vain. He who wants to reject the law would have to explain why people are ready to pay prices for land. If the law were not valid, a farmer would never consider expanding the size of his farm. He would be in a position to multiply indefinitely the return of any piece of soil by multiplying his input of capital and labor.

People have sometimes believed that, while the law of diminishing returns is valid in agricultural production, with regard to the processing industries a law of increasing returns prevails. It took a long time before they realized that the law of returns refers to all branches of production equally. It is faulty to contrast agriculture and the processing industries with regard to this law. What is called—in a very inexpedient, even misleading terminology—the law of increasing returns is nothing but a reversal of the law of diminishing returns, an unsatisfactory formulation of the law of returns. If one approaches the optimum combination by increasing the quantity of one factor only, the quantity of other factors remaining unchanged, then the returns per unit of the variable factor increase either in proportion to the increase or even to a greater extent. A machine may, when operated by 2 workers, produce *p*; when operated by 3 workers, 3 *p*; when operated by 4 workers, 6 *p*; when operated by 5 workers, 7 *p*; when operated by 6 workers, also not more than 7*p*. Then the employment of 4 workers renders the optimum return per head of the worker, namely $\frac{6}{4}$ *p*, while under the other combinations the returns per head are respectively 1/2*p*, *p*, $\frac{7}{5}$ *p* and $\frac{7}{6}$ *p*. If, instead of 2 workers, 3 or 4 workers are employed, then the returns increase more than in relation to the increase in the number of workers; they do not increase in the proportion 2:3:4, but in the proportion 1:3:6. We are faced with increasing returns per head of the worker. But this is nothing else than the reverse of the law of diminishing returns.

If a plant or enterprise deviates from the optimum combination of the factors employed, it is less efficient than a plant or enterprise for which the deviation from the optimum is smaller. Both in agriculture and in the processing industries many factors of production are not perfectly divisible. It is, especially in the processing industries, for the most part easier to attain the optimum combination by expanding the size of the plant or enterprise than by restricting it. If the smallest unit of one or of several factors is too large to allow for its optimal exploitation in a small or medium-size plant or enterprise, the only way to attain the optimum is by increasing the outfit's size. It is these facts that bring about the superiority of big-scale production.

The full importance of this problem will be shown later in discussing the issues of cost accounting.

3. Human Labor as a Means

The employment of the physiological functions and manifestations of human life as a means is called labor. The display of the potentialities of human energy and vital processes which the man whose life they manifest does not use for the attainment of external ends different from the mere running of these processes and from the physiological role they play in the biological consummation of his own vital economy, is not labor; it is simply life. Man works in using his forces and abilities as a means for the removal of uneasiness and in substituting purposeful exploitation of his vital energy for the spontaneous and carefree discharge of his faculties and nerve tensions. Labor is a means, not an end in itself.

Every individual has only a limited quantity of energy to expend, and every unit of labor can only bring about a limited effect. Otherwise human labor would be available in abundance; it would not be scarce and it would not be considered as a means for the removal of uneasiness and economized as such.

In a world in which labor is economized only on account of its being available in a quantity insufficient to attain all ends for which it can be used as a means, the supply of labor available would be equal to the whole quantity of labor which all men together are able to expend. In such a world everybody would be eager to work until he had completely exhausted his momentary capacity to work. The time which is not required for recreation and restoration of the capacity to work, used up by previous working, would be entirely devoted to work. Every nonutilization of the full capacity to work would be deemed a loss. Through the performance of more work one would have increased one's well-being. That a part of the available potential remained unused would be appraised as a forfeiture of well-being. The very idea of laziness would be unknown. Nobody would think: I could possibly do this or that; but it is not worthwhile; it does not pay; I prefer my leisure. Everybody would consider his whole capacity to work as a supply of factors of production which he would be anxious to utilize completely. Even a chance of the smallest increase in well-being would be considered a sufficient incentive to work more if it happened that at the instant no more profitable use could be made of the quantity of labor concerned.

In our actual world things are different. The expenditure of labor is deemed painful. Not to work is considered a state of affairs more satisfactory than working. Leisure is, other things being equal, preferred to travail. People work only when they value the return of labor higher than the decrease in satisfaction brought about by the curtailment of leisure. To work involves disutility.

Psychology and physiology may try to explain this fact. There is no need for praxeology to investigate whether or not they can succeed in such endeavors. For praxeology it is a datum that men are eager to enjoy leisure and therefore look upon their own capacity to bring about effects with feelings different from those with which they look upon the capacity of material factors of production. Man in considering an expenditure of his own labor investigates not only whether there is no more desirable end for the employment of the quantity of labor in question, but no less whether it would not be more desirable to abstain from any further expenditure of labor. We can express this fact also in calling the attainment of leisure an end of purposeful activity, or an economic good of the first order. In employing this somewhat sophisticated terminology, we must view leisure as any other economic good from the aspect of marginal utility. We must conclude that the first unit of leisure satisfies a desire more urgently felt than the second one, the second one a more urgent desire than the third one, and so on. Reversing this proposition, we get the statement that the disutility of labor felt by the worker increases in a greater proportion than the amount of labor expended.

However, it is needless for praxeology to study the question of whether or not the disutility of labor increases in proportion to the increase in the quantity of labor performed or to a greater extent. (Whether this problem is of any importance for physiology and psychology, and whether or not these sciences can elucidate it, can be left undecided.) At any rate the worker knocks off work at the point at which he no longer considers the utility of continuing work as a sufficient compensation for the disutility of the additional expenditure of labor. In forming this judgment he contrasts, if we disregard the decrease in yield brought about by increasing fatigue, each portion of working time with the same quantity of product as the preceding portions. But the utility of the units of yield decreases with the progress of the labor performed and the increase in the total amount of yield produced. The products of the prior units of working time have provided for the satisfaction of more important needs than the products of the work performed later. The satisfaction of these less important needs may not be considered as a sufficient reward for the further continuation of work,

although they are compared with the same quantities of physical output.

It is therefore irrelevant for the praxeological treatment of the matter whether the disutility of labor is proportional to the total expenditure of labor or whether it increases to a greater extent than the time spent in working. At any rate, the propensity to expend the still unused portions of the total potential for work decreases, other things being equal, with the increase in the portions already expended. Whether this decrease in the readiness to work more proceeds with a more rapid or a less rapid acceleration, is always a question of economic data, not a question of categorial principles.

The disutility attached to labor explains why in the course of human history, concomitantly with the progressive increase in the physical productivity of labor brought about by technological improvement and a more abundant supply of capital, by and large a tendency toward shortening the hours of work developed. Among the amenities which civilized man can enjoy in a more abundant way than his less civilized ancestors there is also the enjoyment of more leisure time. In this sense one can answer the question, often raised by philosophers and philanthropists, whether or not economic progress has made men happier. If the productivity of labor were lower than it is in the present capitalist world, man would be forced either to toil more or to forsake many amenities. In establishing this fact the economists do not assert that the only means to attain happiness is to enjoy more material comfort, to live in luxury, or to have more leisure. They simply acknowledge the truth that men are in a position to provide themselves better with what they consider they need.

The fundamental praxeological insight that men prefer what satisfies them more to what satisfies them less and that they value things on the basis of their utility does not need to be corrected or complemented by an additional statement concerning the disutility of labor. These propositions already imply the statement that labor is preferred to leisure only in so far as the yield of labor is more urgently desired than the enjoyment of leisure.

The unique position which the factor labor occupies in our world is due to its nonspecific character. All nature-given primary factors of production—i.e., all those natural things and forces that man can use for improving his state of well-being—have specific powers and virtues. There are ends for whose attainment they are more suitable, ends for which they are less suitable, and ends for which they are altogether unsuitable. But human labor is both suitable and indispensable for the performance of all thinkable processes and modes of production.

It is, of course, impermissible to deal with human labor as such in general. It is a fundamental mistake not to see that men and their abilities to work are different. The work a certain individual can perform is more suitable for some ends, less suitable for other ends, and altogether unsuitable for still other ends. It was one of the deficiencies of classical economics that it did not pay enough attention to this fact and did not take it into account in the construction of its theory of value, prices, and wage rates. Men do not economize labor in general, but the particular kinds of labor available. Wages are not paid for labor expended, but for the achievements of labor, which differ widely in quality and quantity. The production of each particular product requires the employment of workers able to perform the particular kind of labor concerned. It is absurd to justify the failure to consider this point by reference to the alleged fact that the main demand for and supply of labor concerns unskilled common labor which every healthy man is able to perform, and that skilled labor, the labor of people with particular inborn faculties and special training, is by and large an exception. There is no need to investigate whether conditions were such in a remote past or whether even for primitive tribesmen the inequality of inborn and acquired capacities for work was the main factor in economizing labor. In dealing with conditions of civilized peoples it is impermissible to disregard the differences in the quality of labor performed. Work which various people are able to perform is different because men are born unequal and because the skill and experience they acquire in the course of their lives differentiate their capacities still more.

In speaking of the nonspecific character of human labor we certainly do not assert that all human labor is of the same quality. What we want to establish is rather that the differences in the kind of labor required for the production of various commodities are greater than the differences in the inborn capacities of men. (In emphasizing this point we are not dealing with the creative performances of the genius; the work of the genius is outside the orbit of ordinary human action and is like a free gift of destiny which comes to mankind overnight.[6] We furthermore disregard the institutional barriers denying some groups of people access to certain occupations and the training they require.) The innate inequality of various individuals does not break up the zoological uniformity and homogeneity of the species man to such an extent as to divide the supply of labor into disconnected sections. Thus the potential supply of labor available for the performance of each

6. See below, pp. 139-140.

particular kind of work exceeds the actual demand for such labor. The supply of every kind of specialized labor could be increased by the withdrawal of workers from other branches and their training. The quantity of need satisfaction is in none of the branches of production permanently limited by a scarcity of people capable of performing special tasks. Only in the short run can there emerge a dearth of specialists. In the long run it can be removed by training people who display the innate abilities required.

Labor is the most scarce of all primary means of production because it is in this restricted sense nonspecific and because every variety of production requires the expenditure of labor. Thus the scarcity of the other primary means of production—i.e., the nonhuman means of production supplied by nature—becomes for acting man a scarcity of those primary material means of production whose utilization requires the smallest expenditure of labor.[7] It is the supply of labor available that determines to what an extent the factor nature in each of its varieties can be exploited for the satisfaction of needs.

If the supply of labor which men are able and ready to perform increases, production increases too. Labor cannot remain unemployed on account of its being useless for the further improvement of need satisfaction. Isolated self-sufficient man always has the opportunity of improving his condition by expending more labor. On the labor market of a market society there are buyers for every supply of labor offered. There can be abundance and superfluity only in segments of the labor market; it results in pushing labor to other segments and in an expansion of production in some other provinces of the economic system. On the other hand, an increase in the quantity of land available—other things being equal—could result in an increase in production only if the additional land is more fertile than the marginal land tilled before.[8] The same is valid with regard to accumulated material equipment for future production. The serviceableness of capital goods also depends on the supply of labor available. It would be wasteful to use the capacity of existing facilities if the labor required could be employed for the satisfaction of more urgent needs.

Complementary factors of production can only be used to the extent allowed by the availability of the most scarce among them. Let us assume that the production of 1 unit of *p* requires the expenditure of 7 units of *a* and

7. Of course, some natural resources are so scarce that they are entirely utilized.

8. Under free mobility of labor it would be wasteful to improve barren soil if the reclaimed area is not so fertile that it compensates for the total cost of the operation.

of 3 units of *b* and that neither *a* nor *b* can be used for any production other than that of *p*. If 49 *a* and 2,000 *b* are available, no more than 7 *p* can be produced. The available supply of *a* determines the extent of the use of *b*. Only *a* is considered an economic good; only for *a* are people ready to pay prices; the full price of *p* is allowed for 7 units of *a*. On the other hand *b* is not an economic good and no prices are allowed for it. There are quantities of *b* which remain unused.

We may try to imagine the conditions within a world in which all material factors of production are so fully employed that there is no opportunity to employ all men or to employ all men to the extent that they are ready to work. In such a world labor is abundant; an increase in the supply of labor cannot add any increment whatever to the total amount of production. If we assume that all men have the same capacity and application for work and if we disregard the disutility of labor, labor in such a world would not be an economic good. If this world were a socialist commonwealth, an increase in population figures would be deemed an increase in the number of idle consumers. If it were a market society, wage rates paid would not be enough to prevent starvation. Those seeking employment would be ready to go to work for any wages, however low, even if insufficient for the preservation of their lives. They would be happy to delay for awhile death by starvation.

There is no need to dwell upon the paradoxes of this hypothesis and to discuss the problems of such a world. Our world is different. Labor is more scarce than material factors of production. We are not dealing at this point with the problem of optimum population. We are dealing only with the fact that there are material factors of production which remain unused because the labor required is needed for the satisfaction of more urgent needs. In our world there is no abundance, but a shortage of manpower, and there are unused material factors of production, i.e. land, mineral deposits, and even plants and equipment.

This state of affairs could be changed by such an increase in population figures that all material factors required for the production of the foodstuffs indispensable-in the strict meaning of the word-for the preservation of human life are fully exploited. But as long as this is not the case, it cannot be changed by any improvement in technological methods of production. The substitution of more efficient methods of production for less efficient ones does not render labor abundant, provided there are still material factors available whose utilization can increase human well-being. On the contrary, it increases output and thereby the quantity of consumers' goods. "Labor-

saving" devices increase supply. They do not bring about "technological unemployment."[9]

Every product is the result of the employment both of labor and of material factors. Man economizes both labor and material factors.

Immediately Gratifying Labor and Mediately Gratifying Labor

As a rule labor gratifies the performer only mediately, namely, through the removal of uneasiness which the attainment of the end brings about. The worker gives up leisure and submits to the disutility of labor in order to enjoy either the product or what other people are ready to give him for it. The expenditure of labor is for him a means for the attainment of certain ends, a price paid and a cost incurred.

But there are instances in which the performance of labor gratifies the worker immediately. He derives immediate satisfaction from the expenditure of labor. The yield is twofold. It consists on the one hand in the attainment of the product and on the other hand in the satisfaction that the performance itself gives to the worker.

People have misinterpreted this fact grotesquely and have based on this misinterpretation fantastic plans for social reforms. One of the main dogmas of socialism is that labor has disutility only within the capitalistic system of production, while under socialism it will be pure delight. We may disregard the effusions of the poor lunatic Charles Fourier. But Marxian "scientific" socialism does not differ in this point from the utopians. Some of its foremost champions, Frederick Engels and Karl Kautsky, expressly declare that a chief effect of a socialist regime will be to transform labor from a pain into a pleasure.[10]

The fact is often ignored that those activities which bring about immediate gratification and are thus direct sources of pleasure and enjoyment, are essentially different from labor and working. Only a very superficial treatment of the facts concerned can fail to recognize these differences. Paddling a canoe as it is practiced on Sundays for amusement on the lakes of public parks can only from the point of view of hydromechanics be likened to the rowing of boatsmen and galley slaves. When judged as a means for the attainment of ends it is as different as is the humming of an aria by a rambler from the recital of the same aria by the singer in the opera. The carefree Sunday paddler and the singing rambler derive immediate gratification from their activities, but not mediate gratification. What they do is therefore not labor, not the employment of their physiological functions for the attainment

9. See below, pp. 769-779.

10. Karl Kautsky, *Die soziale Revolution* (3d ed. Berlin, 1911), II, 16ff. About Engels see below, p. 591.

of ends other than the mere exercise of these functions. It is merely pleasure. It is an end in itself; it is done for its own sake and does not render any further service. As it is not labor, it is not permissible to call it immediately gratifying labor.[11]

Sometimes a superficial observer may believe that labor performed by other people gives rise to immediate gratification because he himself would like to engage in a kind of play which apparently imitates the kind of labor concerned. As children play school, soldiers, and railroad, so adults too would like to play this and that. They think that the railroad engineer must enjoy operating and steering his engine as much as they would if they were permitted to toy with it. On his hurried way to the office the bookkeeper envies the patrolman who, he thinks, is paid for leisurely strolling around his beat. But the patrolman envies the bookkeeper who, sitting on a comfortable chair in a well-heated room, makes money by some scribbling which cannot seriously be called labor. Yet the opinions of people who misinterpret other people's work and consider it a mere pastime need not be taken seriously.

There are, however, also instances of genuine immediately gratifying labor. There are some kinds of labor of which, under special conditions, small quantities provide immediate gratification. But these quantities are so insignificant that they do not play any role at all in the complex of human action and production for the satisfaction of wants. Our world is characterized by the phenomenon of the disutility of labor. People trade the disutility-bringing labor for the products of labor; labor is for them a source of mediate gratification.

As far as a special kind of labor gives a limited amount of pleasure and not pain, immediate gratification and not disutility of labor, no wages are allowed for its performance. On the contrary, the performer, the "worker," must buy the pleasure and pay for it. Hunting game was and is for many people regular disutility-creating labor. But there are people for whom it is pure pleasure. In Europe amateur hunters buy from the owner of the hunting-ground the right to shoot a definite number of game of a definite type. The purchase of this right is separated from the price to be paid for the bag. If the two purchases are linked together, the price by far exceeds the prices that can be obtained on the market for the bag. A chamois buck still roaming on precipitous rocks has therefore a higher cash value than later when killed, brought down to the valley, and ready for the utilization of the meat, the skin, and the horns, although strenuous climbing and some material must be expended for its killing. One could say that one of the services which a living buck is able to render is to provide the hunter with the pleasure of killing it.

11. Rowing seriously practiced as a sport and singing seriously practiced by an amateur are introversive labor. See below, pp. 587-588.

The Creative Genius

Far above the millions that come and pass away tower the pioneers, the men whose deeds and ideas cut out new paths for mankind. For the pioneering genius[12] to create is the essence of life. To live means for him to create.

The activities of these prodigious men cannot be fully subsumed under the praxeological concept of labor. They are not labor because they are for the genius not means, but ends in themselves. He lives in creating and inventing. For him there is not leisure, only intermissions of temporary sterility and frustration. His incentive is not the desire to bring about a result, but the act of producing it. The accomplishment gratifies him neither mediately nor immediately. It does not gratify him mediately because his fellow men at best are unconcerned about it, more often even greet it with taunts, sneers, and persecution. Many a genius could have used his gifts to render his life agreeable and joyful; he did not even consider such a possibility and chose the thorny path without hesitation. The genius wants to accomplish what he considers his mission, even if he knows that he moves toward his own disaster.

Neither does the genius derive immediate gratification from his creative activities. Creating is for him agony and torment, a ceaseless excruciating struggle against internal and external obstacles; it consumes and crushes him. The Austrian poet Grillparzer has depicted this in a touching poem "Farewell to Gastein."[13] We may assume that in writing it he thought not only of his own sorrows and tribulations but also of the greater sufferings of a much greater man, of Beethoven, whose fate resembled his own and whom he understood, through devoted affection and sympathetic appreciation, better than any other of his contemporaries. Nietzsche compared himself to the flame that insatiably consumes and destroys itself.[14] Such agonies are phenomena which have nothing in common with the connotations generally attached to the notions of work and labor, production and success, bread-winning and enjoyment of life.

The achievements of the creative innovator, his thoughts and theories, his poems, paintings, and compositions, cannot be classified praxeologically as products of *labor*. They are not the outcome of the employment of labor

12. Leaders [Fürhrers] are not pioneers. They guide people along the tracks pioneers have laid. The pioneer clears a road through land hitherto inaccessible and may not care whether or not anybody wants to go the new way. The leader directs people toward the goal they want to reach.

13. It seems that there is no English translation of this poem. The book of Douglas Yates (*Franz Grillparzer, a Critical Biography*, Oxford, 1946), I, 57, gives a short English resume of its content.

14. For a translation of Nietzsche's poem see M.A. Mügge, *Friedrich Nietzsche* (New York, 1911), p. 275.

which could have been devoted to the production of other amenities for the "production" of a masterpiece of philosophy, art, or literature. Thinkers, poets, and artists are sometimes unfit to accomplish any other work. At any rate, the time and toil which they devote to creative activities are not withheld from employment for other purposes. Conditions may sometimes doom to sterility a man who would have had the power to bring forth things unheard of; they may leave him no alternative other than to die from starvation or to use all his forces in the struggle for mere physical survival. But if the genius succeeds in achieving his goals, nobody but himself pays the "costs" incurred. Goethe was perhaps in some respects hampered by his functions at the court of Weimar. But certainly he would not have accomplished more in his official duties as minister of state, theater manager, and administrator of mines if he had not written his plays, poems, and novels.

It is, furthermore, impossible to substitute other people's work for that of the creators. If Dante and Beethoven had not existed, one would not have been in a position to produce the *Divina Commedia* or the Ninth Symphony by assigning other men to these tasks. Neither society nor single individuals can substantially further the genius and his work. The highest intensity of the "demand" and the most peremptory order of the government are ineffectual. The genius does not deliver to order. Men cannot improve the natural and social conditions which bring about the creator and his creation. It is impossible to rear geniuses by eugenics, to train them by schooling, or to organize their activities. But, of course, one can organize society in such a way that no room is left for pioneers and their path-breaking.

The creative accomplishment of the genius is an ultimate fact for praxeology. It comes to pass in history as a free gift of destiny. It is by no means the result of production in the sense in which economics uses this term.

4. Production

Action, if successful, attains the end sought. It produces the product.

Production is not an act of creation; it does not bring about something that did not exist before. It is a transformation of given elements through arrangement and combination. The producer is not a creator. Man is creative only in thinking and in the realm of imagination. In the world of external phenomena he is only a transformer. All that he can accomplish is to combine the means available in such a way that according to the laws of nature the result aimed at is bound to emerge.

It was once customary to distinguish between the production of tangible

goods and the rendering of personal services. The carpenter who made tables and chairs was called productive; but this epithet was denied to the doctor whose advice helped the ailing carpenter to recover his capacity to make tables and chairs. A differentiation was made between the doctor-carpenter nexus and the carpenter-tailor nexus. The doctor, it was asserted, does not himself produce; he makes a living from what other people produce, he is maintained by carpenters and tailors. At a still earlier date the French Physiocrats contended that all labor was sterile unless it extracted something from the soil. Only cultivation, fishing and hunting, and the working of mines and quarries were in their opinion productive. The processing industries did not add to the value of the material employed anything more than the value of the things consumed by the workers.

Present-day economists laugh at their predecessors for having made such untenable distinctions. However, they should rather cast the beam out of their own eyes. The way in which many contemporary writers deal with various problems—for instance, advertising and marketing—is manifestly a relapse into the crude errors which should have disappeared long ago.

Another widely held opinion finds a difference between the employment of labor and that of material factors of production. Nature, it is asserted, dispenses its gifts gratuitously; but labor must be paid for by submitting to its disutility. In toiling and overcoming the disutility of labor man adds something to the universe that did not exist before. In this sense labor was called creative. This too is erroneous. Man's capacity to work is given in the universe as are the original and inherent capacities of the land and the animal substances. Nor does the fact that a part of the potentiality of labor can remain unused differentiate it from the nonhuman factors of production; these too can remain unused. The readiness of individuals to overcome the disutility of labor is the outcome of the fact that they prefer the produce of labor to the satisfaction derived from more leisure.

Only the human mind that directs action and production is creative. The mind too appertains to the universe and to nature; it is a part of the given and existing world. To call the mind creative is not to indulge in any metaphysical speculations. We call it creative because we are at a loss to trace the changes brought about by human action farther back than to the point at which we are faced with the intervention of reason directing human activities. Production is not something physical, material, and external; it is a spiritual and intellectual phenomenon. Its essential requisites are not human labor and external natural forces and things, but the decision of the mind to use

these factors as means for the attainment of ends. What produces the product are not toil and trouble in themselves, but the fact that the toiling is guided by reason. The human mind alone has the power to remove uneasiness.

The materialist metaphysics of the Marxians misconstrues these things entirely. The "productive forces" are not material. Production is a spiritual, intellectual, and ideological phenomenon. It is the method that man, directed by reason, employs for the best possible removal of uneasiness. What distinguishes our conditions from those of our ancestors who lived one thousand or twenty thousand years ago is not something material, but something spiritual. The material changes are the outcome of the spiritual changes.

Production is alteration of the given according to the designs of reason. These designs—the recipes, the formulas, the ideologies—-are the primary thing; they transform the original factors—both human and nonhuman—into means. Man produces by dint of his reason; he chooses ends and employs means for their attainment. The popular saying according to which economics deals with the material conditions of human life is entirely mistaken. Human action is a manifestation of the mind. In this sense praxeology can be called a moral science (*Geisteswissenschaft*).

Of course, we do not know what mind *is*, just as we do not know what motion, life, electricity *are*. Mind is simply the word to signify the unknown factor that has enabled men to achieve all that they have accomplished: the theories and the poems, the cathedrals and the symphonies, the motorcars and the airplanes.

Part Two

Action Within The Framework Of Society

VIII. HUMAN SOCIETY

1. Human Cooperation

SOCIETY is concerted action, cooperation. Society is the outcome of conscious and purposeful behavior.

This does not mean that individuals have concluded contracts by virtue of which they have founded human society. The actions which have brought about social cooperation and daily bring it about anew do not aim at anything else than cooperation and coadjuvancy with others for the attainment of definite singular ends. The total complex of the mutual relations created by such concerted actions is called society. It substitutes collaboration for the—at least conceivable—isolated life of individuals. Society is division of labor and combination of labor. In his capacity as an acting animal man becomes a social animal.

Individual man is born into a socially organized environment. In this sense alone we may accept the saying that society is—logically or historically—antecedent to the individual. In every other sense this dictum is either empty or nonsensical. The individual lives and acts within society. But society is nothing but the combination of individuals for cooperative effort. It exists nowhere else than in the actions of individual men. It is a delusion to search for it outside the actions of individuals. To speak of a society's autonomous and independent existence, of its life, its soul, and its actions is a metaphor which can easily lead to crass errors.

The questions whether society or the individual is to be considered as the ultimate end, and whether the interests of society should be subordinated to those of the individuals or the interests of the individuals to those of society are fruitless. Action is always action of individual men. The social or societal element is a certain orientation of the actions of individual men. The category *end* makes sense only when applied to action. Theology and the metaphysics of history may discuss the ends of society and the designs which God wants to realize with regard to society in the same way in which they discuss the purpose of all other parts of the created universe. For science,

which is inseparable from reason, a tool manifestly unfit for the treatment of such problems, it would be hopeless to embark upon speculations concerning these matters.

Within the frame of social cooperation there can emerge between members of society feelings of sympathy and friendship and a sense of belonging together. These feelings are the source of man's most delightful and most sublime experiences. They are the most precious adornment of life; they lift the animal species man to the heights of a really human existence. However, they are not, as some have asserted, the agents that have brought about social relationships. They are fruits of social cooperation, they thrive only within its frame; they did not precede the establishment of social relations and are not the seed from which they spring.

The fundamental facts that brought about cooperation, society, and civilization and transformed the animal man into a human being are the facts that work performed under the division of labor is more productive than isolated work and that man's reason is capable of recognizing this truth. But for these facts men would have forever remained deadly foes of one another, irreconcilable rivals in their endeavors to secure a portion of the scarce supply of means of sustenance provided by nature. Each man would have been forced to view all other men as his enemies; his craving for the satisfaction of his own appetites would have brought him into an implacable conflict with all his neighbors. No sympathy could possibly develop under such a state of affairs.

Some sociologists have asserted that the original and elementary subjective fact in society is a "consciousness of kind."[1] Others maintain that there would be no social systems if there were no "sense of community or of belonging together."[2] One may agree, provided that these somewhat vague and ambiguous terms are correctly interpreted. We may call consciousness of kind, sense of community, or sense of belonging together the acknowledgment of the fact that all other human beings are potential collaborators in the struggle for survival because they are capable of recognizing the mutual benefits of cooperation, while the animals lack this faculty. However, we must not forget that the primary facts that bring about such consciousness or such a sense are the two mentioned above. In a hypothetical world in which the division of labor would not increase productivity, there would not be any society. There would not be any sentiments of benevolence and good will.

1. F.H. Giddings, *The Principles of Sociology* (New York, 1926), p. 17.
2. F.M. MacIver, *Society* (New York, 1937), pp. 6-7.

Principle of the division of labor is one of the great basic principles of cosmic becoming and evolutionary change. The biologists were right in borrowing the concept of the division of labor from social philosophy and in adapting it to their field of investigation. There is division of labor between the various parts of any living organism. There are, furthermore, organic entities composed of collaborating animal individuals; it is customary to call metaphorically such aggregations of the ants and bees "animal societies." But one must never forget that the characteristic feature of human society is purposeful cooperation; society is an outcome of human action, i.e., of a conscious aiming at the attainment of ends. No such element is present, as far as we can ascertain, in the processes which have resulted in the emergence of the structure-function systems of plant and animal bodies and in the operation of the societies of ants, bees, and hornets. Human society is an intellectual and spiritual phenomenon. It is the outcome of a purposeful utilization of a universal law determining cosmic becoming, viz., the higher productivity of the division of labor. As with every instance of action, the recognition of the laws of nature is put into the service of man's efforts to improve his conditions.

2. A Critique of the Holistic and Metaphysical View of Society

According to the doctrines of universalism, conceptual realism, holism, collectivism, and some representatives of Gestaltpsychologie, society is an entity living its own life, independent of and separate from the lives of the various individuals, acting on its own behalf and aiming at its own ends which are different from the ends sought by the individuals. Then, of course, an antagonism between the aims of society and those of its members can emerge. In order to safeguard the flowering and further development of society it becomes necessary to master the selfishness of the individuals and to compel them to sacrifice their egoistic designs to the benefit of society. At this point all these holistic doctrines are bound to abandon the secular methods of human science and logical reasoning and to shift to theological or metaphysical professions of faith. They must assume that Providence, through its prophets, apostles, and charismatic leaders, forces men who are constitutionally wicked, i.e., prone to pursue their own ends, to walk in the ways of righteousness which the Lord or *Weltgeist* or history wants them to walk.

This is the philosophy which has characterized from time immemorial

the creeds of primitive tribes. It has been an element in all religious teachings. Man is bound to comply with the law issued by a superhuman power and to obey the authorities which this power has entrusted with the enforcement of the law. The order created by this law, human society, is consequently the work of the Deity and not of man. If the Lord had not interfered and had not given enlightenment to erring mankind, society would not have come into existence. It is true that social cooperation is a blessing for man; it is true that man could work his way up from barbarism and the moral and material distress of his primitive state only within the framework of society. However, if left alone he would never have seen the road to his own salvation. For adjustment to the requirements of social cooperation and subordination to the precepts of the moral law put heavy restraints upon him. From the point of view of his wretched intellect he would deem the abandonment of some expected advantage an evil and a privation. He would fail to recognize the incomparably greater, but later, advantages which renunciation of present and visible pleasures will procure. But for supernatural revelation he would never have learned what destiny wants him to do for his own good and that of his offspring.

The scientific theory as developed by the social philosophy of eighteenth-century rationalism and liberalism and by modern economics does not resort to any miraculous interference of superhuman powers. Every step by which an individual substitutes concerted action for isolated action results in an immediate and recognizable improvement in his conditions. The advantages derived from peaceful cooperation and division of labor are universal. They immediately benefit every generation, and not only later descendants. For what the individual must sacrifice for the sake of society he is amply compensated by greater advantages. His sacrifice is only apparent and temporary; he foregoes a smaller gain in order to reap a greater one later. No reasonable being can fail to see this obvious fact. When social cooperation is intensified by enlarging the field in which there is division of labor or when legal protection and the safeguarding of peace are strengthened, the incentive is the desire of all those concerned to improve their own conditions. In striving after his own—rightly understood—interests the individual works toward an intensification of social cooperation and peaceful intercourse. Society is a product of human action, i.e., the human urge to remove uneasiness as far as possible. In order to explain its becoming and its evolution it is not necessary to have recourse to a doctrine, certainly offensive to a truly religious mind, according to which the original creation

was so defective that reiterated superhuman intervention is needed to prevent its failure.

The historical role of the theory of the division of labor as elaborated by British political economy from Hume to Ricardo consisted in the complete demolition of all metaphysical doctrines concerning the origin and the operation of social cooperation. It consummated the spiritual, moral and intellectual emancipation of mankind inaugurated by the philosophy of Epicureanism. It substituted an autonomous rational morality for the heteronomous and intuitionist ethics of older days. Law and legality, the moral code and social institutions are no longer revered as unfathomable decrees of Heaven. They are of human origin, and the only yardstick that must be applied to them is that of expediency with regard to human welfare. The utilitarian economist does not say:Fiat justitia, pereat mundus. He says: Fiat justitia,ne pereat mundus. He does not ask a man to renounce his well-being for the benefit of society. He advises him to recognize what his rightly understood interests are. In his eyes God's magnificence does not manifest itself in busy interference with sundry affairs of princes and politicians, but in endowing his creatures with reason and the urge toward the pursuit of happiness.[3]

The essential problem of all varieties of universalistic, collectivistic, and holistic social philosophy is: By what mark do I recognize the true law, the authentic apostle of God's word, and the legitimate authority. For many claim that Providence has sent them, and each of these prophets preaches another gospel. For the faithful believer there cannot be any doubt; he is fully confident that he has espoused the only true doctrine. But it is precisely the firmness of such beliefs that renders the antagonisms irreconcilable. Each party is prepared to make its own tenets prevail. But as logical argumentation cannot decide between various dissenting creeds, there is no means left for the settlement of such disputes other than armed conflict. The

3. Many economists, among them Adam Smith and Bastiat, believed in God. Hence they admired in the facts they had discovered the providential care of "the great Director of Nature." Atheist critics blame them for this attitude. However, these critics fail to realize that to sneer at the references to the "invisible hand" does not invalidate the essential teachings of the rationalist and utilitarian social philosophy. One must comprehend that the alternative is this: Either association is a human process because it best serves the aims of the individuals concerned and the individuals themselves have the ability to realize the advantages they derive from their adjustment to life in social cooperation. Or a superior being enjoins upon reluctant men subordination to the law and to the social authorities. It is of minor importance whether one calls this supreme being God, Weltgeist, Destiny, History, Wotan, or Material Productive Forces and what title one assigns to its apostles, the dictators.

nonrationalist, nonutilitarian, and nonliberal social doctrines must beget wars and civil wars until one of the adversaries is annihilated or subdued. The history of the world's great religions is a record of battles and wars, as is the history of the present-day counterfeit religions, socialism, statolatry, and nationalism.

Intolerance and propaganda by the executioner's or the soldier's sword are inherent in any system of heteronomous ethics. The laws of God or Destiny claim universal validity, and to the authorities which they declare legitimate all men by rights owe obedience. As long as the prestige of heteronomous codes of morality and of their philosophical corollary, conceptual realism, was intact, there could not be any question of tolerance or of lasting peace. When fighting ceased, it was only to gather new strength for further battling. The idea of tolerance with regard to other people's dissenting views could take root only when the liberal doctrines had broken the spell of universalism. In the light of the utilitarian philosophy, society and state no longer appear as institutions for the maintenance of a world order that for considerations hidden to the human mind pleases the Deity although it manifestly hurts the secular interests of many or even of the immense majority of those living today. Society and state are on the contrary the primary means for all people to attain the ends they aim at of their own accord. They are created by human effort and their maintenance and most suitable organization are tasks not essentially different from all other concerns of human action. The supporters of a heteronomous morality and of the collectivistic doctrine cannot hope to demonstrate by ratiocination the correctness of their specific variety of ethical principles and the superiority and exclusive legitimacy of their particular social ideal. They are forced to ask people to accept credulously their ideological system and to surrender to the authority they consider the right one; they are intent upon silencing dissenters or upon beating them into submission.

Of course, there will always be individuals and groups of individuals whose intellect is so narrow that they cannot grasp the benefits which social cooperation brings them. There are others whose moral strength and will power are so weak that they cannot resist the temptation to strive for an ephemeral advantage by actions detrimental to the smooth functioning of the social system. For the adjustment of the individual to the requirements of social cooperation demands sacrifices. These are, it is true, only temporary and apparent sacrifices as they are more than compensated for by the incomparably greater advantages which living within society provides. However, at the instant, in the very act of renouncing an expected enjoyment,

they are painful, and it is not for everybody to realize their later benefits and to behave accordingly. Anarchism believes that education could make all people comprehend what their own interests require them to do; rightly instructed they would of their own accord always comply with the rules of conduct indispensable for the preservation of society. The anarchists contend that a social order in which nobody enjoys privileges at the expense of his fellow-citizens could exist without any compulsion and coercion for the prevention of action detrimental to society. Such an ideal society could do without state and government, i.e., without a police force, the social apparatus of coercion and compulsion.

The anarchists overlook the undeniable fact that some people are either too narrow-minded or too weak to adjust themselves spontaneously to the conditions of social life. Even if we admit that every sane adult is endowed with the faculty of realizing the good of social cooperation and of acting accordingly, there still remains the problem of the infants, the aged, and the insane. We may agree that he who acts antisocially should be considered mentally sick and in need of care. But as long as not all are cured, and as long as there are infants and the senile, some provision must be taken lest they jeopardize society. An anarchistic society would be exposed to the mercy of every individual. Society cannot exist if the majority is not ready to hinder, by the application or threat of violent action, minorities from destroying the social order. This power is vested in the state or government.

State or government is the social apparatus of compulsion and coercion. It has the monopoly of violent action. No individual is free to use violence or the threat of violence if the government has not accorded this right to him. The state is essentially an institution for the preservation of peaceful interhuman relations. However, for the preservation of peace it must be prepared to crush the onslaughts of peace-breakers.

Liberal social doctrine, based on the teachings of utilitarian ethics and economics, sees the problem of the relation between the government and those ruled from a different angle than universalism and collectivism. Liberalism realizes that the rulers, who are always a minority, cannot lastingly remain in office if not supported by the consent of the majority of those ruled. Whatever the system of government may be, the foundation upon which it is built and rests is always the opinion of those ruled that to obey and to be loyal to this government better serves their own interests than insurrection and the establishment of another regime. The majority has the power to do away with an unpopular government and uses this power

whenever it becomes convinced that its own welfare requires it. Civil war and revolution are the means by which the discontented majorities overthrow rulers and methods of government which do not suit them. For the sake of domestic peace liberalism aims at democratic government. Democracy is therefore not a revolutionary institution. On the contrary, it is the very means of preventing revolutions and civil wars. It provides a method for the peaceful adjustment of government to the will of the majority. When the men in office and their policies no longer please the majority of the nation, they will—in the next election—be eliminated and replaced by other men espousing different policies.

The principle of majority rule or government by the people as recommended by liberalism does not aim at the supremacy of the mean, of the lowbred, of the domestic barbarians. The liberals too believe that a nation should be ruled by those best fitted for this task. But they believe that a man's ability to rule proves itself better by convincing his fellow-citizens than by using force upon them. There is, of course, no guarantee that the voters will entrust office to the most competent candidate. But no other system could offer such a guarantee. If the majority of the nation is committed to unsound principles and prefers unworthy office-seekers, there is no remedy other than to try to change their mind by expounding more reasonable principles and recommending better men. A minority will never win lasting success by other means.

Universalism and collectivism cannot accept this democratic solution of the problem of government. In their opinion the individual in complying with the ethical code does not directly further his earthly concerns but, on the contrary, foregoes the attainment of his own ends for the benefit of the designs of the Deity or of the collective whole. Moreover reason alone is not capable of conceiving the supremacy of the absolute values and the unconditional validity of the sacred law and of interpreting correctly the canons and commandments. Hence it is in their eyes a hopeless task to try to convince the majority through persuasion and to lead them to righteousness by amicable admonition. Those blessed by heavenly inspiration, to whom their *charisma* has conveyed illumination, have the duty to propagate the gospel to the docile and to resort to violence against the intractable. The charismatic leader is the Deity's vicar, the mandatory of the collective whole, the tool of history. He is infallible and always right. His orders are the supreme norm.

Universalism and collectivism are by necessity systems of theocratic

government. The common characteristic of all their varieties is that they postulate the existence of a superhuman entity which the individuals are bound to obey. What differentiates them from one another is only the appellation they give to this entity and the content of the laws they proclaim in its name. The dictatorial rule of a minority cannot find any legitimation other than the appeal to an alleged mandate obtained from a superhuman absolute authority. It does not matter whether the autocrat bases his claims on the divine rights of anointed kings or on the historical mission of the vanguard of the proletariat or whether the supreme being is called *Geist* (Hegel) or *Humanite* (Auguste Comte). The terms society and state as they are used by the contemporary advocates of socialism, planning, and social control of all the activities of individuals signify a deity. The priests of this new creed ascribe to their idol all those attributes which the theologians ascribe to God—omnipotence, omniscience, infinite goodness, and so on.

If one assumes that there exists above and beyond the individual's actions an imperishable entity aiming at its own ends, different from those of mortal men, one has already constructed the concept of a superhuman being. Then one cannot evade the question whose ends take precedence whenever an antagonism arises, those of the state or society or those of the individual. The answer to this question is already implied in the very concept of state or society as conceived by collectivism and universalism. If one postulates the existence of an entity which ex definitione is higher, nobler, and better than the individuals, then there cannot be any doubt that the aims of this eminent being must tower above those of the wretched individuals. (It is true that some lovers of paradox—for instance, Max Stirner[4]—took pleasure in turning the matter upside down and for all that asserted the precedence of the individual.) If society or state is an entity endowed with volition and intention and all the other qualities attributed to it by the collectivist doctrine, then it is simply nonsensical to set the shabby individual's trivial aims against its lofty designs.

The quasi-theological character of all collectivist doctrines becomes manifest in their mutual conflicts. A collectivist doctrine does not assert the superiority of a collective whole in abstracto; it always proclaims the eminence of a definite collectivist idol, and either flatly denies the existence of other such idols or relegates them to a subordinate and ancillary position

4. Cf. Max Stirner (Johan Kaspar Schmidt). *The Ego and His Own*, trans. by S.T. Byington (New York, 1907).

with regard to its own idol. The worshipers of the state proclaim the excellence of a definite state, i.e., their own; the nationalists, the excellence of their own nation. If dissenters challenge their particular program by heralding the superiority of another collectivist idol, they resort to no objection other than to declare again and again: We are right because an inner voice tells us that we are right and you are wrong. The conflicts of antagonistic collectivist creeds and sects cannot be decided by ratiocination; they must be decided by arms. The alternatives to the liberal and democratic principle of majority rule are the militarist principles of armed conflict and dictatorial oppression.

All varieties of collectivist creeds are united in their implacable hostility to the fundamental political institutions of the liberal system: majority rule, tolerance of dissenting views, freedom of thought, speech, and the press, equality of all men under the law. This collaboration of collectivist creeds in their attempts to destroy freedom has brought about the mistaken belief that the issue in present-day political antagonisms is individualism versus collectivism. In fact it is a struggle between individualism on the one hand and a multitude of collectivist sects on the other hand whose mutual hatred and hostility is no less ferocious than their abomination of the liberal system. It is not a uniform Marxian sect that attacks capitalism, but a host of Marxian groups. These groups—for instance, Stalinists, Trotskyists, Mensheviks, supporters of the Second International, and so on—fight one another with the utmost brutality and inhumanity. And then there are again many other nonMarxian sects which apply the same atrocious methods in their mutual struggles. A substitution of collectivism for liberalism would result in endless bloody fighting.

The customary terminology misrepresents these things entirely. The philosophy commonly called individualism is a philosophy of social cooperation and the progressive intensification of the social nexus. On the other hand the application of the basic ideas of collectivism cannot result in anything but social disintegration and the perpetuation of armed conflict. It is true that every variety of collectivism promises eternal peace starting with the day of its own decisive victory and the final overthrow and extermination of all other ideologies and their supporters. However, the realization of these plans is conditioned upon a radical transformation in mankind. Men must be divided into two classes: the omnipotent godlike dictator on the one hand and the masses which must surrender volition and reasoning in order to become mere chessmen in the plans of the dictator. The masses must be dehumanized in order to make

one man their godlike master. Thinking and acting, the foremost characteristics of man as man, would become the privilege of *one* man only. There is no need to point out that such designs are unrealizable. The chiliastic empires of dictators are doomed to failure; they have never lasted longer than a few years. We have just witnessed the breakdown of several of such "millennial" orders. Those remaining will hardly fare better.

The modern revival of the idea of collectivism, the main cause of all the agonies and disasters of our day, has succeeded so thoroughly that it has brought into oblivion the essential ideas of liberal social philosophy. Today even many of those favoring democratic institutions ignore these ideas. The arguments they bring forward for the justification of freedom and democracy are tainted with collectivist errors; their doctrines are rather a distortion than an endorsement of true liberalism. In their eyes majorities are always right simply because they have the power to crush any opposition; majority rule is the dictatorial rule of the most numerous party, and the ruling majority is not bound to restrain itself in the exercise of its power and in the conduct of political affairs. As soon as a faction has succeeded in winning the support of the majority of citizens and thereby attained control of the government machine, it is free to deny to the minority all those democratic rights by means of which it itself has previously carried on its own struggle for supremacy.

This pseudo-liberalism is, of course, the very antithesis of the liberal doctrine. The liberals do not maintain that majorities are godlike and infallible; they do not contend that the mere fact that a policy is advocated by the many is a proof of its merits for the common weal. They do not recommend the dictatorship of the majority and the violent oppression of dissenting minorities. Liberalism aims at a political constitution which safeguards the smooth working of social cooperation and the progressive intensification of mutual social relations. Its main objective is the avoidance of violent conflicts, of wars and revolutions that must disintegrate the social collaboration of men and throw people back into the primitive conditions of barbarism where all tribes and political bodies endlessly fought one another. Because the division of labor requires undisturbed peace, liberalism aims at the establishment of a system of government that is likely to preserve peace, viz., democracy.

Praxeology and Liberalism

Liberalism, in its 19th century sense, is a political doctrine. It is not a theory, but an application of the theories developed by praxeology and

especially by economics to definite problems of human action within society.

As a political doctrine liberalism is not neutral with regard to values and the ultimate ends sought by action. It assumes that all men or at least the majority of people are intent upon attaining certain goals. It gives them information about the means suitable to the realization of their plans. The champions of liberal doctrines are fully aware of the fact that their teachings are valid only for people who are committed to these valuational principles.

While praxeology, and therefore economics too, uses the terms happiness and removal of uneasiness in a purely formal sense, liberalism attaches to them a concrete meaning. It presupposes that people prefer life to death, health to sickness, nourishment to starvation, abundance to poverty. It teaches man how to act in accordance with these valuations.

It is customary to call these concerns materialistic and to charge liberalism with an alleged crude materialism and a neglect of the "higher" and "nobler" pursuits of mankind. Man does not live by bread alone, say the critics, and they disparage the meanness and despicable baseness of the utilitarian philosophy. However, these passionate diatribes are wrong because they badly distort the teachings of liberalism.

First: The liberals do not assert that men ought to strive after the goals mentioned above. What they maintain is that the immense majority prefer a life of health and abundance to misery, starvation, and death. The correctness of this statement cannot be challenged. It is proved by the fact that all antiliberal doctrines—the theocratic tenets of the various religious, statist, nationalist, and socialist parties—adopt the same attitude with regard to these issues. They all promise their followers a life of plenty. They have never ventured to tell people that the realization of their program will impair their material well-being. They insist—on the contrary—that while the realization of the plans of their rival parties will result in indigence for the majority, they themselves want to provide their supporters with abundance. The Christian parties are no less eager in promising the masses a higher standard of living than the nationalists and the socialists. Present-day churches often speak more about raising wage rates and farm incomes than about the dogmas of the Christian doctrine.

Secondly: The liberals do not disdain the intellectual and spiritual aspirations of man. On the contrary. They are prompted by a passionate ardor for intellectual and moral perfection, for wisdom and for aesthetic excellence. But their view of these high and noble things is far from the crude representations of their adversaries. They do not share the naive opinion that any system of social organization can directly succeed in encouraging philosophical or scientific thinking, in producing masterpieces of art and

literature and in rendering the masses more enlightened. They realize that all that society can achieve in these fields is to provide an environment which does not put insurmountable obstacles in the way of the genius and makes the common man free enough from material concerns to become interested in things other than mere breadwinning. In their opinion the foremost social means of making man more human is to fight poverty. Wisdom and science and the arts thrive better in a world of affluence than among needy peoples.

It is a distortion of facts to blame the age of liberalism for an alleged materialism. The nineteenth century was not only a century of unprecedented improvement in technical methods of production and in the material well-being of the masses. It did much more than extend the average length of human life. Its scientific and artistic accomplishments are imperishable. It was an age of immortal musicians, writers, poets, painters, and sculptors; it revolutionized philosophy, economics, mathematics, physics, chemistry, and biology. And, for the first time in history, it made the great works and the great thoughts accessible to the common man.

Liberalism and Religion

Liberalism is based upon a purely rational and scientific theory of social cooperation. The policies it recommends are the application of a system of knowledge which does not refer in any way to sentiments, intuitive creeds for which no logically sufficient proof can be provided, mystical experiences, and the personal awareness of superhuman phenomena. In this sense the often misunderstood and erroneously interpreted epithets atheistic and agnostic can be attributed to it. It would, however, be a serious mistake to conclude that the sciences of human action and the policy derived from their teachings, liberalism, are antitheistic and hostile to religion. They are radically opposed to all systems of theocracy. But they are entirely neutral with regard to religious beliefs which do not pretend to interfere with the conduct of social, political, and economic affairs.

Theocracy is a social system which lays claim to a superhuman title for its legitimation. The fundamental law of a theocratic regime is an insight not open to examination by reason and to demonstration by logical methods. Its ultimate standard is intuition providing the mind with subjective certainty about things which cannot be conceived by reason and ratiocination. If this intuition refers to one of the traditional systems of teaching concerning the existence of a Divine Creator and Ruler of the universe, we call it a religious belief. If it refers to another system we call it a metaphysical belief. Thus a system of theocratic government need not be founded on one of the great historical religions of the world. It may be the outcome of metaphysical

tenets which reject all traditional churches and denominations and take pride in emphasizing their antitheistic and antimetaphysical character. In our time the most powerful theocratic parties are opposed to Christianity and to all other religions which evolved from Jewish monotheism. What characterizes them as theocratic is their craving to organize the earthly affairs of mankind according to the contents of a complex of ideas whose validity cannot be demonstrated by reasoning. They pretend that their leaders are blessed by a knowledge inaccessible to the rest of mankind and contrary to the ideas maintained by those to whom the charisma is denied. The charismatic leaders have been entrusted by a mystical higher power with the office of managing the affairs of erring mankind. They alone are enlightened; all other people are either blind and deaf or malefactors.

It is a fact that many varieties of the great historical religions were affected by theocratic tendencies. Their apostles were inspired by a craving for power and the oppression and annihilation of all dissenting groups. However, we must not confuse the two things, religion and theocracy.

William James calls religious "the feelings, acts and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine."[5] He enumerates the following beliefs as the characteristics of the religious life: That the visible world is part of a more spiritual universe from which it draws its chief significance; that union or harmonious relation with that higher universe is our true end; that prayer or inner communion with the spirit thereof--be that spirit "God" or "law"—is a process wherein work is really done, and spiritual energy flows in and produces effects, psychological or material, within the phenomenal world. Religion, James goes on to say, also includes the following psychological characteristics: A zest which *adds* itself like a gift to life, and takes the form either of lyrical enchantment or of appeal to earnestness and heroism, and furthermore an assurance of safety and a temper of peace, and, in relation to others, a preponderance of loving affection.[6]

This characterization of mankind's religious experience and feelings does not make any reference to the arrangement of social cooperation. Religion, as James sees it, is a purely personal and individual relation between man and a holy, mysterious, and awe-inspiring divine Reality. It enjoins upon man a certain mode of individual conduct. But it does not assert anything with regard to the problems of social organization. St.

5. W. James, *The Varieties of Religious Experience* (35th impression, New York, 1925), p. 31.
6. *Ibid.*, pp. 485-486.

Francis d'Assisi, the greatest religious genius of the West, did not concern himself with politics and economics. He wanted to teach his disciples how to live piously; he did not draft a plan for the organization of production and did not urge his followers to resort to violence against dissenters. He is not responsible for the interpretation of his teachings by the order he founded.

Liberalism puts no obstacles in the way of a man eager to adjust his personal conduct and his private affairs according to the mode in which he individually or his church or denomination interprets the teachings of the Gospels. But it is radically opposed to all endeavors to silence the rational discussion of problems of social welfare by an appeal to religious intuition and revelation. It does not enjoin divorce or the practice of birth control upon anybody. But it fights those who want to prevent other people from freely discussing the pros and cons of these matters.

In the liberal opinion the aim of the moral law is to impel individuals to adjust their conduct to the requirements of life in society, to abstain from all acts detrimental to the preservation of peaceful social cooperation and to the improvement of interhuman relations. Liberals welcome the support which religious teachings may give to those moral precepts of which they themselves approve, but they are opposed to all those norms which are bound to bring about social disintegration from whatever source they may stem.

It is a distortion of fact to say, as many champions of religious theocracy do, that liberalism fights religion. Where the principle of church interference with secular issues is in force, the various churches, denominations and sects are fighting one another. By separating church and state, liberalism establishes peace between the various religious factions and gives to each of them the opportunity to preach its gospel unmolested.

Liberalism is rationalistic. It maintains that it is possible to convince the immense majority that peaceful cooperation within the framework of society better serves their rightly understood interests than mutual battling and social disintegration. It has full confidence in man's reason. It may be that this optimism is unfounded and that the liberals have erred. But then there is no hope left for mankind's future.

3. The Division of Labor

The fundamental social phenomenon is the division of labor and its counterpart human cooperation.

Experience teaches man that cooperative action is more efficient and productive than isolated action of self-sufficient individuals. The natural conditions determining man's life and effort are such that the division of

labor increases output per unit of labor expended. These natural facts are:

First: the innate inequality of men with regard to their ability to perform various kinds of labor. Second: the unequal distribution of the nature-given, nonhuman opportunities of production on the surface of the earth. One may as well consider these two facts as one and the same fact, namely, the manifoldness of nature which makes the universe a complex of infinite varieties. If the earth's surface were such that the physical conditions of production were the same at every point and if one man were as equal to all other men as is a circle to another with the same diameter in Euclidian geometry, men would not have embarked upon the division of labor.

There is still a third fact, viz., that there are undertakings whose accomplishment exceeds the forces of a single man and requires the joint effort of several. Some of them require an expenditure of labor which no single man can perform because his capacity to work is not great enough. Others again could be accomplished by individuals; but the time which they would have to devote to the work would be so long that the result would only be attained late and would not compensate for the labor expended. In both cases only joint effort makes it possible to attain the end sought.

If only this third condition were present, temporary cooperation between men would have certainly emerged. However, such transient alliances to cope with specific tasks which are beyond the strength of an individual would not have brought about lasting social cooperation. Undertakings which could be performed only in this way were not very numerous at the early stages of civilization. Moreover, all those concerned may not often agree that the performance in question is more useful and urgent than the accomplishment of other tasks which they could perform alone. The great human society enclosing all men in all of their activities did not originate from such occasional alliances. Society is much more than a passing alliance concluded for a definite purpose and ceasing as soon as its objective is realized, even if the partners are ready to renew it should an occasion present itself.

The increase in productivity brought about by the division of labor is obvious whenever the inequality of the participants is such that every individual or every piece of land is superior at least in one regard to the other individuals or pieces of land concerned. If *A* is fit to produce in 1 unit of time 6 *p* or 4 *q*, and *B* only 2 *p*, but 8 *q*, they both, when working in isolation, will produce together 4 *p* + 6 *q*; when working under the division of labor, each of them producing only that commodity in whose

production he is more efficient than his partner, they will produce 6 *p* + 8 *q*. But what will happen, if *A* is more efficient than *B* not only in the production of *p* but also in the production of *q*?

This is the problem which Ricardo raised and solved immediately.

4. The Ricardian Law of Association

Ricardo expounded the law of association in order to demonstrate what the consequences of the division of labor are when an individual or a group, more efficient in every regard, cooperates with an individual or a group less efficient in every regard. He investigated the effects of trade between two areas, unequally endowed by nature, under the assumption that the products, but not the workers and the accumulated factors of future production (capital goods), can freely move from each area into the other. The division of labor between two such areas will, as Ricardo's law shows, increase the productivity of labor and is therefore advantageous to all concerned, even if the physical conditions of production for any commodity are more favorable in one of these two areas than in the other. It is advantageous for the better endowed area to concentrate its efforts upon the production of those commodities for which its superiority is greater, and to leave to the less endowed area the production of other goods in which its own superiority is less. The paradox that it is more advantageous to leave more favorable domestic conditions of production unused and to procure the commodities they could produce from areas in which conditions for their production are less favorable, is the outcome of the immobility of labor and capital, to which the more favorable places of production are inaccessible.

Ricardo was fully aware of the fact that his law of comparative cost, which he expounded mainly in order to deal with a special problem of international trade, is a particular instance of the more universal law of association.

If *A* is in such a way more efficient than *B* that he needs for the production of 1 unit of the commodity *p* 3 hours compared with *B's* 5, and for the production of 1 unit of *q* 2 hours compared with *B's* 4, then both will gain if *A* confines himself to producing *q* and leaves *B* to produce *p*. If each of them gives 60 hours to producing *p* and 60 hours to producing *q*, the result of *A's* labor is 20 *p* + 30 *q*; of *B's*, 12 *p* +15 *q*; and for both together , 32 *p* + 45 *q*. If, however, *A* confines himself to producing *q* alone, he produces 60 *q* in 120 hours, while *B*, if he confines himself to producing *p*, produces in the same time 24 *p*. The result of their activities is then 24 *p* + 60 *q*, which,

as p has for A a substitution ratio of $\frac{3}{2}\,q$ and for B one of $\frac{5}{4}\,q$, signifies a larger output than $32\,p + 45\,q$. Therefore it is manifest that the division of labor brings advantages to all who take part in it. Collaboration of the more talented, more able, and more industrious with the less talented, less able, and less industrious results in benefit for both. The gains derived from the division of labor are always mutual.

The law of association makes us comprehend the tendencies which resulted in the progressive intensification of human cooperation. We conceive what incentive induced people not to consider themselves simply as rivals in a struggle for the appropriation of the limited supply of means of subsistence made available by nature. We realize what has impelled them and permanently impels them to consort with one another for the sake of cooperation. Every step forward on the way to a more developed mode of the division of labor serves the interests of all participants. In order to comprehend why man did not remain solitary, searching like the animals for food and shelter for himself only and at most also for his consort and his helpless infants, we do not need to have recourse to a miraculous interference of the Deity or to the empty hypostasis of an innate urge toward association. Neither are we forced to assume that the isolated individuals or primitive hordes one day pledged themselves by a contract to establish social bonds. The factor that brought about primitive society and daily works toward its progressive intensification is human action that is animated by the insight into the higher productivity of labor achieved under the division of labor.

Neither history nor ethnology nor any other branch of knowledge can provide a description of the evolution which has led from the packs and flocks of mankind's nonhuman ancestors to the primitive, yet already highly differentiated, societal groups about which information is provided in excavations, in the most ancient documents of history, and in the reports of explorers and travelers who have met savage tribes. The task with which science is faced in respect of the origins of society can only consist in the demonstration of those factors which can and must result in association and its progressive intensification. Praxeology solves the problem. If and as far as labor under the division of labor is more productive than isolated labor, and if and as far as man is able to realize this fact, human action itself tends toward cooperation and association; man becomes a social being not in sacrificing his own concerns for the sake of a mythical Moloch, society, but in aiming at an improvement in his own welfare. Experience teaches that

this condition—higher productivity achieved under the division of labor—is present because its cause—the inborn inequality of men and the inequality in the geographical distribution of the natural factors of production—is real. Thus we are in a position to comprehend the course of social evolution.

Current Errors Concerning the Law of Association

People cavil much about Ricardo's law of association, better known under the name *law of comparative cost*. The reason is obvious. This law is an offense to all those eager to justify protection and national economic isolation from any point of view other than the selfish interests of some producers or the issues of war-preparedness.

Ricardo's first aim in expounding this law was to refute an objection raised against freedom of international trade. The protectionist asks: What under free trade will be the fate of a country in which the conditions for any kind of production are less favorable than in all other countries? Now, in a world in which there is free mobility not only for products, but no less for capital goods and for labor, a country so little suited for production would cease to be used as the seat of any human industry. If people fare better without exploiting the—comparatively unsatisfactory—physical conditions of production offered by this country, they will not settle here and will leave it as uninhabited as the polar regions, the tundras and the deserts. But Ricardo deals with a world whose conditions are determined by settlement in earlier days, a world in which capital goods and labor are bound to the soil by definite institutions. In such a milieu free trade, i.e., the free mobility of commodities only, cannot bring about a state of affairs in which capital and labor are distributed on the surface of the earth according to the better or poorer physical opportunities afforded to the productivity of labor. Here the law of comparative cost comes into operation. Each country turns toward those branches of production for which its conditions offer comparatively, although not absolutely, the most favorable opportunities. For the inhabitants of a country it is more advantageous to abstain from the exploitation of some opportunities which—absolutely and technologically—are more propitious and to import commodities produced abroad under conditions which—absolutely and technologically—are less favorable than the unused domestic resources. The case is analogous to that of a surgeon who finds it convenient to employ for the cleaning of the operating-room and the instruments a man whom he excels in this performance also and to devote himself exclusively to surgery, in which his superiority is higher.

The theorem of comparative cost is in no way connected with the value theory of classical economics. It does not deal with value or with prices. It is an analytic judgment; the conclusion is implied in the two propositions

that the technically movable factors of production differ with regard to their productivity in various places and are institutionally restricted in their mobility. The theorem, without prejudice to the correctness of its conclusions, can disregard problems of valuation because it is free to resort to a set of simple assumptions. These are: that only two products are to be produced; that these products are freely movable; that for the production of each of them two factors are required; that one of these factors (it may be either labor or capital goods) is identical in the production of both, while the other factor (a specific property of the soil) is different for each of the two processes; that the greater scarcity of the factor common to both processes determines the extent of the exploitation of the different factor. In the frame of these assumptions, which make it possible to establish substitution ratios between the expenditure of the common factor and the output, the theorem answers the question raised.

The law of comparative cost is as independent of the classical theory of value as is the law of returns, which its reasoning resembles. In both cases we can content ourselves with comparing only physical input and physical output. With the law of returns we compare the output of the same product. With the law of comparative costs we compare the output of two different products. Such a comparison is feasible because we assume that for the production of each of them, apart from one specific factor, only nonspecific factors of the same kind are required.

Some critics blame the law of comparative cost for this simplification of assumptions. They believe that the modern theory of value would require a reformulation of the law in conformity with the principles of subjective value. Only such a formulation could provide a satisfactory conclusive demonstration. However, they do not want to calculate in terms of money. They prefer to resort to those methods of utility analysis which they consider a means for making value calculations in terms of utility. It will be shown in the further progress of our investigation that these attempts to eliminate monetary terms from economic calculation are delusive. Their fundamental assumptions are untenable and contradictory and all formulas derived from them are vicious. No method of economic calculation is possible other than one based on money prices as determined by the market.[7]

The meaning of the simple assumptions underlying the law of comparative cost is not precisely the same for the modern economists as it was for the classical economists. Some adherents of the classical school considered them as the starting point of a theory of value in international trade. We know now that they were mistaken in this belief. Besides, we realize that with regard to the determination of value and of prices there

7. See below, pp. 201-209.

is no difference between domestic and foreign trade. What makes people distinguish between the home market and markets abroad is only a difference in the data, i.e., varying institutional conditions restricting the mobility of factors of production and of products.

If we do not want to deal with the law of comparative cost under the simplified assumptions applied by Ricardo, we must openly employ money calculation. We must not fall prey to the illusion that a comparison between the expenditure of factors of production of various kinds and of the output of products of various kinds can be achieved without the aid of money calculation. If we consider the case of the surgeon and his handyman we must say: If the surgeon can employ his limited working time for the performance of operations for which he is compensated at $50 per hour, it is to his interest to employ a handyman to keep his instruments in good order and to pay him $2 per hour, although this man needs 3 hours to accomplish what the surgeon could do in 1 hour. In comparing the conditions of two countries we must say: If conditions are such that in England the production of 1 unit of each of the two commodities *a* and *b* requires the expenditure of 1 working day of the same kind of labor, while in India with the same investment of capital for *a* 2 days and for *b* 3 days are required, and if capital goods and *a* and *b* are freely movable from England to India and vice versa, while there is no mobility of labor, wage rates in India in the production of *a* must tend to be 50 percent, and in the production of *b* 33 1/3 per cent, of the English rates. If the English rate is 6 shillings, the rates in India would be the equivalent of 3 shillings in the production of *a* and the equivalent of 2 shillings in the production of *b*. Such a discrepancy in the remuneration of labor of the same kind cannot last if there is mobility of labor on the domestic Indian labor market. Workers would shift from the production of *b* into the production of *a*; their migration would tend to lower the remuneration in the *a* industry and to raise it in the *b* industry. Finally Indian wage rates would be equal in both industries. The production of *a* would tend to expand and to supplant English competition. On the other hand the production of *b* would become unprofitable in India and would have to be discontinued, while it would expand in England. The same reasoning is valid if we assume that the difference in the conditions of production consists also or exclusively in the amount of capital investment needed.

It has been asserted that Ricardo's law was valid only for his age and is of no avail for our time which offers other conditions. Ricardo saw the difference between domestic trade and foreign trade in differences in the mobility of capital and labor. If one assumes that capital, labor, and products are movable, then there exists a difference between regional and interregional trade only as far as the cost of transportation comes into play. Then

it is superfluous to develop a theory of international trade as distinguished from national trade. Capital and labor are distributed on the earth's surface according to the better or poorer conditions which the various regions offer to production. There are areas more densely populated and better equipped with capital, there are others less densely populated and poorer in capital supply. There prevails on the whole earth a tendency toward an equalization of wage rates for the same kind of labor.

Ricardo, however, starts from the assumption that there is mobility of capital and labor only within each country, and not between the various countries. He raises the question what the consequences of the free mobility of products must be under such conditions. (If there is no mobility of products either, then every country is economically isolated and autarkic, and there is no international trade at all.) The theory of comparative cost answers this question. Now, Ricardo's assumptions by and large held good for his age. Later, in the course of the nineteenth century, conditions changed. The immobility of capital and labor gave way; international transfer of capital and labor became more and more common. Then came a reaction. Today capital and labor are again restricted in their mobility. Reality again corresponds to the Ricardian assumptions.

However, the teachings of the classical theory of interregional trade are above any change in institutional conditions. They enable us to study the problems involved under any imaginable assumptions.

5. The Effects of the Division of Labor

The division of labor is the outcome of man's conscious reaction to the multiplicity of natural conditions. On the other hand it is itself a factor bringing about differentiation. It assigns to the various geographic areas specific functions in the complex of the processes of production. It makes some areas urban, others rural; it locates the various branches of manufacturing, mining, and agriculture in different places. Still more important, however, is the fact that it intensifies the innate inequality of men. Exercise and practice of specific tasks adjust individuals better to the requirements of their performance; men develop some of their inborn faculties and stunt the development of others. Vocational types emerge, people become specialists.

The division of labor splits the various processes of production into minute tasks, many of which can be performed by mechanical devices. It is this fact that made the use of machinery possible and brought about the amazing improvements in technical methods of production. Mechanization is the fruit of the division of labor, its most beneficial achievement, not its motive and fountain spring. Power-driven specialized machinery could be

employed only in a social environment under the division of labor. Every step forward on the road toward the use of more specialized, more refined, and more productive machines requires a further specialization of tasks.

6. The Individual Within Society

If praxeology speaks of the solitary individual, acting on his own behalf only and independent of fellow men, it does so for the sake of a better comprehension of the problems of social cooperation. We do not assert that such isolated autarkic human beings have ever lived and that the social stage of man's nonhuman ancestors and the emergence of the primitive social bonds were effected in the same process. Man appeared on the scene of earthly events as a social being. The isolated asocial man is a fictitious construction.

Seen from the point of view of the individual, society is the great means for the attainment of all his ends. The preservation of society is an essential condition of any plans an individual may want to realize by any action whatever. Even the refractory delinquent who fails to adjust his conduct to the requirements of life within the societal system of cooperation does not want to miss any of the advantages derived from the division of labor. He does not consciously aim at the destruction of society. He wants to lay his hands on a greater portion of the jointly produced wealth than the social order assigns to him. He would feel miserable if antisocial behavior were to become universal and its inevitable outcome, the return to primitive indigence, resulted.

It is illusory to maintain that individuals in renouncing the alleged blessings of a fabulous state of nature and entering into society have foregone some advantages and have a fair claim to be indemnified for what they have lost. The idea that anybody would have fared better under an asocial state of mankind and is wronged by the very existence of society is absurd. Thanks to the higher productivity of social cooperation the human species has multiplied far beyond the margin of subsistence offered by the conditions prevailing in ages with a rudimentary degree of the division of labor. Each man enjoys a standard of living much higher than that of his savage ancestors. The natural condition of man is extreme poverty and insecurity. It is romantic nonsense to lament the passing of the happy days of primitive barbarism. In a state of savagery the complainants would either not have reached the age of manhood, or if they had, they would have lacked the opportunities and amenities provided by civilization. Jean Jacques Rousseau and Frederick Engels, if they had lived in the primitive state which

they describe with nostalgic yearning, would not have enjoyed the leisure required for their studies and for the writing of their books.

One of the privileges which society affords to the individual is the privilege of living in spite of sickness or physical disability. Sick animals are doomed. Their weakness handicaps them in their attempts to find food and to repel aggression on the part of other animals. Deaf, nearsighted, or crippled savages must perish. But such defects do not deprive a man of the opportunity to adjust himself to life in society. The majority of our contemporaries are afflicted with some bodily deficiencies which biology considers pathological. Our civilization is to a great extent the achievement of such men. The eliminative forces of natural selection are greatly reduced under social conditions. Hence some people say that civilization tends to deteriorate the hereditary qualities of the members of society.

Such judgments are reasonable if one looks at mankind with the eyes of a breeder intent upon raising a race of men equipped with certain qualities. But society is not a stud-farm operated for the production of a definite type of men. There is no "natural" standard to establish what is desirable and what is undesirable in the biological evolution of man. Any standard chosen is arbitrary, purely subjective, in short a judgment of value. The terms racial improvement and racial degeneration are meaningless when not based on definite plans for the future of mankind.

It is true, civilized man is adjusted to life in society and not to that of a hunter in virgin forests.

The Fable of the Mystic Communion

The praxeological theory of society is assailed by the fable of the mystic communion.

Society, assert the supporters of this doctrine, is not the product of man's purposeful action; it is not cooperation and division of tasks. It stems from unfathomable depths, from an urge ingrained in man's essential nature. It is, says one group, engrossment by the Spirit which is Divine Reality and participation, by virtue of a *unio mystica*, in God's power and love. Another group sees society as a biological phenomenon; it is the work of the voice of the blood, the bond uniting the offspring of common ancestors with these ancestors and with one another, and the mystical harmony between the ploughman and the soil he tills.

That such psychical phenomena are really felt is true. There are people who experience the unio mystica and place this experience above everything else, and there are men who are convinced that they hear the voice of the blood and

smell with heart and soul the unique scent of the cherished soil of their country. The mystical experience and the ecstatic rapture are facts which psychology must consider real, like any other psychical phenomenon. The error of the communion-doctrines does not consist in their assertion that such phenomena really occur, but in the belief that they are primary facts not dependent on any rational consideration.

The voice of the blood which brings the father close to his child was not heard by those savages who did not know the causal relation between cohabitation and pregnancy. Today, as this relation is known to everybody, a man who has full confidence in his wife's fidelity, the voice of the blood is of no use. Nobody ever ventured to assert that doubts concerning paternity could be resolved by the voice of the blood. A mother who has kept watch over her child since its birth can hear the voice of the blood. If she loses touch with the infant at an early date, she may later identify it by some bodily marks, for instance those moles and scars which once were popular with novel writers. But the blood is mute if such observations and the conclusions derived from them do not make it speak. The voice of the blood, contend the German racists, mysteriously unifies all members of the German people. But anthropology reveals the fact that the German nation is a mixture of the descendants of various races, subraces, and strains and not a homogeneous stock descended from a common ancestry. The recently germanized Slav who has only a short time since changed his paternal family name for a German-sounding name believes that he is substantially attached to all Germans. But he does not experience any such inner urge impelling him to join the ranks of his brothers or cousins who remained Czechs or Poles.

The voice of the blood is not an original and primordial phenomenon. It is prompted by rational considerations. Because a man believes that he is related to other people by a common ancestry, he develops those feelings and sentiments which are poetically described as the voice of the blood.

The same is true with regard to religious ecstasy and mysticism of the soil. The unio mystica of the devout mystic is conditioned by familiarity with the basic teachings of his religion. Only a man who has learned about the greatness and glory of God can experience direct communion with Him. Mysticism of the soil is connected with the development of definite geopolitical ideas. Thus it may happen that inhabitants of the plains or the seashore include in the image of the soil with which they claim to be fervently joined and united also mountain districts which are unfamiliar to them and to whose conditions they could not adapt themselves, only because this territory belongs to the political body of which they are members, or would like to be members. On the other hand they often fail to include in this image of the soil whose voice they claim to

hear neighboring areas of a geographic structure very similar to that of their own country if these areas happen to belong to a foreign nation.

The various members of a nation or linguistic group and the clusters they form are not always united in friendship and good will. The history of every nation is a record of mutual dislike and even hatred between its subdivisions. Think of the English and the Scotch, the Yankees and the Southerners, the Prussians and the Bavarians. It was ideologies that overcame such animosities and inspired all members of a nation or linguistic group with those feelings of community and belonging together which present-day nationalists consider a natural and original phenomenon.

The mutual sexual attraction of male and female is inherent in man's animal nature and independent of any thinking and theorizing. It is permissible to call it original, vegetative, instinctive, or mysterious; there is no harm in asserting metaphorically that it makes one being out of two. We may call it a mystic communion of two bodies, a community. However, neither cohabitation, nor what precedes it and follows, generates social cooperation and societal modes of life. The animals too join together in mating, but they have not developed social relations. Family life is not merely a product of sexual intercourse. It is by no means natural and necessary that parents and children live together in the way in which they do in the family. The mating relation need not result in a family organization. The human family is an outcome of thinking, planning, and acting. It is this very fact which distinguishes it radically from those animal groups which we call *per analogiam* amimal families.

The mystical experience of communion or community is not the source of societal relations, but their product.

The counterpart of the fable of the mystical communion is the fable of a natural and original repulsion between races or nations. It is asserted that an instinct teaches man to distinguish congeners from strangers and to detest the latter. Scions of noble races abominate any contact with members of lower races. To refute this statement one need only mention the fact of racial mixture. As there are in present-day Europe no pure stocks, we must conclude that between members of the various stocks which once settled in that continent there was sexual attraction and not repulsion. Millions of mulattoes and other half-breeds are living counterevidence to the assertion that there exists a natural repulsion between the various races.

Like the mystical sense of communion, racial hatred is not a natural phenomenon innate in man. It is the product of ideologies. But even if such a thing as a natural and inborn hatred between various races existed, it would not render social cooperation futile and would not invalidate Ricardo's theory of association. Social cooperation has nothing to do with personal

love or with a general commandment to love one another. People do not cooperate under the division of labor because they love or should love one another. They cooperate because this best serves their own interests. Neither love not charity nor any other sympathetic sentiments but rightly understood selfishness is what originally impelled man to adjust himself to the requirements of society, to respect the rights and freedoms of his fellow men and to substitute peaceful collaboration for enmity and conflict.

7. The Great Society

Not every interhuman relation is a social relation. When groups of men rush upon one another in a war of outright extermination, when men fight against men as mercilessly as they crush pernicious animals and plants, there is, between the fighting parties, reciprocal effect and mutual relation, but no society. Society is joint action and cooperation in which each participant sees the other partner's success as a means for the attainment of his own.

The struggles in which primitive hordes and tribes fought one another for watering places, hunting and fishing grounds, pastures and booty were pitiless wars of annihilation. They were total wars. So in the nineteenth century were the first encounters of Europeans with the aborigines of territories newly made accessible. But already in the primeval age, long before the time of which historical records convey information, another mode of procedure began to develop. People preserved even in warfare some rudiments of social relations previously established; in fighting against peoples with whom they never before had had any contact, they began to take into account the idea that between human beings, notwithstanding their immediate enmity, a later arrangement and cooperation is possible. Wars were waged to hurt the foe; but the hostile acts were no longer merciless and pitiless in the full sense of these terms. The beligerents began to respect certain limits which in a struggle against men—as differentiated from that against beasts—should not be transcended. Above the implacable hatred and the frenzy of destruction and annihilation a societal element began to prevail. The idea emerged that every human adversary should be considered as a potential partner in a future cooperation, and that this fact should not be neglected in the conduct of military operations. War was no longer considered the normal state of interhuman relations. People recognized that peaceful cooperation is the best means to carry on the struggle for biological survival. We may even say that as soon as people realized that it is more advantageous to enslave the defeated than to kill them, the warriors, while still fighting, gave thought to the aftermath, the peace. Enslavement was by and large a preliminary step toward cooperation.

The ascendancy of the idea that even in war not every act is to be considered permissible, that there are legitimate and illicit acts of warfare, that there are laws, i.e., societal relationships which are above all nations, even above those momentarily fighting one another, has finally established the Great Society embracing all men and all nations. The various regional societies were merged into one ecumenical society.

Belligerents who do not wage war savagely in the manner of beasts, but according to "human" and social rules of warfare, renounce the use of some methods of destruction in order to attain the same concessions on the part of their foes. As far as such rules are complied with, social relations exist between the fighting parties. The hostile acts themselves are not only asocial, but antisocial. It is inexpedient to define the term "social relationships" in such a way as to include actions which aim at other people's annihilation and at the frustration of their actions.[8] Where the only relations between men are those directed at mutual detriment, there is neither society nor societal relations.

Society is not merely interaction. There is interaction—reciprocal influence—between all parts of the universe: between the wolf and the sheep he devours; between the germ and the man it kills; between the falling stone and the thing upon which it falls. Society, on the other hand, always involves men acting in cooperation with other men in order to let all participants attain their own ends.

8. The Instinct of Aggression and Destruction

It has been asserted that man is a beast of prey whose inborn natural instincts impel him to fight, to kill, and to destroy. Civilization, in creating unnatural humanitarian laxity which alienates man from his animal origin, has tried to quell these impulses and appetites. It has made civilized man a decadent weakling who is ashamed of his animality and proudly calls his depravity true humaneness. In order to prevent further degeneration of the species man, it is imperative to free him from the pernicious effects of civilization. For civilization is merely a cunning invention of inferior men. These underlings are too weak to be a match for the vigorous heroes, they are too cowardly to endure the well-deserved punishment of complete annihilation, and they are too lazy and too insolent to serve the masters as slaves. Thus they have resorted to a tricky makeshift. They have reversed the eternal standards of value, absolutely fixed by the immutable laws of the

8. Such is the terminology used by Leopold von Wiese (*Allgemeine Soziologie* [Munich, 1924], I, 10 ff.).

universe; they have propagated a morality which calls their own inferiority virtue and the eminence of the noble heroes vice. This moral rebellion of the slaves must be undone by a transvaluation of all values. The ethics of the slaves, this shameful product of the resentment of weaklings, must be entirely discarded; the ethics of the strong or, properly speaking, the nullification of any ethical restriction must be substituted for it. Man must become a worthy scion of his ancestors, the noble beasts of days gone by.

It is usual to call such doctrines social or sociological Darwinism. We need not decide here whether this terminology is appropriate or not. At any rate it is a mistake to assign the epithets evolutionary and biological to teachings which blithely disparage the whole of mankind's history from the ages in which man began to lift himself above the purely animal existence of his nonhuman ancestors as a continuous progression toward degeneration and decay. Biology does not provide any standard for the appraisal of changes occurring within living beings other than whether or not these changes succeeded in adjusting the individuals to the conditions of their environment and thereby in improving their chances in the struggle for survival. It is a fact that civilization, when judged from this point of view, is to be considered a benefit and not an evil. It has enabled man to hold his own in the struggle against all other living beings, both the big beasts of prey and the even more pernicious microbes; it has multiplied man's means of sustenance; it has made the average man taller, more agile, and more versatile and it has stretched his average length of life; it has given man the uncontested mastery of the earth; it has multiplied population figures and raised the standard of living to a level never dreamed of by the crude cave dwellers of prehistoric ages. It is true that this evolution stunted the development of certain knacks and gifts which were once useful in the struggle for survival and have lost their usefulness under changed conditions. On the other hand it developed other talents and skills which are indispensable for life within the frame of society. However, a biological and evolutionary view must not cavil at such changes. For primitive man hard fists and pugnacity were as useful as the ability to be clever at arithmetic and to spell correctly are for modern man. It is quite arbitrary and certainly contrary to any biological standard to call only those characteristics which were useful to primitive man natural and adequate to human nature and to condemn the talents and skills badly needed by civilized man as marks of degeneration and biological deterioration. To advise man to return to the physical and intellectual features of his prehistoric ancestors is no more reasonable than to ask him to renounce his upright gait and to grow a tail again.

It is noteworthy that the men who were foremost in extolling the eminence of the savage impulses of our barbarian forefathers were so frail that their bodies would not have come up to the requirements of "living dangerously." Nietzsche even before his mental breakdown was so sickly that the only climate he could stand was that of the Engadin valley and of some Italian districts. He would not have been in a position to accomplish his work if civilized society had not protected his delicate nerves against the roughness of life. The apostles of violence wrote their books under the sheltering roof of "bourgeois security" which they derided and disparaged. They were free to publish their incendiary sermons because the liberalism which they scorned safeguarded freedom of the press. They would have been desperate if they had had to forego the blessings of the civilization scorned by their philosophy. And what a spectacle was that timid writer Georges Sorel, who went so far in his praise of brutality as to blame the modern system of education for weakening man's inborn tendencies toward violence![9]

One may admit that in primitive man the propensity for killing and destroying and the disposition for cruelty were innate. We may also assume that under the conditions of earlier ages the inclination for aggression and murder was favorable to the preservation of life. Man was once a brutal beast. (There is no need to investigate whether prehistoric man was a carnivore or a herbivore.) But one must not forget that he was physically a weak animal; he would not have been a match for the big beasts of prey if he had not been equipped with a peculiar weapon, reason. The fact that man is a reasonable being, that he therefore does not yield without inhibitions to every impulse, but arranges his conduct according to reasonable deliberation, must not be called unnatural from a zoological point of view. Rational conduct means that man, in face of the fact that he cannot satisfy all his impulses, desires, and appetites, foregoes the satisfaction of those which he considers less urgent. In order not to endanger the working of social cooperation man is forced to abstain from satisfying those desires whose satisfaction would hinder the establishment of societal institutions. There is no doubt that such a renunciation is painful. However, man has made his choice. He has renounced the satisfaction of some desires incompatible with social life and has given priority to the satisfaction of those desires which can be realized only or in a more plentiful way under a system of the division of labor. He has entered upon the way toward civilization, social cooperation, and wealth.

9. Georges Sorel, *Réflexions sur law violence* (3d. ed., Paris, 1912), p. 269.

This decision is not irrevocable and final. The choice of the fathers does not impair the sons' freedom to choose. They can reverse the resolution. Every day they can proceed to the transvaluation of values and prefer barbarism to civilization, or, as some authors say, the soul to the intellect, myths to reason, and violence to peace. But they must choose. It is impossible to have things incompatible with one another.

Science, from the point of view of its valuational neutrality, does not blame the apostles of the gospel of violence for praising the frenzy of murder and the mad delights of sadism. Value judgments are subjective, and liberal society grants to everybody the right to express his sentiments freely. Civilization has not extirpated the original tendency toward aggression, bloodthirstiness, and cruelty which characterized primitive man. In many civilized men they are dormant and burst forth as soon as the restraints developed by civilization give way. Remember the unspeakable horrors of the Nazi concentration camps. The newspapers continually report abominable crimes manifesting the latent urges toward bestiality. The most popular novels and moving pictures are those dealing with bloodshed and violent acts. Bull fights and cock fights attract large crowds.

If an author says: the rabble thirst for blood and I with them, he may be no less right than in asserting that primitive man too took delight in killing. But he errs if he passes over the fact that the satisfaction of such sadistic desires impairs the existence of society or if he asserts that "true" civilization and the "good" society are an achievement of people blithely indulging in their passion for violence, murder, and cruelty, that the repression of the impulses toward brutality endangers mankind's evolution and that a substitution of barbarism for humanitarianism would save man from degeneration. The social division of labor and cooperation rests upon conciliatory settlement of disputes. Not war, as Heraclitus said, but peace is the source of all social relations. To man desires other than that for bloodshed are inborn. If he wants to satisfy these other desires, he must forego his urge to kill. He who wants to preserve life and health as well and as long as possible, must realize that respect for other people's lives and health better serves his aim than the opposite mode of conduct. One may regret that such is the state of affairs. But no such lamentations can alter the hard facts.

It is useless to censure this statement by referring to irrationality. All instinctive impulses defy examination by reason because reason deals only with the means for attaining ends sought and not with ultimate ends. But what distinguishes man from other animals is precisely that he does not yield without any will of his own to an instinctive urge. Man uses reason in order

to choose between the incompatible satisfactions of conflicting desires.

One must not tell the masses: Indulge in your urge for murder; it is genuinely human and best serves your well-being. One must tell them: If you satisfy your thirst for blood, you must forego many other desires. You want to eat, to drink, to live in fine homes, to clothe yourselves, and a thousand other things which only society can provide. You cannot have everything, you must choose. The dangerous life and the frenzy of sadism may please you, but they are incompatible with the security and plenty which you do not want to miss either.

Praxeology as a science cannot encroach upon the individual's right to choose and to act. The final decisions rest with acting men, not with the theorists. Science's contribution to life and action does not consist in establishing value judgments, but in clarification of the conditions under which man must act and in elucidation of the effects of various modes of action. It puts at the disposal of acting man all the information he needs in order to make his choices in full awareness of their consequences. It prepares an estimate of cost and yield, as it were. It would fail in this task if it were to omit from this statement one of the items which could influence people's choices and decisions.

Current Misinterpretations of Modern Natural Science, Especially of Darwinism

Some present-day antiliberals, both of the right-wing and of the left-wing variety, base their teachings on misinterpretations of the achievements of modern biology.

1. *Men are unequal.* Eighteenth-century liberalism and likewise present-day egalitarianism start from the "self-evident truth" that "all men are created equal, and that they are endowed by their Creator with certain unalienable Rights." However, say the advocates of a biological philosophy of society, natural science has demonstrated in an irrefutable way that men are different. There is no room left in the framework of an experimental observation of natural phenomena for such a concept as natural rights. Nature is unfeeling and insensible with regard to any being's life and happiness. Nature is iron necessity and regularity. It is metaphysical nonsense to link together the "slippery" and vague notion of liberty and the unchangeable absolute laws of cosmic order. Thus the fundamental idea of liberalism is unmasked as a fallacy.

Now it is true that the liberal and democratic movement of the eighteenth and nineteenth centuries drew a great part of its strength from the doctrine of natural law and the innate imprescriptible rights of the individual. These ideas, first developed by ancient philosophy and Jewish theology, permeated

Christian thinking. Some anti-Catholic sects made them the focal point of their political programs. A long line of eminent philosophers substantiated them. They became popular and were the most powerful moving force in the prodemocratic evolution. They are still supported today. Their advocates do not concern themselves with the incontestable fact that God or nature did not create men equal since many are born hale and hearty while others are crippled and deformed. With them all differences between men are due to education, opportunity, and social institutions.

But the teachings of utilitarian philosophy and classical economics have nothing at all to do with the doctrine of natural right. With them the only point that matters is social utility. They recommend popular government, private property, tolerance, and freedom not because they are natural and just, but because they are beneficial. The core of Ricardo's philosophy is the demonstration that social cooperation and division of labor between men who are in every regard superior and more efficient and men who are in every regard inferior and less efficient is beneficial to both groups. Bentham, the radical, shouted: "*Natural rights* is simple nonsense: natural and imprescriptible rights, rhetorical nonsense."[10] With him "the sole object of government ought to be the greatest happiness of the greatest possible number of the community."[11] Accordingly, in investigating what ought to be right he does not care about preconceived ideas concerning God's or nature's plans and intentions, forever hidden to mortal men; he is intent upon discovering what best serves the promotion of human welfare and happiness. Malthus showed that nature in limiting the means of subsistence does not accord to any living being a right of existence, and that by indulging heedlessly in the natural impulse of proliferation man would never have risen above the verge of starvation. He contended that human civilization and well-being could develop only to the extent that man learned to rein his sexual appetites by moral restraint. The Utilitarians do not combat arbitrary government and privileges because they are against natural law but because they are detrimental to prosperity. They recommend equality under the civil law not because men are equal but because such a policy is beneficial to the commonweal. In rejecting the illusory notions of natural law and human equality modern biology only repeated what the utilitarian champions of liberalism and democracy long before had taught in a much more persuasive way. It is obvious that no biological doctrine can ever invalidate what utilitarian philosophy says about the social utility of democratic government, private property, freedom, and equality under the law.

10.Bentham, *Anarchical Fallacies; being an Examination of the Declaration of Rights issued during the French Revolution,* in *Work* (ed. by Bowring), II, 501.

11. Bentham, *Principles of the Civil Code*, in *Works*, I, 301.

The present-day prevalence of doctrines approving social disintegration and violent conflict is not the result of an alleged adaptation of social philosophy to the findings of biology but of the almost universal rejection of utilitarian philosophy and economic theory. People have substituted an ideology of irreconcilable class conflict and international conflict for the "orthodox" ideology of the harmony of the rightly understood, i.e., long-run, interests of all individuals, social groups, and nations. Men are fighting one another because they are convinced that the extermination and liquidation of adversaries is the only means of promoting their own well-being.

2. *The social implications of Darwinism.* The theory of evolution as expounded by Darwin, says a school of social Darwinism, has clearly demonstrated that in nature there are no such things as peace and respect for the lives and welfare of others. In nature there is always struggle and merciless annihilation of the weak who do not succeed in defending themselves. Liberalism's plans for eternal peace—both in domestic and in foreign relations—are the outcome of an illusory rationalism contrary to the natural order.

However, the notion of the struggle for existence as Darwin borrowed it from Malthus and applied it in his theory, is to be understood in a metaphorical sense. Its meaning is that a living being actively resists the forces detrimental to its own life. This resistance, if it is to succeed, must be appropriate to the environmental conditions in which the being concerned has to hold its own. It need not always be a war of extermination such as in the relations between men and morbific microbes. Reason has demonstrated that, for man, the most adequate means of improving his condition is social cooperation and division of labor. They are man's foremost tool in his struggle for survival. But they can work only where there is peace. Wars, civil wars, and revolutions are detrimental to man's success in the struggle for existence because they disintegrate the apparatus of social cooperation.

3. *Reason and rational behavior called unnatural.* Christian theology deprecated the animal functions of man's body and depicted the "soul" as something outside of all biological phenomena. In an excessive reaction against this philosophy some moderns are prone to disparage everything in which man differs from other animals. In their eyes human reason is inferior to the animal instincts and impulses; it is unnatural and therefore bad. With them the terms rationalism and rational behavior have an opprobrious connotation. The perfect man, the real man, is a being who obeys his primordial instincts more than his reason.

The obvious truth is that reason, man's most characteristic feature, is also a biological phenomenon. It is neither more nor less natural than any other feature of the species homo sapiens, for instance, the upright gait or the hairless skin.

IX. THE ROLE OF IDEAS

1. Human Reason

REASON is man's particular and characteristic feature. There is no need for praxeology to raise the question whether reason is a suitable tool for the cognition of ultimate and absolute truth. It deals with reason only as far as it enables man to act.

All those objects which are the substratum of human sensation, perception, and observation also pass before the senses of animals. But man alone has the faculty of transforming sensuous stimuli into observation and experience. And man alone can arrange his various observations and experiences into a coherent system.

Action is preceded by thinking. Thinking is to deliberate beforehand over future action and to reflect afterwards upon past action. Thinking and acting are inseparable. Every action is always based on a definite idea about causal relations. He who thinks a causal relation thinks a theorem. Action without thinking, practice without theory are unimaginable. The reasoning may be faulty and the theory incorrect; but thinking and theorizing are not lacking in any action. On the other hand thinking is always thinking of a potential action. Even he who thinks of a pure theory assumes that the theory is correct, i.e., that action complying with its content would result in an effect to be expected from its teachings. It is of no relevance for logic whether such action is feasible or not.

It is always the individual who thinks. Society does not think any more than it eats or drinks. The evolution of human reasoning from the naive thinking of primitive man to the more subtle thinking of modern science took place within society. However, thinking itself is always an achievement of individuals. There is joint action, but no joint thinking. There is only tradition which preserves thoughts and communicates them to others as a stimulus to their thinking. However, man has no means of appropriating the thoughts of his precursors other than to think them over again. Then, of course, he is in a position to proceed farther on the basis of his forerunners' thoughts. The foremost vehicle of tradition is the word. Thinking is linked up with language and vice versa. Concepts are embodied in terms. Language is a tool of thinking as it is a tool of social action.

The history of thought and ideas is a discourse carried on from generation to generation. The thinking of later ages grows out of the thinking of earlier ages. Without the aid of this stimulation intellectual progress would have been impossible. The continuity of human evolution, sowing for the offspring and harvesting on land cleared and tilled by the ancestors, manifests itself also in the history of science and ideas. We have inherited from our forefathers not only a stock of products of various orders of goods which is the source of our material wealth; we have no less inherited ideas and thoughts, theories and technologies to which our thinking owes its productivity. But thinking is always a manifestation of individuals.

2. World View and Ideology

The theories directing action are often imperfect and unsatisfactory. They may be contradictory and unfit to be arranged into a comprehensive and coherent system.

If we look at all the theorems and theories guiding the conduct of certain individuals and groups as a coherent complex and try to arrange them as far as is feasible into a system, i.e., a comprehensive body of knowledge, we may speak of it as a world view. A world view is, as a theory, an interpretation of all things, and as a precept for action, an opinion concerning the best means for removing uneasiness as much as possible. A world view is thus, on the one hand, an explanation of all phenomena and, on the other hand, a technology, both these terms being taken in their broadest sense. Religion, metaphysics, and philosophy aim at providing a world view. They interpret the universe and they advise men how to act.

The concept of an ideology is narrower than that of a world view. In speaking of ideology we have in view only human action and social cooperation and disregard the problems of metaphysics, religious dogma, the natural sciences, and the technologies derived from them. Ideology is the totality of our doctrines concerning individual conduct and social relations. Both, world view and ideology, go beyond the limits imposed upon a purely neutral and academic study of things as they are. They are not only scientific theories, but also doctrines about the ought, i.e., about the ultimate ends which man should aim at in his earthly concerns.

Asceticism teaches that the only means open to man for removing pain and for attaining complete quietude, contentment, and happiness is to turn away from earthly concerns and to live without bothering about worldly

things. There is no salvation other than to renounce striving after material well-being, to endure submissively the adversities of the earthly pilgrimage and to dedicate oneself exclusively to the preparation for eternal bliss. However, the number of those who consistently and unswervingly comply with the principles of asceticism is so small that it is not easy to instance more than a few names. It seems that the complete passivity advocated by asceticism is contrary to nature. The enticement of life triumphs. The ascetic principles have been adulterated. Even the most saintly hermits made concessions to life and earthly concerns which did not agree with their rigid principles. But as soon as a man takes into account any earthly concerns, and substitutes for purely vegetative ideals an acknowledgment of worldly things, however conditioned and incompatible with the rest of his professed doctrine, he bridges over the gulf which separated him from those who say yes to the striving after earthly ends. Then he has something in common with everyone else.

Human thoughts about things of which neither pure reasoning nor experience provides any knowledge may differ so radically that no agreement can be reached. In this sphere in which the free reverie of the mind is restricted neither by logical thinking nor by sensory experience man can give vent to his individuality and subjectivity. Nothing is more personal than the notions and images about the transcendent. Linguistic terms are unable to communicate what is said about the transcendent; one can never establish whether the hearer conceives them in the same way as the speaker. With regard to things beyond there can be no agreement. Religious wars are the most terrible wars because they are waged without any prospect of conciliation.

But where earthly things are involved, the natural affinity of all men and the identity of the biological conditions for the preservation of their lives come into play. The higher productivity of cooperation under division of labor makes society the foremost means of every individual for the attainment of his own ends whatever they may be. The maintenance and further intensification of social cooperation become a concern of everybody. Every world view and every ideology which is not entirely and unconditionally committed to the practice of asceticism and to a life in anchoritic reclusion must pay heed to the fact that society is the great means for the attainment of earthly ends. But then a common ground is won to clear the way for an agreement concerning minor social problems and the details of society's organization. How-

ever various ideologies may conflict with one another, they harmonize in one point, in the acknowledgment of life in society.

People fail sometimes to see this fact because in dealing with philosophies and ideologies they look more at what these doctrines assert with regard to transcendent and unknowable things and less at their statements about action in this world. Between various parts of an ideological system there is often an unbridgeable gulf. For acting man only those teachings are of real importance which result in precepts for action, not those doctrines which are purely academic and do not apply to conduct within the frame of social cooperation. We may disregard the philosophy of adamant and consistent asceticism because such a rigid asceticism must ultimately result in the extinction of its supporters. All other ideologies, in approving of the search for the necessities of life, are forced in some measure to take into account the fact that division of labor is more productive than isolated work. They thus admit the need for social cooperation.

Praxeology and economics are not qualified to deal with the transcendent and metaphysical aspects of any doctrine. But, on the other hand, no appeal to any religious or metaphysical dogmas and creeds can invalidate the theorems and theories concerning social cooperation as developed by logically correct praxeological reasoning. If a philosophy has admitted the necessity of societal links between men, it has placed itself, as far as problems of social action come into play, on ground from which there is no escape into personal convictions and professions of faith not liable to a thorough examination by rational methods.

This fundamental fact is often ignored. People believe that differences in world view create irreconcilable conflicts. The basic antagonisms between parties committed to different world views, it is contended, cannot be settled by compromise. They stem from the deepest recesses of the human soul and are expressive of a man's innate communion with supernatural and eternal forces. There can never be any cooperation between people divided by different world views.

However, if we pass in review the programs of all parties—both the cleverly elaborated and publicized programs and those to which the parties really cling when in power—we can easily discover the fallacy of this interpretation. All present-day political parties strive after the earthly well-being and prosperity of their supporters. They promise that they will render economic conditions more satisfactory to their followers. With regard to this issue there is no difference between the Roman Catholic Church and the

various Protestant denominations as far as they intervene in political and social questions, between Christianity and the non-Christian religions, between the advocates of economic freedom and the various brands of Marxian materialism, between nationalists and internationalists, between racists and the friends of interracial peace. It is true that many of these parties believe that their own group cannot prosper except at the expense of other groups, and even go so far as to consider the complete annihilation of other groups or their enslavement as the necessary condition of their own group's prosperity. Yet, extermination or enslavement of others is for them not an ultimate end, but a means for the attainment of what they aim at as an ultimate end: their own group's flowering. If they were to learn that their own designs are guided by spurious theories and would not bring about the beneficial results expected, they would change their programs.

The pompous statements which people make about things unknowable and beyond the power of the human mind, their cosmologies, world views, religions, mysticisms, metaphysics, and conceptual phantasies differ widely from one another. But the practical essence of their ideologies, i.e., their teachings dealing with the ends to be aimed at in earthly life and with the means for the attainment of these ends, show much uniformity. There are, to be sure, differences and antagonisms both with regard to ends and means. Yet the differences with regard to ends are not irreconcilable; they do not hinder cooperation and amicable arrangements in the sphere of social action. As far as they concern means and ways only, they are of a purely technical character and as such open to examination by rational methods. When in the heat of party conflicts one of the factions declares: "Here we cannot go on in our negotiations with you because we are faced with a question touching upon our world view; on this point we must be adamant and must cling rigidly to our principles whatever may result," one need only scrutinize matters more carefully to realize that such declarations describe the antagonism as more pointed than it really is. In fact, for all parties committed to pursuit of the people's welfare and thus approving social cooperation, questions of social organization and the conduct of social action are not problems of ultimate principles and of world views, but ideological issues. They are technical problems with regard to which some arrangement is always possible. No party would wittingly prefer social disintegration, anarchy, and a return to primitive barbarism to a solution which must be bought at the price of the sacrifice of some ideological points.

In party programs these technical issues are, of course, of primary importance. A party is committed to certain means, it recommends certain methods of political action and rejects utterly all other methods and policies as inappropriate. A party is a body which combines all those eager to employ the same means for common action. The principle which differentiates men and integrates parties is the choice of means. Thus for the party as such the means chosen are essential. A party is doomed if the futility of the means recommended becomes obvious. Party chiefs whose prestige and political career are bound up with the party's program may have ample reasons for withdrawing its principles from unrestricted discussion; they may attribute to them the character of ultimate ends which must not be questioned because they are based on a world view. But for the people as whose mandataries the party chiefs pretend to act, for the voters whom they want to enlist and for whose votes they canvass, things offer another aspect. They have no objection to scrutinizing every point of a party's program. They look upon such a program only as a recommendation of means for the attainment of their own ends, viz., earthly well-being.

What divides those parties which one calls today world view parties, i.e., parties committed to basic philosophical decisions about ultimate ends, is only seeming disagreement with regard to ultimate ends. Their antagonisms refer either to religious creeds or to problems of international relations or the problem of ownership of the means of production or the problems of political organization. It can be shown that all these controversies concern means and not ultimate ends.

Let us begin with the problems of a nation's political organization. There are supporters of a democratic system of government, of hereditary monarchy, of the rule of a self-styled elite and of Caesarist dictatorship.[1] It is true that these programs are often recommended by reference to divine institutions, to the eternal laws of the universe, to the natural order, to the inevitable trend of historical evolution, and to other objects of transcendent knowledge. But such statements are merely incidental adornment. In appealing to the electorate, the parties advance other arguments. They are eager to show that the system they support will succeed better than those advocated by other parties in realizing those ends which the citizens aim at. They specify the beneficial results achieved in the past or in other countries; they disparage the other parties' programs by relating their failures. They resort both to pure

1. Caesarism is today exemplified by the Bolshevik, Fascist, or Nazi type of dictatorship.

reasoning and to an interpretation of historical experience in order to demonstrate the superiority of their own proposals and the futility of those of their adversaries. Their main argument is always: the political system we support will render you more prosperous and more content.

In the field of society's economic organization there are the liberals advocating private ownership of the means of production, the socialists advocating public ownership of the means of production, and the interventionists advocating a third system which, they contend, is as far from socialism as it is from capitalism. In the clash of these parties there is again much talk about basic philosophical issues. People speak of true liberty, equality, social justice, the rights of the individual, community, solidarity, and humanitarianism. But each party is intent upon proving by ratiocination and by referring to historical experience that only the system it recommends will make the citizens prosperous and satisfied. They tell the people that realization of their program will raise the standard of living to a higher level than realization of any other party's program. They insist upon the expediency of their plans and upon their utility. It is obvious that they do not differ from one another with regard to ends but only as to means. They all pretend to aim at the highest material welfare for the majority of citizens.

The nationalists stress the point that there is an irreconcilable conflict between the interests of various nations, but that, on the other hand, the rightly understood interests of all the citizens within the nation are harmonious. A nation can prosper only at the expense of other nations; the individual citizen can fare well only if his nation flourishes. The liberals have a different opinion. They believe that the interests of various nations harmonize no less than those of the various groups, classes, and strata of individuals within a nation. They believe that peaceful international cooperation is a more appropriate means than conflict for the attainment of the end which they and the nationalists are both aiming at: their own nation's welfare. They do not, as the nationalists charge, advocate peace and free trade in order to betray their own nation's interests to those of foreigners. On the contrary, they consider peace and free trade the best means to make their own nation wealthy. What separates the free traders from the nationalists are not ends, but the means recommended for attainment of the ends common to both.

Dissension with regard to religious creeds cannot be settled by rational methods. Religious conflicts are essentially implacable and irreconcilable. Yet as soon as a religious community enters the field of political action and

tries to deal with problems of social organization, it is bound to take into account earthly concerns, however this may conflict with its dogmas and articles of faith. No religion in its exoteric activities ever ventured to tell people frankly: The realization of our plans for social organization will make you poor and impair your earthly well-being. Those consistently committed to a life of poverty withdrew from the political scene and fled into anchoritic seclusion. But churches and religious communities which have aimed at making converts and at influencing political and social activities of their followers have espoused the principles of secular conduct. In dealing with questions of man's earthly pilgrimage they hardly differ from any other political party. In canvassing, they emphasize, more than bliss in the beyond, the material advantages which they have in store for their brothers in faith.

Only a world view whose supporters renounce any earthly activity whatever could neglect to pay heed to the rational considerations which show that social cooperation is the great means for the attainment of all human ends. Because man is a social animal that can thrive only within society, all ideologies are forced to acknowledge the preeminent importance of social cooperation. They must aim at the most satisfactory organization of society and must approve of man's concern for an improvement of his material well-being. Thus they all place themselves upon a common ground. They are separated from one another not by world views and transcendent issues not subject to reasonable discussion, but by problems of means and ways. Such ideological antagonisms are open to a thorough scrutiny by the scientific methods of praxeology and economics.

The Fight Against Error

A critical examination of the philosophical systems constructed by mankind's great thinkers has very often revealed fissures and flaws in the impressive structure of those seemingly consistent and coherent bodies of comprehensive thought. Even the genius in drafting a world view sometimes fails to avoid contradictions and fallacious syllogisms.

The ideologies accepted by public opinion are still more infected by the shortcomings of the human mind. They are mostly an eclectic juxtaposition of ideas utterly incompatible with one another. They cannot stand a logical examination of their content. Their inconsistencies are irreparable and defy any attempt to combine their various parts into a system of ideas compatible with one another.

Some authors try to justify the contradictions of generally accepted ideologies by pointing out the alleged advantages of a compromise, however unsatisfactory from the logical point of view, for the smooth functioning of interhuman relations. They refer to the popular fallacy that life and reality

are "not logical"; they contend that a contradictory system may prove its expediency or even its truth by working satisfactorily while a logically consistent system would result in disaster. There is no need to refute anew such popular errors. Logical thinking and real life are not two separate orbits. Logic is for man the only means to master the problems of reality. What is contradictory in theory, is no less contradictory in reality. No ideological inconsistency can provide a satisfactory, i.e., working, solution for the problems offered by the facts of the world. The only effect of contradictory ideologies is to conceal the real problems and thus to prevent people from finding in time an appropriate policy for solving them. Inconsistent ideologies may sometimes postpone the emergence of a manifest conflict. But they certainly aggravate the evils which they mask and render a final solution more difficult. They multiply the agonies, they intensify the hatreds, and make peaceful settlement impossible. It is a serious blunder to consider ideological contradictions harmless or even beneficial.

The main objective of praxeology and economics is to substitute consistent correct ideologies for the contradictory tenets of popular eclecticism. There is no other means of preventing social disintegration and of safeguarding the steady improvement of human conditions than those provided by reason. Men must try to think through all the problems involved up to the point beyond which a human mind cannot proceed farther. They must never acquiesce in any solutions conveyed by older generations, they must always question anew every theory and every theorem, they must never relax in their endeavors to brush away fallacies and to find the best possible cognition. They must fight error by unmasking spurious doctrines and by expounding truth.

The problems involved are purely intellectual and must be dealt with as such. It is disastrous to shift them to the moral sphere and to dispose of supporters of opposite ideologies by calling them villains. It is vain to insist that what we are aiming at is good and what our adversaries want is bad. The question to be solved is precisely what is to be considered as good and what as bad. The rigid dogmatism peculiar to religious groups and to Marxism results only in irreconcilable conflict. It condemns beforehand all dissenters as evildoers, it calls into question their good faith, it asks them to surrender unconditionally. No social cooperation is possible where such an attitude prevails.

No better is the propensity, very popular nowadays, to brand supporters of other ideologies as lunatics. Psychiatrists are vague in drawing a line between sanity and insanity. It would be preposterous for laymen to interfere with this fundamental issue of psychiatry. However, it is clear that if the mere fact that a man shares erroneous views and acts according to his errors qualifies him as mentally disabled, it would be very hard to discover an individual to which the epithet sane or normal could be attributed. Then we

are bound to call the past generations lunatic because their ideas about the problems of the natural sciences and concomitantly their techniques differed from ours. Coming generations will call us lunatics for the same reason. Man is liable to error. If to err were the characteristic feature of mental disability, then everybody should be called mentally disabled.

Neither can the fact that a man is at variance with the opinions held by the majority of his contemporaries qualify him as a lunatic. Were Copernicus, Galileo and Lavoisier insane? It is the regular course of history that a man conceives new ideas, contrary to those of other people. Some of these ideas are later embodied in the system of knowledge accepted by public opinion as true. Is it permissible to apply the epithet "sane" only to boors who never had ideas of their own and to deny it to all innovators?

The procedure of some contemporary psychiatrists is really outrageous. They are utterly ignorant of the theories of praxeology and economics. Their familiarity with present-day ideologies is superficial and uncritical. Yet they blithely call the supporters of some ideologies paranoid persons.

There are men who are commonly stigmatized as *monetary cranks.* The monetary crank suggests a method for making everybody prosperous by monetary measures. His plans are illusory. However, they are the consistent application of a monetary ideology entirely approved by contemporary public opinion and espoused by the policies of almost all governments, political parties, and the press.

It is generally believed by those unfamiliar with economic theory that credit expansion and an increase in the quantity of money in circulation are efficacious means for lowering the rate of interest permanently below the height it would attain on a nonmanipulated capital and loan market. This theory is utterly illusory.[2] But it guides the monetary and credit policy of almost every contemporary government. Now, on the basis of this vicious ideology, no valid objection can be raised against the plans advanced by Pierre Joseph Proudhon, Ernest Solvay, Clifford Hugh Douglas and a host of other would-be reformers. They are only more consistent than other people are. They want to reduce the rate of interest to zero and thus to abolish altogether the scarcity of "capital." He who wants to refute them must attack the theories underlying the monetary and credit policies of the great nations.

The psychiatrist may object that what characterizes a man as a lunatic is precisely the fact that he lacks moderation and goes to extremes. While normal man is judicious enough to restrain himself, the paranoid person goes beyond all bounds. This is quite an unsatisfactory rejoinder. All the arguments advanced in favor of the thesis that the rate of interest can be reduced

2. Cf. below, Chapter XX.

by credit expansion from 5 or 4 per cent to 3 or 2 per cent are equally valid for a reduction to zero. The "monetary cranks" are certainly right from the point of view of the monetary fallacies approved by popular opinion.

There are psychiatrists who call the Germans who espoused the principles of Nazism lunatics and want to cure them by therapeutic procedures. Here again we are faced with the same problem. The doctrines of Nazism are vicious, but they do not essentially disagree with the ideologies of socialism and nationalism as approved by other peoples' public opinion. What characterized the Nazis was only the consistent application of these ideologies to the special conditions of Germany. Like all other contemporary nations the Nazis desired government control of business and economic self-sufficiency, i.e., autarky, for their own nation. The distinctive mark of their policy was that they refused to acquiesce in the disadvantages which the acceptance of the same system by other nations would impose upon them. They were not prepared to be forever "imprisoned," as they said, within a comparatively overpopulated area in which physical conditions render the productivity of human effort lower than in other countries. They believed that their nation's great population figures, the strategically propitious geographic situation of their country, and the inborn vigor and gallantry of their armed forces provided them with a good chance to remedy by aggression the evils they deplored.

Now, whoever accepts the ideology of nationalism and socialism as true and as the standard of his own nation's policy, is not in a position to refute the conclusions drawn from them by the Nazis. The only way for a refutation of Nazism left for foreign nations which have espoused these two principles was to defeat the Nazis in war. And as long as the ideology of socialism and nationalism is supreme in the world's public opinion, the Germans or other peoples will try again to succeed by aggression and conquest, should the opportunity ever be offered to them. There is no hope of eradication the aggression mentality if one does not explode entirely the ideological fallacies from which it stems. This is not a task for psychiatrists, but for economists.[3]

Man has only one tool to fight error: reason.

3. Might

Society is a product of human action. Human action is directed by ideologies. Thus society and any concrete order of social affairs are an outcome of ideologies; ideologies are not, as Marxism asserts, a product of a certain state of social affairs. To be sure, human thoughts and ideas are not the achievement of isolated individuals. Thinking too succeeds

3. Cf. Mises, *Omnipotent Government* (New Haven, 1944), pp. 221-228, 129-131-140.

only through the cooperation of the thinkers. No individual would make headway in his reasoning if he were under the necessity of starting from the beginning. A man can advance in thinking only because his efforts are aided by those of older generations who have formed the tools of thinking, the concepts and terminologies, and have raised the problems.

Any given social order was thought out and designed before it could be realized. This temporal and logical precedence of the ideological factor does not imply the proposition that people draft a complete plan of a social system as the utopians do. What is and must be thought out in advance is not the concerting of individual actions into an integrated system of social organization, but the actions of individuals with regard to their fellow men and of already formed groups of individuals with regard to other groups. Before a man aids his fellow in cutting a tree, such cooperation must be thought out. Before an act of barter takes place, the idea of mutual exchange of goods and services must be conceived. It is not necessary that the individuals concerned become aware of the fact that such mutuality results in the establishment of social bonds and in the emergence of a social system. The individual does not plan and execute actions intended to construct society. His conduct and the corresponding conduct of others generate social bodies.

Any existing state of social affairs is the product of ideologies previously thought out. Within society new ideologies may emerge and may supersede older ideologies and thus transform the social system. However, society is always the creation of ideologies temporally and logically anterior. Action is always directed by ideas; it realizes what previous thinking has designed.

If we hypostatize or anthropomorphize the notion of ideology, we may say that ideologies have might over men. Might is the faculty or power of directing actions. As a rule one says only of a man or of groups of men that they are mighty. Then the definition of might is: might is the power to direct other people's actions. He who is mighty, owes his might to an ideology. Only ideologies can convey to a man the power to influence other people's choices and conduct. One can become a leader only if one is supported by an ideology which makes other people tractable and accommodating. Might is thus not a physical and tangible thing, but a moral and spiritual phenomenon. A king's might rests upon the recognition of the monarchical ideology on the part of his subjects.

He who uses his might to run the state, i.e., the social apparatus of coercion and compulsion, rules. Rule is the exercise of might in the political

body. Rule is always based upon might, i.e., the power to direct other people's actions.

Of course, it is possible to establish a government upon the violent oppression of reluctant people. It is the characteristic mark of state and government that they apply violent coercion or the threat of it against those not prepared to yield voluntarily. Yet such violent oppression is no less founded upon ideological might. He who wants to apply violence needs the voluntary cooperation of some people. An individual entirely dependent on himself can never rule by means of physical violence only.[4] He needs the ideological support of a group in order to subdue other groups. The tyrant must have a retinue of partisans who obey his orders of their own accord. Their spontaneous obedience provides him with the apparatus he needs for the conquest of other people. Whether or not he succeeds in making his sway last depends on the numerical relation of the two groups, those who support him voluntarily and those whom he beats into submission. Though a tyrant may temporarily rule through a minority if this minority is armed and the majority is not, in the long run a minority cannot keep the majority in subservience. The oppressed will rise in rebellion and cast off the yoke of tyranny.

A durable system of government must rest upon an ideology acknowledged by the majority. The "real" factor, the "real forces" that are the foundation of government and convey to the rulers the power to use violence against renitent minority groups are essentially ideological, moral, and spiritual. Rulers who failed to recognize this first principle of government and, relying upon the alleged irresistibility of their armed troops, disdained the spirit and ideas have finally been overthrown by the assault of their adversaries. The interpretation of might as a "real" factor not dependent upon ideologies, quite common to many political and historical books, is erroneous. The term *Realpolitik* makes sense only if used to signify a policy taking account of generally accepted ideologies as contrasted with a policy based upon ideologies not sufficiently acknowledged and therefore unfit to support a durable system of government.

He who interprets might as physical or "real" power to carry on and considers violent action as the very foundation of government, sees conditions from the narrow point of view of subordinate officers in charge of sections of an army or police force. To these subordinates a definite task within the framework of the ruling ideology is assigned. Their chiefs commit to their care troops which

4. A gangster may overpower a weaker or unarmed fellow. However, this has nothing to do with life in society. It is an isolated antisocial occurrence.

are not only equipped, armed, and organized for combat, but no less imbued with the spirit which makes them obey the orders issued. The commanders of such subdivisions consider this moral factor a matter of course because they themselves are animated by the same spirit and cannot even imagine a different ideology. The power of an ideology consists precisely in the fact that people submit to it without any wavering and scruples.

However, things are different for the head of the government. He must aim at preservation of the morale of the armed forces and of the loyalty of the rest of the population. For these moral factors are the only "real" elements upon which continuance of his mastery rests. His power dwindles if the ideology that supports it loses force.

Minorities too can sometimes conquer by means of superior military skill and can thus establish minority rule. But such an order of things cannot endure. If the victorious conquerors do not succeed in subsequently converting the system of rule by violence into a system of rule by ideological consent on the part of those ruled, they will succumb in new struggles. All victorious minorities who have established a lasting system of government have made their sway durable by means of a belated ideological ascendancy. They have legitimized their own supremacy either by submitting to the ideologies of the defeated or by transforming them. Where neither of these two things took place, the oppressed many dispossessed the oppressing few either by open rebellion or through the silent but steadfast operation of ideological forces.[5]

Many of the great historical conquests were able to endure because the invaders entered into alliance with those classes of the defeated nation which were supported by the ruling ideology and were thus considered legitimate rulers. This was the system adopted by the Tartars in Russia, by the Turks in the Danube principalities and by and large in Hungary and Transylvania, and by the British and the Dutch in the Indies. A comparatively insignificant number of Britons could rule many hundred millions of Indians because the Indian princes and aristocratic landowners looked upon British rule as a means for the preservation of their privileges and supplied it with the support which the generally acknowledged ideology of India gave to their own supremacy. England's Indian empire was firm as long as public opinion approved of the traditional social order. The Pax Britannica safeguarded the princes' and the landlords' privileges and protected the masses against the agonies of wars between the principalities and of succession wars within them. In our day the infiltration of subversive ideas from abroad has ended

5. Cf. below, pp. 649-650.

British rule and threatens the preservation of the country's age-old social order.

Victorious minorities sometimes owe their success to their technological superiority. This does not alter the case. In the long run it is impossible to withhold the better arms from the members of the majority. Not the equipment of their armed forces, but ideological factors safeguarded the British in India.[6]

A country's public opinion may be ideologically divided in such a way that no group is strong enough to establish a durable government. Then anarchy emerges. Revolutions and civil strife become permanent.

Traditionalism as an Ideology

Traditionalism is an ideology which considers loyalty to valuations, customs, and methods of procedure handed down or allegedly handed down from ancestors both right and expedient. It is not an essential mark of traditionalism that these forefathers were the ancestors in the biological meaning of the term or can be fairly considered such; they were sometimes only the previous inhabitants of the country concerned or supporters of the same religious creed or only precursors in the exercise of some special task. Who is to be considered an ancestor and what is the content of the body of tradition handed down are determined by the concrete teachings of each variety of traditionalism. The ideology brings into prominence some of the ancestors and relegates others to oblivion; it sometimes calls ancestors people who had nothing to do with the alleged posterity. It often constructs a "traditional" doctrine which is of recent origin and is at variance with the ideologies really held by the ancestors.

Traditionalism tries to justify its tenets by citing the success they secured in the past. Whether this assertion conforms with the facts, is another question. Research could sometimes unmask errors in the historical statements of a traditional belief. However, this did not always explode the traditional doctrine. For the core of traditionalism is not real historical facts, but an opinion about them, however mistaken, and a will to believe things to which the authority of ancient origin is attributed.

4. Meliorism and the Idea of Progress

The notions of progress and retrogression make sense only within a teleological system of thought. In such a framework it is sensible to call approach toward the goal aimed at progress and a movement in the opposite

6. We are dealing here with the preservation of European minority rule in non-European countries. About the prospects of an Asiatic aggression on the West cf. below, pp. 669-670.

direction retrogression. Without reference to some agent's action and to a definite goal both these notions are empty and void of any meaning.

It was one of the shortcomings of nineteenth-century philosophies to have misinterpreted the meaning of cosmic change and to have smuggled into the theory of biological transformation the idea of progress. Looking backward from any given state of things to the states of the past one can fairly use the terms development and evolution in a neutral sense. Then evolution signifies the process which led from past conditions to the present. But one must guard against the fatal error of confusing change with improvement and evolution with evolution toward higher forms of life. Neither is it permissible to substitute a pseudoscientific anthropocentrism for the anthropocentrism of religion and the older metaphysical doctrines.

However, there is no need for praxeology to enter into a critique of this philosophy. Its task is to explode the errors implied in current ideologies.

Eighteenth-century social philosophy was convinced that mankind has now finally entered the age of reason. While in the past theological and metaphysical errors were dominant, henceforth reason will be supreme. People will free themselves more and more from the chains of tradition and superstition and will dedicate all their efforts to the continuous improvement of social institutions. Every new generation will contribute its part to this glorious task. With the progress of time society will more and more become the society of free men, aiming at the greatest happiness of the greatest number. Temporary setbacks are, of course, not impossible. But finally the good cause will triumph because it is the cause of reason. People called themselves happy in that they were citizens of an age of enlightenment which through the discovery of the laws of rational conduct paved the way toward a steady amelioration of human affairs. What they lamented was only the fact that they themselves were too old to witness all the beneficial effects of the new philosophy. "I would wish," said Bentham to Philarete Chasles, "to be granted the privilege to live the years which I have still to live, at the end of each of the centuries following my death; thus I could witness the effects of my writing."[7]

All these hopes were founded on the firm conviction, proper to the age, that the masses are both morally good and reasonable. The upper strata, the privileged aristocrats living on the fat of the land, were thought depraved.

7. Philaréte Chasles, *Études sur les hommes et les moers du XIX siècle* (Paris, 1849), p. 89.

The common people, especially the peasants and the workers, were glorified in a romantic mood as noble and unerring in their judgment. Thus the philosophers were confident that democracy, government by the people, would bring about social perfection.

This prejudice was the fateful error of the humanitarians, the philosophers, and the liberals. Men are not infallible; they err very often. It is not true that the masses are always right and know the means for attaining the ends aimed at. "Belief in the common man" is no better founded than was belief in the supernatural gifts of kings, priests, and noblemen. Democracy guarantees a system of government in accordance with the wishes and plans of the majority. But it cannot prevent majorities from falling victim to erroneous ideas and from adopting inappropriate policies which not only fail to realize the ends aimed at but result in disaster. Majorities too may err and destroy our civilization. The good cause will not triumph merely on account of its reasonableness and expediency. Only if men are such that they will finally espouse policies reasonable and likely to attain the ultimate ends aimed at, will civilization improve and society and state render men more satisfied, although not happy in a metaphysical sense. Whether or not this condition is given, only the unknown future can reveal.

There is no room within a system of praxeology for meliorism and optimistic fatalism. Man is free in the sense that he must daily choose anew between policies that lead to success and those that lead to disaster, social disintegration, and barbarism.

The term progress is nonsensical when applied to cosmic events or to a comprehensive world view. We have no information about the plans of the prime mover. But it is different with its use in the frame of ideological doctrine. The immense majority strives after a greater and better supply of food, clothes, homes, and other material amenities. In calling a rise in the masses' standard of living progress and improvement, economists do not espouse a mean materialism. They simply establish the fact that people are motivated by the urge to improve the material conditions of their existence. They judge policies from the point of view of the aims men want to attain. He who disdains the fall in infant mortality and the gradual disappearance of famines and plagues may cast the first stone upon the materialism of the economists.

There is but one yardstick for the appraisal of human action; whether or not it is fit to attain the ends aimed at by acting men.

X. EXCHANGE WITHIN SOCIETY

1. Autistic Exchange and Interpersonal Exchange

ACTION always is essentially the exchange of one state of affairs for another state of affairs. If the action is performed by an individual without any reference to cooperation with other individuals, we may call it autistic exchange. An instance: the isolated hunter who kills an animal for his own consumption; he exchanges leisure and a cartridge for food.

Within society cooperation substitutes interpersonal or social exchange for autistic exchanges. Man gives to other men in order to receive from them. Mutuality emerges. Man serves in order to be served.

The exchange relation is the fundamental social relation. Interpersonal exchange of goods and services weaves the bond which unites men into society. The societal formula is: *do ut des.* Where there is no intentional mutuality, where an action is performed without any design of being benefitted by a concomitant action of other men, there is no interpersonal exchange, but autistic exchange. It does not matter whether the autistic action is beneficial or detrimental to other people or whether it does not concern them at all. A genius may perform his task for himself, not for the crowd; however, he is an outstanding benefactor of mankind. The robber kills the victim for his own advantage; the murdered man is by no means a partner in this crime, he is merely its object; what is done, is done against him.

Hostile aggression was a practice common to man's nonhuman forebears. Conscious and purposeful cooperation is the outcome of a long evolutionary process. Ethnology and history have provided us with interesting information concerning the beginning and the primitive patterns of interpersonal exchange. Some consider the custom of mutual giving and returning of presents and stipulating a certain return present in advance as a precursory pattern of interpersonal exchange.[1] Others consider dumb barter as the primitive mode of trade. However, to make presents in the expectation of

1. Gustav Cassel, *The Theory of Social Economy*, trans. by S. L. Banon, (new ed. London, 1932), p. 371.

being rewarded by the receiver's return present or in order to acquire the favor of a man whose animosity could be disastrous, is already tantamount to interpersonal exchange. The same applies to dumb barter which is distinguished from other modes of bartering and trading only through the absence of oral discussion.

It is the essential characteristic of the categories of human action that they are apodictic and absolute and do not admit of any gradation. There is action or nonaction, there is exchange or nonexchange; everything which applies to action and exchange as such is given or not given in every individual instance according to whether there is or there is not action and exchange. In the same way the boundaries between autistic exchange and interpersonal exchange are sharply distinct. Making one-sided presents without the aim of being rewarded by any conduct on the part of the receiver or of third persons is autistic exchange. The donor acquires the satisfaction which the better condition of the receiver gives to him. The receiver gets the present as a God-sent gift. But if presents are given in order to influence some people's conduct, they are no longer one-sided, but a variety of interpersonal exchange between the donor and the man whose conduct they are designed to influence. Although the emergence of interpersonal exchange was the result of a long evolution, no gradual transition is conceivable between autistic and interpersonal exchange. There were no intermediary modes of exchange between them. The step which leads from autistic to interpersonal exchange was no less a jump into something entirely new and essentially different than was the step from automatic reaction of the cells and nerves to conscious and purposeful behavior, to action.

2. Contractual Bonds and Hegemonic Bonds

There are two different kinds of social cooperation: cooperation by virtue of contract and coordination, and cooperation by virtue of command and subordination or hegemony.

Where and as far as cooperation is based on contract, the logical relation between the cooperating individuals is symmetrical. They are all parties to interpersonal exchange contracts. John has the same relation to Tom as Tom has to John. Where and as far as cooperation is based on command and subordination, there is the man who commands and there are those who obey his orders. The logical relation between these two classes of men is asymmetrical. There is a director and there are people under his care. The director alone chooses and directs; the others—the wards—are mere pawns in his actions.

The power that calls into life and animates any social body is always ideological might, and the fact that makes an individual a member of any social compound is always his own conduct. This is no less valid with regard to a hegemonic societal bond. It is true, people are as a rule born into the most important hegemonic bonds, into the family and into the state, and this was also the case with the hegemonic bonds of older days, slavery and serfdom, which disappeared in the realm of Western civilization. But no physical violence and compulsion can possibly force a man against his will to remain in the status of the ward of a hegemonic order. What violence or the threat of violence brings about is a state of affairs in which subjection as a rule is considered more desirable than rebellion. Faced with the choice between the consequences of obedience and of disobedience, the ward prefers the former and thus integrates himself into the hegemonic bond. Every new command places this choice before him again. In yielding again and again he himself contributes his share to the continuous existence of the hegemonic societal body. Even as a ward in such a system he is an acting human being, i.e., a being not simply yielding to blind impulses, but using his reason in choosing between alternatives.

What differentiates the hegemonic bond from the contractual bond is the scope in which the choices of the individuals determine the course of events. As soon as a man has decided in favor of his subjection to a hegemonic system, he becomes, within the margin of this system's activities and for the time of his subjection, a pawn of the director's actions. Within the hegemonic societal body and as far as it directs its subordinates' conduct, only the director acts. The wards act only in choosing subordination; having once chosen subordination they no longer act for themselves, they are taken care of.

In the frame of a contractual society the individual members exchange definite quantities of goods and services of a definite quality. In choosing subjection in a hegemonic body a man neither gives nor receives anything that is definite. He integrates himself into a system in which he has to render indefinite services and will receive what the director is willing to assign to him. He is at the mercy of the director. The director alone is free to choose. Whether the director is an individual or an organized group of individuals, a directorate, and whether the director is a selfish maniacal tyrant or a benevolent paternal despot is of no relevance for the structure of the whole system.

The distinction between these two kinds of social cooperation is common to all theories of society. Ferguson described it as the contrast between

warlike nations and commercial nations;[2] Saint Simon as the contrast between pugnacious nations and peaceful or industrial nations; Herbert Spencer as the contrast between societies of individual freedom and those of a militant structure;[3] Sombart as the contrast between heroes and peddlers.[4] The Marxians distinguish between the "gentile organization" of a fabulous state of primitive society and the eternal bliss of socialism on the one hand and the unspeakable degradation of capitalism on the other hand.[5] The Nazi philosophers distinguish the counterfeit system of bourgeois security from the heroic system of authoritarian *Führertum.* The valuation of both systems is different with the various sociologists. But they fully agree in the establishment of the contrast and no less in recognizing that no third principle is thinkable and feasible.

Western civilization as well as the civilization of the more advanced Eastern peoples are achievements of men who have cooperated according to the pattern of contractual coordination. These civilizations, it is true, have adopted in some respects bonds of hegemonic structure. The state as an apparatus of compulsion and coercion is by necessity a hegemonic organization. So is the family and its household community. However, the characteristic feature of these civilizations is the contractual structure proper to the cooperation of the individual families. There once prevailed almost complete autarky and economic isolation of the individual household units. When interfamilial exchange of goods and services was substituted for each family's economic self-sufficiency, it was, in all nations commonly considered civilized, a cooperation based on contract. Human civilization as it has been hitherto known to historical experience is preponderantly a product of contractual relations.

Any kind of human cooperation and social mutuality is essentially an order of peace and conciliatory settlement of disputes. In the domestic relations of any societal unit, be it a contractual or a hegemonic bond, there must be peace. Where there are violent conflicts and as far as there are such conflicts, there is neither cooperation nor societal bonds. Those political parties which in their eagerness to substitute the hegemonic system for theS contractual system point

2. Cf. Adam Ferguson, *An Essay on the History of Civil Society* (new ed. Basel, 1789), p. 208.

3. Cf. Herbert Spencer, *The Principles of Sociology* (New York, 1914), III, 575-611.

4. Cf. Werner Sombart, *Haendler und Helden* (Munich, 1915).

5. Cf. Frederick Engels, *The Origin of the Family, Private Property and the State* (New York, 1942), p. 144.

at the rottenness of peace and of bourgeois security, extol the moral nobility of violence and bloodshed and praise war and revolution as the eminently natural methods of interhuman relations, contradict themselves. For their own utopias are designed as realms of peace. The Reich of the Nazis and the commonwealth of the Marxians are planned as societies of undisturbed peace. They are to be created by pacification, i.e., the violent subjection of all those not ready to yield without resistance. In a contractual world various states can quietly coexist. In a hegemonic world there can only be one Reich or commonwealth and only one dictator. Socialism must choose between a renunciation of the advantages of division of labor encompassing the whole earth and all peoples and the establishment of a world-embracing hegemonic order. It is this fact that made Russian Bolshevism, German Nazism, and Italian Fascism "dynamic," i.e., aggressive. Under contractual conditions empires are dissolved into a loose league of autonomous member nations. The hegemonic system is bound to strive after annexation of all independent states.

The contractual order of society is an order of right and law. It is a government under the rule of law (*Rechtsstaat*) as differentiated from the welfare state (*Wohlfahrtsstaat*) or paternal state. Right or law is the complex of rules determining the orbit in which individuals are free to act. No such orbit is left to wards of a hegemonic society. In the hegemonic state there is neither right nor law; there are only directives and regulations which the director may change daily and apply with what discrimination he pleases and which the wards must obey. The wards have one freedom only: to obey without asking questions.

3. Calculative Action

All the praxeological categories are eternal and unchangeable as they are uniquely determined by the logical structure of the human mind and by the natural conditions of man's existence. Both in acting and in theorizing about acting, man can neither free himself from these categories nor go beyond them. A kind of acting categorially different from that determined by these categories is neither possible nor conceivable for man. Man can never comprehend something which would be neither action nor nonaction. There is no history of acting; there is no evolution which would lead from nonaction to action; there are no transitory stages between action and nonaction. There is only acting and nonacting. And for every concrete action all that is rigorously valid which is categorially established with regard to action in general.

Every action can make use of ordinal numbers. For the application of cardinal numbers and for the arithmetical computation based on them special conditions are required. These conditions emerged in the historical evolution of the contractual society. Thus the way was opened for computation and calculation in the planning of future action and in establishing the effects achieved by past action. Cardinal numbers and their use in arithmetical operations are also eternal and immutable categories of the human mind. But their applicability to premeditation and the recording of action depends on certain conditions which were not given in the early state of human affairs, which appeared only later, and which could possibly disappear again.

It was cognition of what is going on within a world in which action is computable and calculable that led men to the elaboration of the sciences of praxeology and economics. Economics is essentially a theory of that scope of action in which calculation is applied or can be applied if certain conditions are realized. No other distinction is of greater significance, both for human life and for the study of human action, than that between calculable action and noncalculable action. Modern civilization is above all characterized by the fact that it has elaborated a method which makes the use of arithmetic possible in a broad field of activities. This is what people have in mind when attributing to it the—not very expedient and often misleading—epithet of rationality.

The mental grasp and analysis of the problems present in a calculating market system were the starting point of economic thinking which finally led to general praxeological cognition. However, it is not the consideration of this historical fact that makes it necessary to start exposition of a comprehensive system of economics by an analysis of the market economy and to place before this analysis an examination of the problem of economic calculation. Neither historical nor heuristic aspects enjoin such a procedure, but the requirements of logical and systematic rigor. The problems concerned are apparent and practical only within the sphere of the calculating market economy. It is only a hypothetical and figurative transfer which makes them utilizable for the scrutiny of other systems of society's economic organization which do not allow of any calculation. Economic calculation is the fundamental issue in the comprehension of all problems commonly called economic.

Part Three

Economic Calculation

XI. VALUATION WITHOUT CALCULATION

1. The Gradation of the Means

ACTING man transfers the valuation of ends he aims at to the means. Other things being equal, he assigns to the total amount of the various means the same value he attaches to the end which they are fit to bring about. For the moment we may disregard the time needed for production of the end and its influence upon the relation between the value of the ends and that of the means.

The gradation of the means is like that of the ends a process of preferring *a* to *b*. It is preferring and setting aside. It is manifestation of a judgment that *a* is more intensely desired than is *b*. It opens a field for application of ordinal numbers, but it is not open to application of cardinal numbers and arithmetical operations based on them. If somebody gives me the choice among three tickets entitling one to attend to operas *Aida*, *Falstaff*, and *Traviata* and I take, if I can only take one of them, *Aida*, and if I can take one more, *Falstaff* also, I have made a choice. That means: under given conditions I prefer *Aida* and *Falstaff* to *Traviata*; if I could only choose one of them, I would prefer *Aida* and renounce *Falstaff*. If I call the admission to *Aida a*, that to *Falstaff b* and that to *Traviata c*, I can say: I prefer *a* to *b* and *b* to *c*.

The immediate goal of acting is frequently the acquisition of countable and measurable supplies of tangible things. Then acting man has to choose between countable quantities; he prefers, for example, 15*r* to 7*p*; but if he had to choose between 15*r* and 8*p*, he might prefer 8*p*. We can express this state of affairs by declaring that he values 15*r* less than 8*p*, but higher than 7*p*. This is tantamount to the statement that he prefers *a* to *b* and *b* to *c*. The substitution of 8*p* for *a*, of 15*r* for *b* and of 7*p* for *c* changes neither the meaning of the statement nor the fact that it describes. It certainly does not render reckoning with cardinal numbers possible. It does not open a field for economic calculation and the mental operations based upon such calculation.

2. The Barter-Fiction of the Elementary Theory of Value and Prices

The elaboration of economic theory is heuristically dependent on the logical processes of reckoning to such an extent that the economists failed to realize the fundamental problem involved in the methods of economic calculation. They were prone to take economic calculation as a matter of course; they did not see that it is not an ultimate given, but a derivative requiring reduction to more elementary phenomena. They misconstrued economic calculation. They took it for a category of all human action and ignored the fact that it is only a category inherent in acting under special conditions. They were fully aware of the fact that interpersonal exchange, and consequently market exchange effected by the intermediary of a common medium of exchange—money, and therefore prices, are special features of a certain state of society's economic organization which did not exist in primitive civilizations and could possibly disappear in the further course of historical change.[1] But they did not comprehend that money prices are the only vehicle of economic calculation. Thus most of their studies are of little use. Even the writings of the most eminent economists are vitiated to some extent by the fallacies implied in their ideas about economic calculation.

The modern theory of value and prices shows how the choices of individuals, their preferring of some things and setting aside of other things, result, in the sphere of interpersonal exchange, in the emergence of market prices.[2] These masterful expositions are unsatisfactory in some minor points and disfigured by unsuitable expressions. But they are essentially irrefutable. As far as they need to be amended, it must be done by a consistent elaboration of the fundamental thoughts of their authors rather than by a refutation of their reasoning.

In order to trace back the phenomena of the market to the universal category of preferring *a* to *b*, the elementary theory of value and prices is bound to use some imaginary constructions. The use of imaginary constructions to which nothing corresponds in reality is an indispensable tool of thinking. No other method would have contributed anything to the interpretation of reality. But one of the most important problems of science is to

1. The German Historical School expressed this by asserting that private ownership of the means of production, market exchange, and money are "historical categories."

2. Cf. especially Eugen von Böhm-Bawerk, *Kapital und Kapitalzins*, Pt. II, Bk. III.

avoid the fallacies which ill-considered employment of such constructions can entail.

The elementary theory of value and prices employs, apart from other imaginary constructions to be dealt with later,[3] the construction of a market in which all transactions are performed in direct exchange. There is no money; goods and services are directly bartered against other goods and services. this imaginary construction is necessary. One must disregard the intermediary role played by money in order to realize that what is ultimately exchanged is always economic goods of the first order against other such goods. Money is nothing but a medium of interpersonal exchange. But one must carefully guard oneself against the delusions which this construction of a market with direct exchange can easily engender.

A serious blunder that owes its origin and its tenacity to a misinterpretation of this imaginary construction was the assumption that the medium of exchange is a neutral factor only. According to this opinion the only difference between direct and indirect exchange was that only in the latter was a medium of exchange used. The interpolation of money into the transaction, it was asserted, did not affect the main features of the business. One did not ignore the fact that in the course of history tremendous alterations in the purchasing power of money have occurred and that these fluctuations often convulsed the whole system of exchange. But it was believed that such events were exceptional facts caused by inappropriate policies. Only "bad" money, it was said, can bring about such disarrangements. In addition people misunderstood the causes and effects of these disturbances. They tacitly assumed that changes in purchasing power occur with regard to all goods and services at the same time and to the same extent. This is, of course, what the fable of money's neutrality implies. The whole theory of catallactics, it was held, can be elaborated under the assumption that there is direct exchange only. If this is once achieved, the only thing to be added is the "simple" insertion of money terms into the complex of theorems concerning direct exchange. However, this final completion of the catallactic system was considered of minor importance only. It was not believed that it could alter anything essential in the structure of economic teachings. The main task of economics was conceived as the study of direct exchange. What remained to be done besides this was at best only a scrutiny of the problems of "bad" money.

Complying with this opinion, economists neglected to lay due stress upon

3. See below, pp. 236-256.

the problems of indirect exchange. Their treatment of monetary problems was superficial; it was only loosely connected with the main body of their scrutiny of the market process. About the beginning of the twentieth century the problems of indirect exchange were by and large relegated to a subordinate place. There were treatises on catallactics which dealt only incidentally and cursorily with monetary matters, and there were books on currency and banking which did not even attempt to integrate their subject into the structure of a catallactic system. At the universities of the Anglo-Saxon countries there were separate chairs for economics and for currency and banking, and at most of the German universities monetary problems were almost entirely disregarded.[4] Only later economists realized that some of the most important and most intricate problems of catallactics are to be found in the field of indirect exchange and that an economic theory which does not pay full regard to them is lamentably defective. The coming into vogue of investigations concerning the relation between the "natural rate of interest" and the "money rate of interest," the ascendancy of the monetary theory of the trade cycle, and the entire demolition of the doctrine of the simultaneousness and evenness of the changes in the purchasing power of money were marks of the new tenor of economic thought. Of course, these new ideas were essentially a continuation of the work gloriously begun by David Hume, the British Currency School, John Stuart Mill and Cairnes.

Still more detrimental was a second error which emerged from the careless use of the imaginary construction of a market with direct exchange.

An inveterate fallacy asserted that things and services exchanged are of equal value. Value was considered as objective, as an intrinsic quality inherent in things and not merely as the expression of various people's eagerness to acquire them. People, it was assumed, first established the magnitude of value proper to goods and services by an act of measurement and then proceeded to barter them against quantities of goods and services of the same amount of value. This fallacy frustrated Aristotle's approach to

4. Neglect of the problems of indirect exchange was certainly influenced by political prepossessions. People did not want to give up the thesis according to which economic depressions are an evil inherent in the capitalist mode of production and are in no way caused by attempts to lower the rate of interest by credit expansion. Fashionable teachers of economics deemed it "unscientific" to explain depressions as a phenomenon originating "only" out of events in the sphere of money and credit. There were even surveys of the history of business cycle theory which omitted any discussion of the monetary thesis. Cf., e.g., Eugen von Bergmann, *Geschichte der nationalokonomischen Krisentheorien* (Stuttgart, 1895).

economic problems and, for almost two thousand years, the reasoning of all those for whom Aristotle's opinions were authoritative. It seriously vitiated the marvelous achievements of the classical economists and rendered the writings of their epigones, especially those of Marx and the Marxian school, entirely futile. The basis of modern economics is the cognition that it is precisely the disparity in the value attached to the objects exchanged that results in their being exchanged. People buy and sell only because they appraise the things given up less than those received. Thus the notion of a measurement of value is vain. An act of exchange is neither preceded nor accompanied by any process which could be called a measuring of value. An individual may attach the same value to two things; but then no exchange can result. But if there is a diversity in valuation, all that can be asserted with regard to it is that one *a* is valued higher, that it is preferred to one *b*. Values and valuations are intensive quantities and not extensive quantities. They are not susceptible to mental grasp by the application of cardinal numbers.

However, the spurious idea that values are measurable and are really measured in the conduct of economic transactions was so deeply rooted that even eminent economists fell victim to the fallacy implied. Even Friedrich von Wieser and Irving Fisher took it for granted that there must be something like measurement of value and that economics must be able to indicate and to explain the method by which such measurement is effected.[5] Most of the lesser economists simply maintained that money serves "as a measure of values."

Now, we must realize that valuing means to prefer *a* to *b*. There is —logically, epistemologically, psychologically, and praxeologically—only one pattern of preferring. It does not friend to other people, an amateur one painting to other paintings, or a consumer a loaf of bread to a piece of candy. Preferring always means to love or to desire *a* more than *b*. Just as there is no standard and no measurement of sexual love, of friendship and sympathy, and of aesthetic enjoyment, so there is no measurement of the value of commodities. If a man exchanges two pounds of butter for a shirt, all that we can assert with regard to this transaction is that he—at the instant of the transaction and under the conditions which this instant offers to him—prefers one shirt to two pounds of butter. It is certain that every act of preferring is characterized by a definite psychic intensity of the feelings it implies.

5. For a critical analysis and refutation of Fisher's argument, cf. Mises, *The Theory of Money and Credit*, trans. by H. E. Batson (London, 1934), pp. 42-44; for the same with regard to Wieser's argument, Mises, *Nationalokonomie* (Geneva, 1940), pp. 192-194.

There are grades in the intensity of the desire to attain a definite goal and this intensity determines the psychic profit which the successful action brings to the acting individual. But psychic quantities can only be felt. They are entirely personal, and there is no semantic means to express their intensity and to convey information about them to other people.

There is no method available to construct a unit of value. Let us remember that two units of a homogeneous supply are necessarily valued differently. The value attached to the nth unit is lower than that attached to the $(n - 1)$th unit.

In the market society there are money prices. Economic calculation is calculation in terms of money prices. The various quantities of goods and services enter into this calculation with the amount of money for which they are bought and sold on the market or for which they could prospectively be bought and sold. It is a fictitious assumption that an isolated self-sufficient individual or the general manager of a socialist system, i.e., a system in which there is no market for means of production, could calculate. There is no way which could lead one from the money computation of a market economy to any kind of computation in a nonmarket system.

The Theory of Value and Socialism

Socialists, Institutionalists and the Historical School have blamed economists for having employed the imaginary construction of an isolated individual's thinking and acting. This Robinson Crusoe pattern, it is asserted, is of no use for the study of the conditions of a market economy. The rebuke is somewhat justified. Imaginary constructions of an isolated individual and of a planned economy without market exchange become utilizable only through the implication of the fictitious assumption, self-contradictory in thought and contrary to reality, that economic calculation is possible also within a system without a market for the means of production.

It was certainly a serious blunder that economists did not become aware of this difference between the conditions of a market economy and a nonmarket economy. Yet the socialists had little reason for criticizing this fault. For it consisted precisely in the fact that the economists tacitly implied the assumption that a socialist order of society could also resort to economic calculation and that they thus asserted the possibility of the realization of the socialist plans.

The classical economists and their epigones could not, of course, recognize the problems involved. If it were true that the value of things is determined by the quantity of labor required for their production or reproduction, then there is no further problem of economic calculation. The supporters of the labor theory of value cannot be blamed for having miscon-

strued the problems of a socialist system. Their fateful failure was their untenable doctrine of value. That some of them were ready to consider the imaginary construction of a socialist economy as a useful and realizable pattern for a thorough reform of social organization did not contradict the essential content of their theoretical analysis. But it was different with subjective catallactics. It was unpardonable for the modern economists to have failed to recognize the problems involved.

Wieser was right when he once declared that many economists have unwittingly dealt with the value theory of communism and have on that account neglected to elaborate that of the present state of society.[6] It is tragic that he himself did not avoid this failure.

The illusion that a rational order of economic management is possible in a society based on public ownership of the means of production owed its origin to the value theory of the classical economists and its tenacity to the failure of many modern economists to think through consistently to its ultimate conclusions the fundamental theorem of the subjectivist theory. Thus the socialist utopias were generated and preserved by the shortcomings of those schools of thought which the Marxians reject as "an ideological disguise of the selfish class interest of the exploiting bourgeoisie." In truth it was the errors of these schools that made the socialist ideas thrive. This fact clearly demonstrates the emptiness of the Marxian teachings concerning "ideologies" and its modern offshoot, the sociology of knowledge.

3. The Problem of Economic Calculation

Acting man uses knowledge provided by the natural sciences for the elaboration of technology, the applied science of action possible in the field of external events. Technology shows what could be achieved if one wanted to achieve it, and how it could be achieved provided people were prepared to employ the means indicated. With the progress of the natural sciences technology progressed too; many would prefer to say that the desire to improve technological methods prompted the progress of the natural sciences. The quantification of the natural sciences made technology quantitative. Modern technology is essentially the applied art of quantitative prediction of the outcome of possible action. One calculates with a reasonable degree of precision the outcome of planned actions, and one calculates in order to arrange an action in such a way that a definite result emerges.

However, the mere information conveyed by technology would suffice for the performance of calculation only if all means of production—both

6. Cf. Friedrich von Wieser, *Der naturliche Wert* (Vienna, 1889), p. 60, n. 3.

material and human—could be perfectly substituted for one another according to definite ratios, or if they all were absolutely specific. In the former case all means of production would be fit, although according to different ratios, for the attainment of all ends whatever; things would be as if only one kind of means—one kind of economic goods of a higher order existed. In the latter case each means could be employed for the attainment of one end only; one would attach to each group of complementary factors of production the value attached to the respective good of the first order. (Here again we disregard provisionally the modifications brought about by the time factor.) Neither of these two conditions is present in the universe in which man acts. The means can only be substituted for one another within narrow limits; they are more or less specific means for the attainment of various ends. But, on the other hand, most means are not absolutely specific; most of them are fit for various purposes. The facts that there are different classes of means, that most of the means are better suited for the realization of some ends, less suited for the attainment of some other ends and absolutely useless for the production of a third group of ends, and that therefore the various means allow for various uses, set man the task of allocating them to those employments in which they can render the best service. Here computation in kind as applied by technology is of no avail. Technology operates with countable and measurable quantities of external things and effects; it knows causal relations between them, but it is foreign to their relevance to human wants and desires. Its field is that of objective use-value only. It judges all problems from the disinterested point of view of a neutral observer of physical, chemical, and biological events. For the notion of subjective use-value, for the specifically human angle, and for the dilemmas of acting man there is no room in the teachings of technology. It ignores the economic problem: to employ the available means in such a way that no want more urgently felt should remain unsatisfied because the means suitable for its attainment were employed—wasted—for the attainment of a want less urgently felt. For the solution of such problems technology and its methods of counting and measuring are unfit. Technology tells how a given end could be attained by the employment of various means which can be used together in various combinations, or how various available means could be employed for certain purposes. But it is at a loss to tell man which procedures he should choose out of the infinite variety of imaginable and possible modes of production. What acting man wants to know is how he must employ the available means for the best possible—

the most economic—removal of felt uneasiness. But technology provides him with nothing more than statements about causal relations between external things. It tells, for example, 7 *a* + 3 *b* + ...*xn* are liable to bring about 8 *P*. But although it knows the value attached by acting man to various goods of the first order, it cannot decide whether this formula or any other out of the infinite multitude of similarly constructed formulas best serves the attainment of the ends sought by acting man. The art of engineering can establish how a bridge must be built in order to span a river at a given point and to carry definite loads. But it cannot answer the question whether or not the construction of such a bridge would withdraw material factors of production and labor from an employment in which they could satisfy needs more urgently felt. It cannot tell whether or not the bridge should be built at all, where it should be built, what capacity for bearing burdens it should have, and which of the many possibilities for its construction should be chosen. Technological computation can establish relations between various classes of means only to the extent that they can be substituted for one another in the attempts to attain a definite goal. But action is bound to discover relations among all means, however dissimilar they may be, without any regard to the question whether or not they can replace one another in performing the same services.

Technology and the considerations derived from it would be of little use for acting man if it were impossible to introduce into their schemes the money prices of goods and services. The projects and designs of engineers would be purely academic if they could not compare input and output on a common basis. The lofty theorist in the seclusion of his laboratory does not bother about such trifling things; what he is searching for is causal relations between various elements of the universe. But the practical man, eager to improve human conditions by removing uneasiness as far as possible, must know whether, under given conditions, what he is planning is the best method, or even a method, to make people less uneasy. He must know whether what he wants to achieve will be an improvement when compared with the present state of affairs and with the advantages to be expected from the execution of other technically realizable projects which cannot be put into execution if the project he has in mind absorbs the available means. Such comparisons can only be made by the use of money prices.

Thus money becomes the vehicle of economic calculation. This is not a separate function of money. Money is the universally used medium of exchange, nothing else. Only because money is the common medium of

exchange, because most goods and services can be sold and bought on the market against money, and only as far as this is the case, can men use money prices in reckoning. The exchange ratios between money and the various goods and services as established on the market of the past and as expected to be established on the market of the future are the mental tools of economic planning. Where there are no money prices, there are no such things as economic quantities. There are only various quantitative relations between various causes and effects in the external world. There is no means for man to find out what kind of action would best serve his endeavors to remove uneasiness as far as possible.

There is no need to dwell upon the primitive conditions of the household economy of self-sufficient farmers. These people performed only very simple processes of production. For them no calculation was needed, as they could directly compare input and output. If they wanted shirts, they grew hemp, they spun, wove, and sewed. They could, without any calculation, easily make up their minds whether or not the toil and trouble expended were compensated by the product. But for civilized mankind a return to such a life is out of the question.

4. Economic Calculation and the Market

The quantitative treatment of economic problems must not be confused with the quantitative methods applied in dealing with the problems of the external universe of physical and chemical events. The distinctive mark of economic calculation is that it is neither based upon nor related to anything which could be characterized as measurement.

A process of measurement consists in the establishment of the numerical relation of an object with regard to another object, viz., the unit of the measurement. The ultimate source of measurement is that of spatial dimensions. With the aid of the unit defined in reference to extension one measures energy and potentiality, the power of a thing to bring about changes in other things and relations, and the passing of time. A pointer-reading is directly indicative of a spatial relation and only indirectly of other quantities. The assumption underlying measurement is the immutability of the unit. The unit of length is the rock upon which all measurement is based. It is assumed that man cannot help considering it immutable.

The last decades have witnessed a revolution in the traditional epistemological setting of physics, chemistry, and mathematics. We are on the eve of innovations whose scope cannot be foreseen. It may be that the coming

generations of physicists will have to face problems in some way similar to those with which praxeology must deal. Perhaps they will be forced to drop the idea that there is something unaffected by cosmic changes which the observer can use as a standard of measurement. But however that may come, the logical structure of the measurement of earthly entities in the macroscopic or molar field of physics will not alter. Measurement in the orbit of microscopic physics too is made with meter scales, micrometers, spectrographs—ultimately with the gross sense organs of man, the observer and experimenter, who himself is molar.[7] It cannot free itself from Euclidian geometry and from the notion of an unchangeable standard.

There are monetary units and there are measurable physical units of various economic goods and of many—but not of all-services bought and sold. But the exchange ratios which we have to deal with are permanently fluctuating. There is nothing constant and invariable in them. They defy any attempt to measure them. They are not facts in the sense in which a physicist calls the establishment of the weight of a quantity of copper a fact. They are historical events, expressive of what happened once at a definite instant and under definite circumstances. The same numerical exchange ratio may appear again, but it is by no means certain whether this will really happen and, if it happens, the question is open whether this identical result was the outcome of preservation of the same circumstances or of a return to them rather than the outcome of the interplay of a very different constellation of price-determining factors. Numbers applied by acting man in economic calculation do not refer to quantities measured but the exchange ratios as they are expected—on the basis of understanding—to be realized on the markets of the future to which alone all acting is directed and which alone counts for acting man.

We are not dealing at this point of our investigation with the problem of a "quantitative science of economics," but with the analysis of the mental processes performed by acting man in applying quantitative distinctions when planning conduct. As action is always directed toward influencing a future state of affairs, economic calculation always deals with the future. As far as it takes past events and exchange ratios of the past into consideration, it does so only for the sake of an arrangement of future action.

The task which acting man wants to achieve by economic calculation is to establish the outcome of acting by contrasting input and output. Economic calculation is either an estimate of the expected outcome of future action or

7. Cf. A. Eddington, *The Philosophy of Physical Science*, pp. 70-79, 168-169.

the establishment of the outcome of past action. But the latter does not serve merely historical and didactic aims. Its practical meaning is to show how much one is free to consume without impairing the future capacity to produce. It is with regard to this problem that the fundamental notions of economic calculation—capital and income, profit and loss, spending and saving, cost and yield—are developed. The practical employment of these notions and of all notions derived from them is inseparably linked with the operation of a market in which goods and services of all orders are exchanged against a universally used medium of exchange, viz., money. They would be merely academic, without any relevance for acting within a world with a different structure of action.

XII. THE SPHERE OF ECONOMIC CALCULATION

1. The Character of Monetary Entries

ECONOMIC calculation can comprehend everything that is exchanged against money.

The prices of goods and services are either historical data describing past events or anticipations of probable future events. Information about a past price conveys the knowledge that one or several acts of interpersonal exchange were effected according to this ratio. It does not convey directly any knowledge about future prices. We may often assume that the market conditions which determined the formation of prices in the recent past will not change at all or at least not change considerably in the immediate future so that prices too will remain unchanged or change only slightly. Such expectations are reasonable if the prices concerned were the result of the interaction of many people ready to buy or to sell provided the exchange ratios seemed propitious to them and if the market situation was not influenced by conditions which are considered as accidental, extraordinary, and not likely to return. However, the main task of economic calculation is not to deal with the problems of unchanging or only slightly changing market situations and prices, but to deal with change. The acting individual either anticipates changes which will occur without his own interference and wants to adjust his actions to this anticipated state of affairs; or he wants to embark upon a project which will change conditions even if no other factors produce a change. The prices of the past are for him merely starting points in his endeavors to anticipate future prices.

Historians and statisticians content themselves with prices of the past. Practical man looks at the prices of the future, be it only the immediate future of the next hour, day, or month. For him the prices of the past are merely a help in anticipating future prices. Not only in his preliminary calculation of the expected outcome of planned action, but no less in his attempts to establish the result of his past transactions, he is primarily concerned with future prices.

In balance sheets and in profit-and-loss statements the result of past action becomes visible as the difference between the money equivalent of funds

owned (total assets minus total liabilities) at the beginning and at the end of the period reported, and as the difference between the money equivalent of costs incurred and gross proceeds earned. In such statements it is necessary to enter the estimated money equivalent of all assets and liabilities other than cash. These items should be appraised according to the prices at which they could probably be sold in the future or, as is especially the case with equipment for production processes, in reference to the prices to be expected in the sale of merchandise manufactured with their aid. However, old business customs and the provisions of commercial law and of the tax laws have brought about a deviation from sound principles of accounting which aim merely at the best attainable degree of correctness. These customs and laws are not so much concerned with correctness in balance sheets and profit-and-loss statements as with the pursuit of other aims. Commercial legislation aims at a method of accounting which could indirectly protect creditors against loss. It tends more or less to an appraisal of assets below their estimated market value in order to make the net profit and the total funds owned appear smaller than they really are. Thus a safety margin is created which reduces the danger that, to the prejudice of creditors, too much might be withdrawn from the firm as alleged profit and that an already insolvent firm might go on until it had exhausted the means available for the satisfaction of its creditors. Contrariwise tax laws often tend toward a method of computation which makes earnings appear higher than an unbiased method would. The idea is to raise effective tax rates without making this raise visible in the nominal tax rates schedules. We must therefore distinguish between economic calculation as it is practiced by businessmen planning future transactions and those computations of business facts which serve other purposes. The determination of taxes due and economic calculation are two different things. If a law imposing a tax upon the keeping of domestic servants prescribes that one male servant should be counted as two female servants, nobody would interpret such a provision as anything other than a method for determining the amount of tax due. Likewise if an inheritance tax law prescribes that securities should be appraised at the stock market quotation on the day of the decedent's death, we are merely provided with a way of determining the amount of the tax.

The duly kept accounts in a system of correct bookkeeping are accurate as to dollars and cents. They display an impressive precision, and the numerical exactitude of their items seems to remove all doubts. In fact, the most important figures they contain are speculative anticipations of future

market constellations. It is a mistake to compare the items of any commercial account to the items used in purely technological reckoning, e.g., in the design for the construction of a machine. The engineer—as far as he attends to the technological side of his job—applies only numerical relations established by the methods of the experimental natural sciences; the businessman cannot avoid numerical terms which are the outcome of his understanding of future human conduct. The main thing in balance sheets and in profit-and-loss statements is the evaluation of assets and liabilities not embodied in cash. All such balances and statements are virtually interim balances and interim statements. They describe as well as possible the state of affairs at an arbitrarily chosen instant while life and action go on and do not stop. It is possible to wind up individual business units, but the whole system of social production never ceases. Nor are the assets and liabilities consisting in cash exempt from the indeterminacy inherent in all business accounting items. They depend on the future constellation of the market no less than any item of inventory or equipment. The numerical exactitude of business accounts and calculations must not prevent us from realizing the uncertainty and speculative character of their items and of all computations based on them.

Yet, these facts do not detract from the efficiency of economic calculation. Economic calculation is as efficient as it can be. No reform could add to its efficiency. It renders to acting man all the services which he can obtain from numerical computation. It is, of course, not a means of knowing future conditions with certainty, and it does not deprive action of its speculative character. But this can be considered a deficiency only by those who do not come to recognize the facts that life is not rigid, that all things are perpetually fluctuating, and that men have no certain knowledge about the future.

It is not the task of economic calculation to expand man's information about future conditions. Its task is to adjust his actions as well as possible to his present opinion concerning want-satisfaction in the future. For this purpose acting man needs a method of computation, and computation requires a common denominator to which all items entered are to be referable. The common denominator of economic calculation is money.

2. The Limits of Economic Calculation

Economic calculation cannot comprehend things which are not sold and bought against money.

There are things which are not for sale and for whose acquisition sacrifices other than money and money's worth must be expended. He who wants to train himself for great achievements must employ many means, some of which may require expenditure of money. But the essential things to be devoted to such an endeavor are not purchasable. Honor, virtue, glory, and likewise vigor, health, and life itself play a role in action both as means and as ends, but they do not enter into economic calculation.

There are things which cannot at all be evaluated in money, and there are other things which can be appraised in money only with regard to a fraction of the value assigned to them. The appraisal of an old building must disregard its artistic and historical eminence as far as these qualities are not a source of proceeds in money or goods vendible. What touches a man's heart only and does not induce other people to make sacrifices for its attainment remains outside the pale of economic calculation.

However, all this does not in the least impair the usefulness of economic calculation. Those things which do not enter into the items of accountancy and calculation are either ends or goods of the first order. No calculation is required to acknowledge them fully and to make due allowance for them. All that acting man needs in order to make his choice is to contrast them with the total amount of costs their acquisition or preservation requires. Let us assume that a town council has to decide between two water supply projects. One of them implies the demolition of a historical landmark, while the other at the cost of an increase in money expenditure spares this landmark. The fact that the feelings which recommend the conservation of the monument cannot be estimated in a sum of money does not in any way impede the councilmen's decision. The values that are not reflected in any monetary exchange ratio are, on the contrary, by this very fact lifted into a particular position which makes the decision rather easier. No complaint is less justified than the lamentation that the computation methods of the market do not comprehend things not vendible. Moral and aesthetic values do not suffer any damage on account of this fact.

Money, money prices, market transactions, and economic calculation based upon them are the main targets of criticism. Loquacious sermonizers disparage Western civilization as a mean system of mongering and peddling. Complacency, self-righteousness, and hypocrisy exult in scorning the "dollar-philosophy" of our age. Neurotic reformers, mentally unbalanced literati, and ambitious demagogues take pleasure in indicting "rationality" and in preaching the gospel of the "irrational." In the eyes of these babblers money

and calculation are the source of the most serious evils. However, the fact that men have developed a method of ascertaining as far as possible the expediency of their actions and of removing uneasiness in the most practical and economic way does not prevent anybody from arranging his conduct according to the principle he considers to be right. The "materialism" of the stock exchange and of business accountancy does not hinder anybody from living up to the standards of Thomas a Kempis or from dying for a noble cause. The fact that the masses prefer detective stories to poetry and that it therefore pays better to write the former than the latter, is not caused by the use of money and monetary accounting. It is not the fault of money that there are gangsters, thieves, murderers, prostitutes, corruptible officials and judges. It is not true that honesty does not "pay." It pays for those who prefer fidelity to what they consider to be right to the advantages which they could derive from a different attitude.

Other critics of economic calculation fail to realize that it is a method available only to people acting in the economic system of the division of labor in a social order based upon private ownership of the means of production. It can only serve the considerations of individuals or groups of individuals operating in the institutional setting of this social order. It is consequently a calculation of private profits and not of "social welfare." This means that the prices of the market are the ultimate fact for economic calculation. It cannot be applied for considerations whose standard is not the demand of the consumers as manifested on the market but the hypothetical valuations of a dictatorial body managing all national or earthly affairs. He who seeks to judge actions from the point of view of a pretended "social value," i.e., from the point of view of the "whole society," and to criticize them by comparison with the events in an imaginary socialist system in which his own will is supreme, has no use for economic calculation. Economic calculation in terms of money prices is the calculation of entrepreneurs producing for the consumers of a market society. It is of no avail for other tasks.

He who wants to employ economic calculation must not look at affairs in the manner of a despotic mind. Prices can be used for calculation by the entrepreneurs, capitalists, landowners, and wage earners of a capitalist society. For matters beyond the pursuits of these categories it is inadequate. It is nonsensical to evaluate in money objects which are not negotiated on the market and to employ in calculations arbitrary items which do not refer to reality. The law determines the amount which ought to be paid as

indemnification for having caused a man's death. But the statute enacted for the determination of the amends due does not mean that there is a price for human life. Where there is slavery, there are market prices of slaves. Where there is no slavery man, human life, and health are *res extra commercium*. In a society of free men the preservation of life and health are ends, not means. They do not enter into any process of accounting means.

It is possible to determine in terms of money prices the sum of the income or the wealth of a number of people. But it is nonsensical to reckon national income or national wealth. As soon as we embark upon considerations foreign to the reasoning of a man operating within the pale of a market society, we are no longer helped by monetary calculation methods. The attempts to determine in money the wealth of a nation or of the whole of mankind are as childish as the mystic efforts to solve the riddles of the universe by worrying about the dimensions of the pyramid of Cheops. If a business calculation values a supply of potatoes at $100, the idea is that it will be possible to sell it or to replace it against this sum. If a whole entrepreneurial unit is estimated $1,000,000, it means that one expects to sell it for this amount. But what is the meaning of the items in a statement of a nation's total wealth? What is the meaning of the computation's final result? What must be entered into it and what is to be left outside? Is it correct or not to enclose the "value" of the country's climate and the people's innate abilities and acquired skill? The businessman can convert his property into money, but a nation cannot.

The money equivalents as used in acting and in economic calculation are money prices, i.e., exchange ratios between money and other goods and services. The prices are not measured in money; they consist in money. Prices are either prices of the past or expected prices of the future. A price is necessarily a historical fact either of the past or of the future. There is nothing in prices which permits one to liken them to the measurement of physical and chemical phenomena.

3. The Changeability of Prices

Exchange ratios are subject to perpetual change because the conditions which produce them are perpetually changing. The value that an individual attaches both to money and to various goods and services is the outcome of a moment's choice. Every later instant may generate something new and bring about other considerations and valuations. Not that prices are fluctuating, but that they do not alter more quickly could fairly be deemed a problem requiring explanation.

Daily experience teaches people that the exchange ratios of the market are mutable. One would assume that their ideas about prices would take full account of this fact. Nevertheless all popular notions of production and consumption, marketing and prices are more or less contaminated by a vague and contradictory notion of price rigidity. The layman is prone to consider the preservation of yesterday's price structure both as normal and fair, and to condemn changes in the exchange ratios as a violation of the rules of nature and of justice.

It would be a mistake to explain these popular beliefs as a precipitate of old opinions conceived in earlier ages of more stable conditions of production and marketing. It is questionable whether or not prices were less changeable in those older days. On the contrary, it could rather be asserted that the merger of local markets into larger national markets, the final emergence of a world embracing world market, and the evolution of commerce aiming at continuously supplying the consumers have made price changes less frequent and less sharp. In precapitalistic times their was more stability in technological methods of production, but there was much more irregularity in supplying the various local markets and in adjusting supply to their changing demands. But even if it were true that prices were somewhat more stable in a remote past, it would be of little avail for our age. The popular notions about money and money prices are not derived from ideas formed in the past. It would be wrong to interpret them as atavistic remnants. Under modern conditions every individual is daily faced with so many problems of buying and selling that we are right in assuming that his thinking about these matters is not simply a thoughtless reception of traditional ideas.

It is easy to understand why those whose short-run interests are hurt by a change in prices resent such changes, emphasize that the previous prices were not only fairer but also more normal, and maintain that price stability is in conformity with the laws of nature and of morality. But every change in prices furthers the short-run interests of other people. Those favored will certainly not be prompted by the urge to stress the fairness and normalcy of price rigidity.

Neither atavistic reminiscences nor the state of selfish group interests can explain the popularity of the idea of price stability. Its roots are to be seen in the fact that notions concerning social relations have been constructed according to the pattern of the natural sciences. The economists and sociologists who aimed at shaping the social sciences according to the pattern of physics or physiology only indulged in a way of thinking which popular fallacies had adopted long before.

Even the classical economists were slow to free themselves from this error. With them value was something objective, i.e., a phenomenon of the external world and a quality inherent in things and therefore measurable. They utterly failed to comprehend the purely human and voluntaristic character of value judgments. As far as we can see today, it was Samuel Bailey who first disclosed what is going on in preferring one thing to another.[1] But his book was overlooked as were the writings of other precursors of the subjective theory of value.

It is not only a task of economic science to discard the errors concerning measurability in the field of action. It is no less a task of economic policy. For the failures of present-day economic policies are to some extent due to the lamentable confusion brought about by the idea that there is something fixed and therefore measurable in interhuman relations.

4. Stabilization

An outgrowth of all these errors is the idea of stabilization.

Shortcomings in the governments' handling of monetary matters and the disastrous consequences of policies aimed at lowering the rate of interest and at encouraging business activities through credit expansion gave birth to the ideas which finally generated the slogan "stabilization." One can explain its emergence and its popular appeal, one can understand it as the fruit of the last hundred and fifty years' history of currency and banking, one can, as it were, plead extenuating circumstances for the error involved. But no such sympathetic appreciation can render its fallacies any more tenable.

Stability, the establishment of which the program of stabilization aims at, is an empty and contradictory notion. The urge toward action, i.e., improvement of the conditions of life, is inborn in man. Man himself changes from moment to moment and his valuations, volitions, and acts change with him. In the realm of action there is nothing perpetual but change. There is no fixed point in this ceaseless fluctuation other than the eternal aprioristic categories of action. It is vain to sever valuation and action from man's unsteadiness and the changeability of his conduct and to argue as if there were in the universe eternal values independent of human value judgments and suitable to serve as a yardstick for the appraisal of real action.[2]

1. Cf. Samuel Bailey, *A Critical Dissertation on the Nature, Measures and Causes of Values*. London, 1825. No.7 in Series of Reprints of Scarce Tracts in Economics and Political Science, London School of Economics (London, 1931).

2. For the propensity of the mind to view rigidity and unchangeability as the essential thing and change and motion as the accidental, cf. Bergson, *La Pensee et le mouvant*, pp. 85 ff.

All methods suggested for a measurement of the changes in the monetary unit's purchasing power are more or less unwittingly founded on the illusory image of an eternal and immutable being who determines by the application of an immutable standard the quantity of satisfaction which a unit of money conveys to him. It is a poor justification of this ill-thought idea that what is wanted is merely to measure changes in the purchasing power of money. The crux of the stability notion lies precisely in *this* concept of purchasing power. The layman, laboring under the ideas of physics, once considered money as a yardstick of prices. He believed that fluctuations of exchange ratios occur only in the relations between the various commodities and services and not also in the relation between money and the "totality" of goods and services. Later, people reversed the argument. It was no longer money to which constancy of value was attributed, but the "totality" of things vendible and purchasable. People began to devise methods for working up complexes of commodity units to be contrasted to the monetary unit. Eagerness to find indexes for the measurement of purchasing power silenced all scruples. Both the doubtfulness and the incomparability of the price records employed and the arbitrary character of the procedures used for the computation of averages were disregarded.

Irving Fisher, the eminent economist, who was the champion of the American stabilization movement, contrasts with the dollar a basket containing all the goods the housewife buys on the market for the current provision of her household. In the proportion in which the amount of money required for the purchase of the content of this basket changes, the purchasing power of the dollar has changed. The goal assigned to the policy of stabilization is the preservation of the immutability of this money expenditure.[3] This would be all right if the housewife and her imaginary basket were constant elements, if the basket were always to contain the same goods and the same quantity of each and if the role which this assortment of goods plays in the family's life were not to change. But we are living in a world in which none of these conditions is realized.

First of all there is the fact that the quality of the commodities produced and consumed changes continuously. It is a mistake to identify wheat with wheat, not to speak of shoes, hats, and other manufactures. The great price differences in the synchronous sales of commodities which mundane speech and statistics arrange in the same class clearly evidence this truism. An idiomatic expression asserts that two peas are alike; but buyers and sellers distinguish

3. Cf. Irving Fisher, *The Monetary Illusion* (New York, 1928), pp. 19-20.

various qualities and grades of peas. A comparison of prices paid at different places or at different dates for commodities which technology or statistics calls by the same name, is useless if it is not certain that their qualities—but for the place difference—are perfectly the same. Quality means in this connection: all those properties to which the buyers and would-be-buyers pay heed. The mere fact that the quality of all goods and services of the first order is subject to change explodes one of the fundamental assumptions of all index number methods. It is irrelevant that a limited amount of goods of the higher orders—especially metals and chemicals which can be uniquely determined by a formula—are liable to a precise description of their characteristic features. A measurement of purchasing power would have to rely upon the prices of the goods and services of the first order and, what is more, of *all* of them. To employ the prices of the producers' goods is not helpful because it could not avoid counting the various stages of the production of one and the same consumers' good several times and thus falsifying the result. A restriction to a group of selected goods would be quite arbitrary and therefore vicious.

But even apart from all these insurmountable obstacles the task would remain insoluble. For not only do the technological features of commodities change and new kinds of goods appear while many old ones disappear. Valuations change too, and they cause changes in demand and production. The assumptions of the measurement doctrine would require men whose wants and valuations are rigid. Only if people were to value the same things always in the same way, could we consider price changes as expressive of changes in the power of money to buy things.

As it is impossible to establish the total amount of money spent at a given fraction of time for consumers' goods, statisticians must rely upon the prices paid for individual commodities. This raises two further problems for which there is no apodictic solution. It becomes necessary to attach to the various commodities coefficients of importance. It would be manifestly wrong to let the prices of various commodities enter into the computation without taking into account the different roles they play in the total system of the individuals' households. But the establishment of such proper weighting is again arbitrary. Secondly, it becomes necessary to compute averages out of the data collected and adjusted. But there exist different methods for the computation of averages. There are the arithmetic, the geometric, the harmonic averages, there is the quasi-average known as the median. Each of them leads to different results. None of them can be recognized as the unique

way to attain a logically unassailable answer. The decision in favor of one of these methods of computation is arbitrary.

If all human conditions were unchangeable, if all people were always to repeat the same actions because their uneasiness and their ideas about its removal were constant, or if we were in a position to assume that changes in these factors occurring with some individuals or groups are always outweighed by opposite changes with other individuals or groups and therefore do not effect total demand and total supply, we would live in a world of stability. But the idea that in such a world money's purchasing power could change is contradictory. As will be shown later, changes in the purchasing power of money must necessarily affect the prices of different commodities and services at different times and to different extents; they must consequently bring about changes in demand and supply, in production and consumption.[4] The idea implied in the inappropriate term *level of prices*, as if —other things being equal—all prices could rise or drop evenly, is untenable. Other things cannot remain equal if the purchasing power of money changes.

In the field of praxeology and economics no sense can be given to the notion of measurement. In the hypothetical state of rigid conditions there are no changes to be measured. In the actual world of change there are no fixed points, dimensions, or relations which could serve as a standard. The monetary unit's purchasing power never changes evenly with regard to all things vendible and purchasable. The notions of stability and stabilization are empty if they do not refer to a state of rigidity and its preservation. However, this state of rigidity cannot even be thought out consistently to its ultimate logical consequences; still less can it be realized.[5] Where there is action, there is change. Action is a lever of change.

The pretentious solemnity which statisticians and statistical bureaus display in computing indexes of purchasing power and cost of living is out of place. These index numbers are at best rather crude and inaccurate illustrations of changes which have occurred. In periods of slow alterations in the relation between the supply of and the demand for money they do not convey any information at all. In periods of inflation and consequently of sharp price changes they provide a rough image of events which every individual experiences in his daily life. A judicious housewife knows much more about price changes as far as they affect her own household than the

4. See below, pp. 411-413.
5. [5]. See below, pp. 247-250.

statistical averages can tell. She has little use for computations disregarding changes both in quality and in the amount of goods which she is able or permitted to buy at the prices entering into the computation. If she "measures" the changes for her personal appreciation by taking the prices of only two or three commodities as a yardstick, she is no less "scientific" and no more arbitrary than the sophisticated mathematicians in choosing their methods for the manipulation of the data of the market.

In practical life nobody lets himself be fooled by index numbers. Nobody agrees with the fiction that they are to be considered as measurements. Where quantities are measured, all further doubts and disagreements concerning their dimensions cease. These questions are settled. Nobody ventures to argue with the meteorologists about their measurements of temperature, humidity, atmospheric pressure, and other meteorological data. But on the other hand nobody acquiesces in an index number if he does not expect a personal advantage from its acknowledgment by public opinion. The establishment of index numbers does not settle disputes; it merely shifts them into a field in which the clash of antagonistic opinions and interests is irreconcilable.

Human action originates change. As far as there is human action there is no stability, but ceaseless alteration. The historical process is a sequence of changes. It is beyond the power of man to stop it and to bring about an age of stability in which all history comes to a standstill. It is man's nature to strive after improvement, to beget new ideas, and to rearrange the conditions of his life according to these ideas.

The prices of the market are historical facts expressive of a state of affairs that prevailed at a definite instant of the irreversible historical process. In the praxeological orbit the concept of measurement does not make any sense. In the imaginary—and, of course, unrealizable—state of rigidity and stability there are no changes to be measured. In the actual world of permanent change there are no fixed points, objects, qualities or relations with regard to which changes could be measured.

5. The Root of the Stabilization Idea

Economic calculation does not require monetary stability in the sense in which this term is used by the champions of the stabilization movement. The fact that rigidity in the monetary unit's purchasing power is unthinkable and unrealizable does not impair the methods of economic calculation. What

economic calcualtion requires is a monetary system whose functioning is not sabotaged by government interference. The endeavors to expand the quantity of money in circulation either in order to increase the government's capacity to spend or in order to bring about a temporary lowering of the rate of interest disintegrate all currency matters and derange economic calculation. The first aim of monetary policy must be to prevent governments from embarking upon inflation and from creating conditions which encourage credit expansion on the part of banks. But this program is very different from the confused and self-contradictory program of stabilizing purchasing power.

For the sake of economic calculation all that is needed is to avoid great and abrupt fluctuations in the supply of money. Gold and, up to the middle of the nineteenth century, silver served very well all the purposes of economic calculation. Changes in the relation between the supply of and the demand for the precious metals and the resulting alterations in purchasing power went on so slowly that the entrepreneur's economic calculation could disregard them without going too far afield. Precision is unattainable in economic calculation quite apart from the shortcomings emanating from not paying due consideration to monetary changes.[6] The planning businessman cannot help employing data concerning the unknown future; he deals with future prices and future costs of production. Accounting and bookkeeping in their endeavors to establish the result of past action are in the same position as far as they rely upon the estimation of fixed equipment, inventories, and receivables. In spite of all these uncertainties economic calculation can achieve its tasks. For these uncertainties do not stem from deficiencies of the system of calculation. They are inherent in the essence of acting that always deals with the uncertain future.

The idea of rendering purchasing power stable did not originate from endeavors to make economic calculation more correct. Its source is the wish to create a sphere withdrawn from the ceaseless flux of human affairs, a realm which the historical process does not effect. Endowments which were designed to provide in perpetuity for an ecclesiastic body, for a charitable institution, or for a family were long established in land or in disbursement

6. No practical calculation can ever be precise. The formula underlying the process of calculation may be exact; the calculation itself depends on the approximate establishment of quantities and is therefore necessarily inaccurate. Economics is, as has been shown above (p. 39), an exact science of real things. But as soon as price data are introduced into the chain of thought, exactitude is abandoned and economic history is submitted for economic theory.

of agricultural products in kind. Later annuities to be settled in money were added. Endowers and beneficiaries expected that an annuity determined in terms of a definite amount of precious metals would not be affected by changes in economic conditions. But these hopes were illusory. Later generations learned that the plans of their ancestors were not realized. Stimulated by this experience they began to investigate how the aims sought could be attained. Thus they embarked upon attempts to measure changes in purchasing power and to eliminate such changes.

The problem assumed much greater importance when governments initiated their policies of long-term irredeemable and perpetual loans. The state, this new deity of the dawning age of statolatry, this eternal and superhuman institution beyond the reach of earthly frailties, offered to the citizen an opportunity to put his wealth in safety and to enjoy a stable income secure against all vicissitudes. It opened a way to free the individual from the necessity of risking and acquiring his wealth and his income anew each day in the capitalist market. He who invested his funds in bonds issued by the government and its subdivisions was no longer subject to the inescapable laws of the market and to the sovereignty of the consumers. He was no longer under the necessity of investing his funds in such a way that they would best serve the wants and needs of the consumers. He was secure, he was safeguarded against the dangers of the competitive market in which losses are the penalty of inefficiency; the eternal state had taken him under its wing and guaranteed him the undisturbed enjoyment of his funds. Henceforth his income no longer stemmed from the process of supplying the wants of the consumers in the best possible way, but from the taxes levied by the state's apparatus of compulsion and coercion. He was no longer a servant of his fellow citizens, subject to their sovereignty; he was a partner of the government which ruled the people and exacted tribute from them. What the government paid as interest was less than the market offered. But this difference was far outweighed by the unquestionable solvency of the debtor, the state whose revenue did not depend on satisfying the public, but on insisting on the payment of taxes.

In spite of the unpleasant experiences with public debts in earlier days, people were ready to trust freely the modernized state of the nineteenth century. It was generally assumed that this new state would scrupulously meet its voluntarily contracted obligations. Capitalists and entrepreneurs were fully aware of the fact that in the market society there is no means of

preserving acquired wealth other than by acquiring it anew each day in tough competition with everybody, with the already existing firms as well as with newcomers "operating on a shoe string." The entrepreneur, grown old and weary and no longer prepared to risk his hard-earned wealth by new attempts to meet the wants of consumers, and the heir of other people's profits, lazy and fully conscious of his own inefficiency, preferred investment in bonds of the public debt because they wanted to be free from the law of the market.

Now, the irredeemable perpetual public debt presupposes the stability of purchasing power. Although the state and its compulsion may be eternal, the interest paid on the public debt could be eternal only if based on a standard of unchanging value. In this form the investor who for security's sake shuns the market, entrepreneurship, and investment in free enterprise and prefers government bonds is faced again with the problem of the changeability of all human affairs. He discovers that in the frame of a market society there is no room left for wealth not dependent upon the market. His endeavors to find an inexhaustible source of income fail.

There are in this world no such things as stability and security and no human endeavors are powerful enough to bring them about. There is in the social system of the market society no other means of acquiring wealth and of preserving it than successful service to the consumers. The state is, of course, in a position to exact payments from its subjects and to borrow funds. However, even the most ruthless government in the long run is not able to defy the laws determining human life and action. If the government uses the sums borrowed for investment in those lines in which they best serve the wants of the consumers, and if it succeeds in these entrepreneurial activities in free and equal competition with all private entrepreneurs, it is in the same position as any other businessman; it can pay interest because it has made surpluses. But if the government invests funds unsuccessfully and no surplus results, or if it spends the money for current expenditure , the capital borrowed shrinks or disappears entirely, and no source is opened from which interest and principal could be paid. Then taxing the people is the only method available for complying with the articles of the credit contract. In asking taxes for such payments the government makes the citizens answerable for money squandered in the past. The taxes paid are not compensated by any present service rendered by the government's

apparatus. The government pays interest on capital which has been consumed and no longer exists. The treasury is burdened with the unfortunate results of past policies.

A good case can be made out for short-term government debts under special conditions. Of course, the popular justification of war loans is nonsensical. All the materials needed for the conduct of a war must be provided by restriction of civilian consumption, by using up a part of the capital available and by working harder. The whole burden of warring falls upon the living generation. The coming generations are only affected to the extent to which, on account of the war expenditure, they will inherit less from those now living than they would have if no war had been fought. Financing a war through loans does not shift the burden to the sons and grandsons.[7] It is merely a method of distributing the burden among the citizens. If the whole expenditure had to be provided by taxes, only those who have liquid funds could be approached. The rest of the people would not contribute adequately. Short-term loans can be instrumental in removing such inequalities, as they allow for a fair assessment on the owners of fixed capital.

The long-term public and semipublic credit is a foreign and disturbing element in the structure of a market society. Its establishment was a futile attempt to go beyond the limits of human action and to create an orbit of security and eternity removed from the transitoriness and instability of earthly affairs. What an arrogant presumption to borrow and to lend money for ever and ever, to make contracts for eternity, to stipulate for all times to come! In this respect it mattered little whether the loans were in a formal manner made irredeemable or not; intentionally and practically they were as a rule considered and dealt with as such. In the heyday of liberalism some Western nations really retired parts of their long-term debt by honest reimbursement. But for the most part new debts were only heaped upon old ones. The financial history of the last century shows a steady increase in the amount of public indebtedness. Nobody believes that the states will eternally drag the burden of these interest payments. It is obvious that sooner or later all these debts will be liquidated in some way or other, but certainly not by payment of interest and principal according to the terms of the contract. A host of sophisticated writers are

7. Loans, in this context, mean funds borrowed from those who have money available for lending. We do not refer here to credit expansion of which the main vehicle in present-day America is borrowing from the commercial banks.

already busy elaborating the moral palliation for the day of final settlement.[8]

The fact that economic calculation in terms of money is unequal to the tasks which are assigned to it in these illusory schemes for establishment of an unrealizable realm of calm removed from the inescapable limitations of human action and providing eternal security cannot be called a deficiency. There are no such things as eternal, absolute, and unchanging values. The search for a standard of such values is vain. Economic calculation is not imperfect because it does not correspond to the confused ideas of people yearning for a stable income not dependent on the productive processes of men.

8. The most popular of these doctrines is crystallized in the phrase: A public debt is no burden because we owe it to ourselves. If this were true, then the wholesale obliteration of the public debt would be an innocuous operation, a mere act of bookkeeping and accountancy. The fact is that the public debt embodies claims of people who have in the past entrusted funds to the government against all those who are daily producing new wealth. It burdens the producing strata for the benefit of another part of the people. It is possible to free the producers of new wealth from this burden by collecting the taxes required for the payments exclusively from the bondholders. But this means undisguised repudiation.

XIII. MONETARY CALCULATION AS A TOOL OF ACTION

1. Monetary Calculation as a Method of Thinking

MONETARY calculation is the guiding star of action under the social system of division of labor. It is the compass of the man embarking upon production. He calculates in order to distinguish the remunerative lines of production from the unprofitable ones, those of which the sovereign consumers are likely to approve form those of which they are likely to disapprove. Every single step of entrepreneurial activities is subject to scrutiny by monetary calculation. The premeditation of planned action becomes commercial precalculation of expected costs and expected proceeds. The retrospective establishment of the outcome of past action becomes accounting of profit and loss.

The system of economic calculation in monetary terms is conditioned by certain social institutions. It can operate only in an institutional setting of the division of labor and private ownership of the means of production in which goods and services of all orders are bought and sold against a generally used medium of exchange, i.e., money.

Monetary calculation is the method of calculating employed by people acting within the frame of society based on private control of the means of production. It is a device of acting individuals; it is a mode of computation designed for ascertaining private wealth and income and private profits and losses of individuals acting on their own behalf within a free enterprise society.[1] All its results refer to the actions of individuals only. When statisticians summarize these results, the outcome shows the sum of the autonomous actions of a plurality of self-directing individuals, but not the effect of the action of a collective body, of a whole, or of a totality. Monetary calculation is entirely inapplicable and useless for any consideration which does not look at things from the point of view of individuals. It involves calculating the individuals' profits, not imaginary "social" values and "social" welfare.

1. In partnerships and corporations it is always individuals who act, although not only one individual.

Monetary calculation is the main vehicle of planning and acting in the social setting of a society of free enterprise directed and controlled by the market and its prices. It developed in this frame and was gradually perfected with the improvement of the market mechanism and with the expansion of the scope of things which are negotiated on markets against money. It was economic calculation that assigned to measurement, number, and reckoning the role they play in our quantitative and computing civilization. The measurements of physics and chemistry make sense for practical action only because there is economic calculation. It is monetary calculation that made arithmetic a tool in the struggle for a better life. It provides a mode of using the achievements of laboratory experiments for the most efficacious removal of uneasiness.

Monetary calculation reaches its full perfection in capital accounting. It establishes the money prices of the available means and confronts this total with the changes brought about by action and by the operation of other factors. This confrontation shows what changes occurred in the state of the acting men's affairs and the magnitude of those changes; it makes success and failure, profit and loss ascertainable. The system of free enterprise has been dubbed capitalism in order to deprecate and to smear it. However, this term can be considered very pertinent. It refers to the most characteristic feature of the system, its main eminence, viz., the role the notion of capital plays in its conduct.

There are people to whom monetary calculation is repulsive. They do not want to be roused from their daydreams by the voice of critical reason. Reality sickens them, they long for a realm of unlimited opportunity. They are disgusted by the meanness of a social order in which everything is nicely reckoned in dollars and pennies. They call their grumbling the noble deportment worthy of the friends of the spirit, of beauty, and virtue as opposed to the ignoble baseness and villainy of Babbittry. However, the cult of beauty and virtue, wisdom and the search for truth are not hindered by the rationality of the calculating and computing mind. It is only romantic reverie that cannot thrive in a milieu of sober criticism. The cool-headed reckoner is the stern chastiser of the ecstatic visionary.

Our civilization is inseparably linked with our methods of economic calculation. It would perish if we were to abandon this most precious intellectual tool of acting. Goethe was right in calling bookkeeping by double entry "one of the finest inventions of the human mind."[2]

2. Cf. Goethe, *Wilhelm Meister's Apprenticeship*, Bk. I, chap. x.

2. Economic Calculation and the Science of Human Action

The evolution of capitalist economic calculation was the necessary condition for the establishment of a systematic and logically coherent science of human action. Praxeology and economics have a definite place in the evolution of human history and in the process of scientific research. They could only emerge when acting man had succeeded in creating methods of thinking that made it possible to calculate his actions. The science of human action was at the beginning merely a discipline dealing with those actions which can be tested by monetary calculation. It dealt exclusively with what we may call the orbit of economics in the narrower sense, that is, with those actions which within a market society are transacted by the intermediary of money. The first steps on the way to its elaboration were odd investigations concerning currency, moneylending, and the prices of various goods. The knowledge conveyed by Gresham's Law, the first crude formulations of the quantity theory of money—such as those of Bodin and Davanzati—and the Law of Gregory King mark the first dawn of the cognition that regularity of phenomena and inevitable necessity prevail in the field of action. The first comprehensive system of economic theory, that brilliant achievement of the classical economists, was essentially a theory of calculated action. It drew implicitly the borderline between what is to be considered economic and what extra-economic along the line which separates action calculated in monetary terms from other action. Starting from this basis, the economists were bound to widen step by step the field of their studies until they finally developed a system dealing with all human choices, a general theory of action.

Part Four

Catallactics Or Economics Of The Market Society

XIV. THE SCOPE AND METHOD OF CATALLACTICS

1. The Delimitation of Catallactic Problems

THERE have never been any doubts and uncertainties about the scope of economic science. Ever since people have been eager for a systematic study of economics or political economy, all have agreed that it is the task of this branch of knowledge to investigate the market phenomena, that is, the determination of the mutual exchange ratios of the goods and services negotiated on markets, their origin in human action and their effects upon later action. The intricacy of a precise definition of the scope of economics does not stem from uncertainty with regard to the orbit of the phenomena to be investigated. It is due to the fact that the attempts to elucidate the phenomena concerned must go beyond the range of the market and of market transactions. In order to conceive the market fully one is forced to study the action of hypothetical isolated individuals on one hand and to contrast the market system with an imaginary socialist commonwealth on the other hand. In studying interpersonal exchange one cannot avoid dealing with autistic exchange. But then it is no longer possible to define neatly the boundaries between the kind of action which is the proper field of economic science in the narrower sense, and other action. Economics widens its horizon and turns into a general science of all and every human action, into praxeology. The question emerges of how to distinguish precisely, within the broader field of general praxeology, a narrower orbit of specifically economic problems.

The abortive attempts to solve this problem of a precise delimitation of the scope of catallactics have chosen as a criterion either the motives causing action or the goals which action aims at. But the variety and manifoldness of the motives instigating a man's action are without relevance for a comprehensive study of acting. Every action is motivated by the urge to remove a felt uneasiness. It does not matter for the science of action how people qualify this uneasiness from a physiological, psychological, or ethical point of view. It is the task of economics to deal with all commodity prices as they are really asked and paid in market transactions. It must not

restrict its investigations to the study of those prices which result or are likely to result from a conduct displaying attitudes to which psychology, ethics, or any other way of looking at human behavior would attach a definite label. The classification of actions according to their various motives may be momentous for psychology and may provide a yardstick for a moral evaluation; for economics it is inconsequential. Essentially the same is valid with regard to the endeavors to restrict the scope of economics to those actions which aim at supplying people with tangible material things of the external universe. Strictly speaking, people do not long for tangible goods as such, but for the services which these goods are fitted to render them. They want to attain the increment in well-being which these services are able to convey. But if this is so, it is not permissible to except from the orbit of "economic" action those actions which remove uneasiness directly without the interposition of any tangible and visible things. The advice of a doctor, the instruction of a teacher, the recital of an artist, and other personal services are no less an object of economic studies than the architect's plans for the construction of a building, the scientist's formula for the production of a chemical compound, and the author's contribution to the publishing of a book.

The subject matter of catallactics is all market phenomena with all their roots, ramifications, and consequences. It is a fact that people in dealing on the market are motivated not only by the desire to get food, shelter, and sexual enjoyment, but also by manifold "ideal" urges. Acting man is always concerned both with "material" and "ideal" things. He chooses between various alternatives, no matter whether they are to be classified as material or ideal. In the actual scales of value material and ideal things are jumbled together. Even if it were feasible to draw a sharp line between material and ideal concerns, one must realize that every concrete action either aims at the realization both of material and ideal ends or is the outcome of a choice between something material and something ideal.

Whether it is possible to separate neatly those actions which aim at the satisfaction of needs exclusively conditioned by man's physiological constitution from other "higher" needs can be left undecided. But we must not overlook the fact that in reality no food is valued solely for its nutritive power and no garment or house solely for the protection it affords against cold weather and rain. It cannot be denied that the demand for goods is widely influenced by metaphysical, religious, and ethical considerations, by aesthetic value judgments, by customs, habits, prejudices, tradition, changing

fashions, and many other things. To an economist who would try to restrict his investigations to "material" aspects only, the subject matter of inquiry vanishes as soon as he wants to catch it.

All that can be contended is this: Economics is mainly concerned with the analysis of the determination of money prices of goods and services exchanged on the market. In order to accomplish this task it must start from a comprehensive theory of human action. Moreover, it must study not only the market phenomena, but no less the hypothetical conduct of an isolated man and of a socialist community. Finally, it must not restrict its investigations to those modes of action which in mundane speech are called "economic" actions, but must deal also with actions which are in a loose manner of speech called "noneconomic."

The scope of praxeology, the general theory of human action, can be precisely defined and circumscribed. The specifically economic problems, the problems of economic action in the narrower sense, can only by and large be disengaged from the comprehensive body of praxeological theory. Accidental facts of the history of science of conventions play a role in all attempts to provide a definition of the scope of "genuine" economics.

Not logical or epistemological rigor, but considerations of expediency and traditional convention make us declare that the field of catallactics or of economics in the narrower sense is the analysis of the market phenomena. This is tantamount to the statement: Catallactics is the analysis of those actions which are conducted on the basis of monetary calculation. Market exchange and monetary calculation are inseparably linked together. A market in which there is direct exchange only is merely an imaginary construction. On the other hand, money and monetary calculation are conditioned by the existence of the market.

It is certainly one of the tasks of economics to analyze the working of an imaginary socialist system of production. But access to this study too is possible only through the study of catallactics, the elucidation of a system in which there are money prices and economic calculation.

The Denial of Economics

There are doctrines flatly denying that there can be a science of economics. What is taught nowadays at most of the universities under the label of economics is practically a denial of it.

He who contests the existence of economics virtually denies that man's well-being is disturbed by any scarcity of external factors. Everybody, he implies, could enjoy the perfect satisfaction of all his wishes, provided a

reform succeeds in overcoming certain obstacles brought about by inappropriate man-made institutions. Nature is open-handed, it lavishly loads mankind with presents. Conditions could be paradisiac for an indefinite number of people. Scarcity is an artificial product of established practices. The abolition of such practices would result in abundance.

In the doctrine of Karl Marx and his followers scarcity is a historical category only. It is the feature of the primeval history of mankind which will be forever liquidated by the abolition of private property. Once mankind has effected the leap from the realm of necessity into the realm of freedom[1] and thereby reached "the higher phase of communist society," there will be abundance and consequently it will be feasible to give "to each according to his needs."[2] There is in the vast flood of Marxian writings not the slightest allusion to the possibility that a communist society in its "higher phase" might have to face a scarcity of natural factors of production. The fact of the disutility of labor is spirited away by the assertion that to work, under communism of course, will no longer be pain but pleasure, "the primary necessity of life."[3] The unpleasant experiences of the Russian "experiment" are interpreted as caused by the capitalists' hostility, by the fact that socialism in one country only is not yet perfect and therefore has not yet been able to bring about the "higher phase," and, more recently, by the war.

Then there are the radical inflationists as represented, for example, by Proudhon and by Ernest Solvay. In their opinion scarcity is created by the artificial checks upon credit expansion and other methods of increasing the quantity of money in circulation, enjoined upon the gullible public by the selfish class interests of bankers and other exploiters. They recommend unlimited public spending as the panacea.

Such is the myth of potential plenty and abundance. Economics may leave it to the historians and psychologists to explain the popularity of this kind of wishful thinking and indulgence in daydreams. All that economics has to say about such idle talk is that economics deals with the problems man has to face on account of the fact that his life is conditioned by natural factors. It deals with action, i.e., with the conscious endeavors to remove as far as possible felt uneasiness. It has nothing to assert with regard to the state of affairs in an unrealizable and for human reason even inconceivable universe of unlimited opportunities. In such a world, it may be admitted, there will be no law of value, no scarcity, and no economic problems. These things will be absent because there will be no choices to be made, no action, and

1. Cf. Engels, *Herrn Eugen Duhrings Umwalzung der Wissenschaft* (7th ed. Stuttgart, 1910), p.306.

2. Cf. Karl Marx, *Zur Kritik des sozialdemokratischen Parteiprogramms von Gotha,* ed. Kreibich (Reichenberg, 1920), p. 17.

3. Cf. *ibid.*