The examination of the economic content of Greek philosophy is made difficult by the wholesale destruction of by far the larger part of Greek literature. Of the writings of the philosophers, only the dialogues of Plato and the major works of Aristotle have been preserved intact. Of the writings of all other Greek philosophers there exist only fragments, in some cases only a few lines, and most of these fragments have come down to us in the form of second- or third-hand reports or quotations. The picture of Greek philosophy that is impressed on the mind of the student is thus a distorted one. The writings that have been lost wholly or in part are only dimly seen in the background, while Plato and Aristotle hold the center of the stage.
Indeed, not a single statement of democratic political theory has survived and for this reason it has been said that the surviving literature is not representative of Athens, which was the cradle of democracy.

The central figure in Greek philosophy was Socrates (469–399 B.C.), who did not produce any writings at all and whose views are known only from the reports of others, mainly from the dialogues written by his pupil Plato. So important was Socrates’ position that Greek philosophy can be divided into a pre- and a post-Socratic period. Almost all of the many schools of thought that emerged during the post-Socratic period claimed to be the intellectual heirs of Socrates—so rich was the legacy of his thought and so varied were the interpretations that could be given to it.

PRE-SOCRATIC PHILOSOPHY: PYTHAGORAS

Many pre-Socratic philosophers form a link between mythology and the rational discourse of the logical age. Much of their attention was given to cosmology, the study of the nature of the universe and of rules that guide it. The ideas of a few of them have influenced economic thought. One of these was Pythagoras (c.582–c.507 B.C.), all of whose writings are lost but who, according to a later Greek writer, “extolled and promoted the study of numbers more than any one, diverting it from mercantile practice and comparing everything to numbers.” The same writer also attributed to Pythagoras the introduction of weights and measures among the Greeks. Pythagorean ideas served as the basis of the “mathematical” approach to the theory of the just exchange as developed by Aristotle. It is an open question, however, whether Pythagoras’s quantitative bent was inspired by mercantile practice. It seems that he came to mathematics rather by way of music, and he is believed to have discovered the numerical ratios that determine the intervals of the musical scale. From these investigations the notion of harmony was derived, which in turn has an affinity with the concept of equilibrium that was to occupy a central position in the economic thought of later generations. To the Greeks harmony meant “the joining or fitting of things together,” 6 an idea that played an important part in Plato’s discussion of the threefold division of the soul and of the state.

HERACLITUS

At first glance, harmony, balance, or equilibrium may seem entirely unrelated to, or even the opposite of, the notion of strife or competition, which as a fundamental principle of cosmic and social organization goes back to Heraclitus (c.535–475 B.C.), another pre-Socratic philosopher who was Pythagoras’s junior by about fifty years. Heraclitus, who was given the byword “the Obscure” by the ancients, developed his thought in paradoxical terms. He taught that “war is the father of all things,” an idea that has been interpreted to refer to the struggle of opposite forces that generates balance, equilibrium, or a harmonious order. The forms that this thought has assumed in intellectual history are legion. Our notion of a self-regulating market has its root in Heraclitus’s philosophy. So does the nineteenth-century idea of social Darwinism with its belief that the competitive struggle secures the survival of the fittest. A related concept of Heraclitus is his paradoxic logic, or polarity of thought, which teaches in its extreme form that opposites are identical, and in a more moderate form that opposites can only be understood in relation to their opposites. Two thousand years later this notion was revived in the dialectics of Hegel (1770–1831), whose thought has been interpreted to imply that one concept, the thesis, will inevitably turn into its opposite, the antithesis, and that the interaction of the two generates a synthesis that in turn would be the first form of another triad. Hegel’s dialectic idealism led to Marx’s dialectic materialism, which, like the “System of Economic Contradictions” of Proudhon, another Social­ist, has an affinity with the thought of Heraclitus.

DEMOCRITUS

Seminal ideas emerge also in the thought of Democritus (c.460–c.370 B.C.), a contemporary of Socrates who is chiefly remembered for his theory of the atom but whose numerous writings include a treatise on economics. Of all this nothing but some three hundred quotations have been preserved.

Although Democritus taught that moral values are absolutes, his theory of economic value was a subjective one. “The same thing,” a fragment of his writings states, “is good and true for all men, but the pleasant differs from one and another.” Not only was utility thus interpreted in subjective terms, but recognition was also given to its relative character: “The most pleasant things become most unpleasant if moderation does not prevail”—a thought that anticipates the notion of diminishing utility and of the transformation of goods into nuisances once saturation is reached. Democritus also had a notion of time preference that may be more judicious than that of some modern writers who, like Pigou, interpret our inclination to place a higher value on present than on future goods as the result of a “defective telescopic vision.” “The old man was once young,” Democritus says, “but it is not sure whether the young man will ever attain old age; hence, the good on hand is superior to the one still to come.”

The subjective and relative character of utility is further recognized in a saying of Democritus to the effect that if only a few goods are desired, these will seem to be many, because a restrained demand makes poverty equivalent to wealth. This and similar thoughts are indicative of Democritus’s intention to tackle the economic problem of scarcity by operating on the demand side. He did not fail, however, to take also the supply side into consideration and was one of the few Greek philosophers to pay his respects to the value and worth of labor: “Toil is sweeter than idleness when men

FROM THE BIBLE TO PLATO

gain what they seek for or know that they will use it." As to the disutility of labor, Democritus stressed the relevance of regular work habits which may diminish it.

In the matter of economic organization, Democritus underlines the importance of liberality and mutual aid as means to integrate society. "When the powerful champion the poor and render them service and kindness, then men are not left desolate but become fellows and defend one another." Democritus also attached a higher value to freedom than to the enjoyment of material goods. "Poverty in a democracy is as much preferable to prosperity under a despot as is freedom to slavery." He favored private rather than communal property, basing his argument on the superior effects of private property on incentive, thrift, and pleasure: "Income from communally held property gives less pleasure, and the expenditure less pain."

Although Plato never referred to Democritus, Aristotle not only was familiar with his writings but devoted several works of his own to Democritus's thought. It may well be that Aristotle's defense of private property (pp. 27 ff.) was inspired by Democritus's ideas. Democritus was still more important source of inspiration to Epicurus (p. 38), but the latter was unwilling to acknowledge his debt. Marx was attracted by the materialistic philosophy of the two and wrote his doctoral dissertation, first published in 1902, on the differences between Democritean and Epicurean natural philosophy.

PLATO

The dialogues of Plato (c.427-c.347 B.C.) that contain economic ideas are his Republic and his Laws, although a few may also be found in his other dialogues. These works treat of subjects that fall under the heading of political science or jurisprudence. Such economic thoughts as they contain must be discussed within the context of the political ideas with which they are linked.

THE REPUBLIC

The sensible purpose of the Republic is to give an answer to a question that has haunted philosophers throughout the ages—What is justice? Before giving what he considers the correct answer, Plato rejects a number of misinterpretations. He is not impressed by the view that justice consists of telling the truth and paying one's debts. In connection with the discussion of this faulty interpretation of justice, Plato develops a few thoughts about wealth. He admits that wealth is known to be a great comfort and that all love money because of its usefulness. A distinction is then made between inherited and acquired wealth. Those who have made their own fortune are twice as much attached to it as are other people: their wealth is not only useful to them; it is also their own creation. But such people are bad company. They have nothing good to say about anything except wealth. Some hold that the highest value of wealth derives from the peace of mind of the wealthy man who is able to speak the truth and pay his debts. This may be correct, but according to Plato—speaking through Socrates—telling the truth and paying one's debts is not an exhaustive definition of justice.

Another interpretation of justice that Plato rejects is the social-contract theory which holds that individual conduct is restrained by convention in the interest of all. Such compacts and conventions are made because people realize that if somebody is wronged, the harm of the sufferer must be given more weight than the advantage of the doer. Thus, laws are made to avoid doing wrong and suffering wrong, and what the law prescribes is justice. Here again random remarks about economic subjects are inserted, such as the threefold division of goods. One class consists of harmless pleasures and enjoyments that we welcome for their own sake, which have no further consequences besides the satisfaction of the moment. Another class is made up of pursuits which in themselves are a burden and are not done for their own sake but because of their desirable consequences or results, such as doing one's job. The third and highest class is filled with good things that are valued both for themselves and for their consequences, such as knowledge and health. It may be noted that among the examples designed to illustrate the second class we do not find specifically mentioned manual labor and toil but rather activities to which today many would be inclined to assign a satisfying content in themselves: physical training and the healing arts. If these were considered disagreeable and a burden, what must have been the ranking of labor and toil?

Having rejected these and other interpretations of justice, Plato then turns to construction rather than critique and with the help of the method of successive approximation constructs an ideal state which to him constitutes the materialization of justice on earth. Plato's ideal state is the one in which the philosopher is king. This final result is reached as the outcome of a protracted analysis, which is applied to the city-state of Plato's own environment. The basis of the city-state is not a man-made compact but the natural inequality of man, who is endowed by nature with a variety of gifts and talents that are highly developed in some and less so in others. Division of labor, specialization, and exchange are thus natural and advantageous in view of man's inequality and lack of self-sufficiency.
wealth of nations," whereas Plato searches for the structure of the ideal community. Smith rationalizes moneymaking; Plato, as will soon be seen, rationalizes class distinctions and the stratification of society.

Plato, of course, does not deny that specialization raises production. He emphasizes that goods are produced more easily and plentifully and are of higher quality when each person performs the function in the community for which his nature best suits him. The idea of division of labor is expanded also to consider the need for imports from regions beyond the limits of the city-state, as well as for exports to be given in exchange for imports. The logical priority in this reasoning is placed on imports. In addition to the farmers, craftsmen, traders, and hired laborers, shopkeepers are also needed in the marketplace, people who take the money of those eager to buy and transmit it to those eager to sell. If no such specialists were available, the farmers and artisans would have to waste their time at the market, waiting for customers. In a well-ordered community, Plato points out, the shopkeepers are usually chosen from those who lack the physical strength to be useful in other employments. As for the wage-earners, they have the physical stamina required for heavy work, but their intellectual ability is so poor that they hardly deserve to be included in the society.

THE IDEAL STATE This first "model" of Plato's ideal city-state ministers to basic human needs. In it, justice arises if each follows that occupation for which nature has best equipped him. In response to the objection that such a city would resemble a "community of pigs," Plato then complicates the model by allowing for luxury, luxury trades, and other refinements of civilization. This development will be restricted by the meager resources of the city-state. The country will be too small to support the artists, poets, dancers, makers of household gear and women's adornment, servants, barbers, cooks, confectioners, and extra physicians required by the new style of life. To provide a more nearly adequate economic basis for it, the city-state will be compelled to make war on its neighbors to cut off a slice of their territory, and these in turn, if they likewise abandon themselves to the quest for unlimited wealth, will pursue the same aim. "All wars," Plato states in another context, "are made for the sake of getting money" (Phaedo, 66 c).

In the second approximation of Plato's ideal state there thus arises the need for military strength to support aggression on the part of the city-state and to protect it from the aggression of others. In addition to the class of producers—farmers, artisans, traders, shopkeepers, and so forth—that form the citizenry in his first approximation, there is thus formed a second class, that of professional soldiers. In line with the principle of specialization, they will have to have a native aptitude for their calling, and they will be given complete freedom from other occupations.

In the third approximation Plato's ideal state emerges complete. Here the two-class system of rulers—soldiers—and ruler—producers—is modified by a differentiation of the ruling class into soldiers and those who will stand at the apex of the pyramid, the philosophers. The three classes of pro-

ducers, soldiers, and philosophers reflect Plato's view of the human mind or soul, which is divided by him into three parts, "one that craves, one that fights, and one that thinks." In the threefold stratification of Plato's ideal community the people who are apt to crave material goods must toil to produce them; those who are equipped with a pronounced courage and a fighting instinct will constitute the military; those who can think rationally and philosophically will be chosen to rule. Such harmonious ordering of society will constitute justice. There are detailed regulations about the upbringing and education of children, the emancipation of women, and, not too clearly, the movement of people from one class into the other. That Plato, while admitting such movement in principle, expected to keep it within narrow bounds is evidenced by his strong belief in the importance of inherited characteristics and personality traits. This belief inspired him to impose strict rules on the selection of marriage partners, which was to proceed in line with the principles of scientific breeding as applied in animal husbandry, with the weak and infirm to be destroyed. To enable the philosophers to obtain and hold on to power in the state, they are instructed to sway the population with the help of propaganda in the form of "white" or "medicinal" or "noble" lies relating to their own god-like origin and the inferior lineage of the other classes.

PRIVATE VERSUS COMMUNAL PROPERTY Little is said in Plato's second and third approximations about the producing class and its economic organization. As to wealth and poverty, the general observation is made that both have evil consequences. Wealth will produce luxury and idleness; poverty will result in mean standards of conduct and workmanship. Hence, the ruling class will have to keep a watchful eye on these matters. As for the two components of the ruling class—the soldiers and the philosophers—they are to be freed from the burdens of private property and family in order to devote their lives to the business for which nature has equipped them best, soldiering and ruling. Instead, in addition to the communal upbringing of the children, there is instituted for the two upper classes a community of property as well as of women.

This means that the members of the upper classes will have no private houses but will live together and share common meals. They will not be allowed to possess gold or silver, "that mortal dross which has been the source of many unholy deeds." If they should be unhappy about these and other deprivations, it is not the happiness of any special class that counts but the happiness of the community as a whole. Moreover, the lives that they will lead will befit their true nature. They will not tear the city asunder by stamping the mark of private property upon various goods that they would drag into their homes. They will not be exposed to lawsuits, family quarrels, and the ever-recurring vexations of a family father.

---

The significance that Plato attaches to the requirement that the upper classes must own property only in common is brought into still sharper relief in his discussion of the causes that are responsible for the degeneration of the ideal state. Such a degeneration may occur mainly as a result of the operations of economic factors. The ruling classes will be corrupted if they acquire a taste for money and possessions, and the producing class, whose members by their very nature do have such a taste, will not be eager to usurp the position of the rulers if this precludes the accumulation of wealth. In his description of the conditions of degeneracy Plato depicts the economic strife characteristic of the Greek city-states of his time, a social malaise that the outlawry of private property for the rulers of the ideal city-state aims to prevent.

**TYPES OF GOVERNMENT**
Altogether Plato distinguishes five types of government—the aristocratic one of the ideal community ruled by the best, and four degenerate forms: timocracy or the rule of the soldiers; oligarchy or plutarchy, the rule of the wealthy; democracy; and despotism.

If the soldier class usurps power, ambition and the desire to excel that constitute the native endowment of the warriors are no longer restrained by the rule of reason. Allowed to run free, envy and rivalries are stimulated by the possession of land, homes, and other types of property. In the public's scale of value wealth comes to rank as the highest good, replacing virtue. When, reflecting this change in valuation, property qualifications come to be required for the exercise of political power, the latter is taken over by the wealthy, and plutocracy is established. The state is then divided into the rich and the poor, with each class plotting against the other. Some wealthy people will squander their money, fall into debt, and be ruined. The ranks of the pauper class are swollen in this way because a society that honors wealth above all cannot at the same time inspire in its members the proper sense of self-control which would protect them, nor can it provide for them adequate institutional arrangements aiming at the same purpose, such as the refusal to enforce the repayment of loans. As more and more wealthy people become impoverished, the pauper class in the end rebels, civil strife ensues, and when the poor win, democracy becomes established. There the unsatisfiable desire for wealth as the highest good is replaced by an unsatisfiable desire for liberty. Plato frowns on social arrangements under which everyone is allowed to talk and act as he likes, although he has to admit that a constitution under which all can develop to the fullest their diverse individualities may be the finest of all. Nevertheless he deplores it a situation where the citizens are at liberty to pursue the fancy of the moment, where no one is under duty to wield authority or to obey it, where tolerance is paired with disregard for the authoritarian principles of government ruling the ideal community, where rulers behave like subjects and subjects like rulers, where there is no respect for authority, and where in the end the slave is as free as the master who has purchased him.

Eventually, economic strife will be the undoing of democracy, just as it has destroyed other forms of government. Society will be broken up into three classes—idle spendthrifts (drones) who furnish the leaders, wealthy persons who become the prey of the drones, and the large mass of the population with small means and no interest in politics, to whom the drones will throw part of their spoil. The demagogic leaders and the wealthy class are embroiled in denunciations and plots, and the plundered rich eventually become what the demagogues accuse them of being: reactionaries with revolutionary designs. In this situation a champion of the people arises. He is transformed into a despot because he is unable to hold on to power by means other than terror, being at war equally with the rich, whom he prosecutes as enemies of the people, and with the men of courage and the men of reason, who detest him. Once he has eliminated his internal enemies, he will stir up external wars to create conditions of permanent emergency in which he can prove his indispensability and which so impoverish the people that all their energies have to be devoted to the winning of their daily bread rather than to plots against the tyrant.

**THE LAWS**
In one way or another, the fall of the ideal state is invariably related to the accumulation of wealth and to the inequalities and cleavages created thereby. The elimination of private property from the institutions applicable to the lives of those who count—the ruling class—is thus a cornerstone of Plato's system. That this is so is demonstrated also in the *Laws*, a work that Plato wrote when he was older, more disillusioned by ill-fated ventures into practical politics, and more willing to sacrifice principle to practicability. Here again he points out, and in words that are stronger still and more moving than those used in the *Republic*, that the best political community is the one made up of friends who share everything, women, children, and all possessions. A community, he says, in which all is done to cast away what the word *ownership* refers to, in which all is done to turn into common property even that which nature has made our own—our eyes, ears, and hands, which now see, hear, and act in the common service—such a community will be united in its attachment to the same system of values, and what gives pleasure or pain to one will give pleasure or pain to all. If such a city could ever be found on earth it would be peopled by gods or by the children of gods (V 739). However, in the *Laws* Plato all but abandons this ideal as being impractical, and in its stead sets forth the fundamental principles of organization which, though not the best, come closest to the best and are more likely to be approximated in the world of reality.

Again the picture he draws is one of a community limited in size, here to some five thousand family farms, each operated by a citizen and handed over on his death to a son, natural or adopted. The number of holdings is not allowed to vary and the population is to be kept stationary, if need be by sending out colonists or, but only as a last resort, by admitting immigrants. The life of the citizens is subject to numerous and detailed regulations designed to keep out "dangerous thoughts" and to prevent the
rise of pronounced inequalities that might threaten social cohesion. Great attention is given to education and persuasion to bring about right conduct and to attach the people to the ideal of the good life. As to pleasures and enjoyments, proper education will not insist upon complete self-denial but on modesty and sobriety. Although right conduct and the good life (which fosters the harmonious development of all virtues—wisdom, moderation, respect for others, courage) are valuable for their own sake, they have in addition attached to them a pleasure premium. Right conduct and the good life are thus depicted not only as morally superior but also as involving more pleasure and less pain than their opposites. Pleasure and pain are described as the very wires or strings whose pull causes people to act. They prefer pleasure and are repelled by pain, and in their actions they try to strike a balance on the side of pleasure. Pain and pleasure have "dimensions"—frequency, duration, intensity, and so forth—which people will take into account when striking this balance.

The citizens may enjoy the products of economic activities, but arts, crafts, and trades cut into people's leisure time; they stimulate undesirable appetites and tend to demean a person—especially one engaged in manual labor and retail trade. Hence, the citizens may only engage in agricultural pursuits connected with their farm holdings. They are not allowed to practice a craft or a trade. Such "sordid callings" are reserved for the resident foreigners, who are admitted, if they possess a skill, for a period of twenty years and may possibly be allowed to stay longer as a reward for having rendered some signal service to the community. The citizens may not possess gold and silver but only token money. Thus they are not permitted to accumulate wealth in the form of full-bodied money. They may travel abroad only with the permission of the government, and if they happen to acquire foreign moneys they must turn them over to the authorities. Credit transactions are discouraged; if they occur, they have to be based strictly on trust because the borrower has no legal duty to pay interest or principal. Prices and quality of goods are controlled by public authorities, as is foreign trade. Only necessities may be imported, and only goods that are not needed exported. An individual's wealth may not fall below a minimum—the family holding, which is inalienable—nor may it exceed a maximum, that is, the holding plus other property up to four times its value. In this manner, extremes of indigence and opulence will be avoided. The citizens will be protected against corruption resulting from commercialization. Economic inequalities will primarily result from differences in thrift and efficiency in the management of the farm rather than from trade or craftsmanship or from speculative windfall gains which enrich some and impoverish others. The very wealthy, Plato argues, cannot at the same time be good men. Care for wealth should rank third and lowest, after care for the soul and for the body.

APPRaisal of Plato's Thought. Those of Plato's ideas that have been discussed in our present context constitute only a small segment of his thought. His writings have cast their spell over countless readers for more than two thousand years. To this day Plato is the most widely read writer in college courses in philosophy in our country, holding a lead of two to one over others. Only a few have been able to resist the magic of his dialogues, which are addressed to perennial problems, besides being pieces of art of the highest order. One of the few was Thomas Jefferson, to whom Plato did not appeal and who marveled at his persistent reputation, ascribing it to "fashion and authority." Jefferson expressed great satisfaction that "Platonic republicanism" had not obtained favor; otherwise, he said, "we should now have been all living, men, women, and children, well together, like beasts of the field or forest."3 Indeed, the plea for solidarity is driven to such an extreme by Plato—see particularly the passage of the Laws paraphrased on page 19—that its fulfillment would destroy the individual and transform him into a mere limb of the political organism.

Plato's political ideas are pronouncedly authoritarian. Although they may not appeal to a democrat, they should compel a searching of souls of all who are attached to the democratic way of life. As a contemporary author has pointed out, the answer to Plato's apprehensions about the weakness of democracy lies in our lives rather than in arguments.9 Imaginative and exalted as Plato's thought is, his ideas about economics label him a child of his time. The city-state of his environment had a population of which slaves constituted one-third, and slaves and foreigners together one-half. Slavery he does not question, and with slaves and resident foreigners available to do the bulk of economic activities, the economic problem did not impress him as a particularly urgent one for the full-fledged citizens of the city-state. It is these with whom he is concerned, not with a wider political community or with universal humanity. As for the citizen himself, his heart is with the aristocratic families of ancient lineage, of whom he himself was a scion, and who at his time were the full-fledged citizens of the city-state. It is these with whom he is concerned, not with a wider political community or with universal humanity. As for the citizen himself, his heart is with the aristocratic families of ancient lineage, of whom he himself was a scion, and who at his time were on modesty and sobriety. Although right conduct and the good life (which fosters the harmonious development of all virtues—wisdom, moderation, respect for others, courage) are valuable for their own sake, they have in addition attached to them a pleasure premium. Right conduct and the good life are thus depicted not only as morally superior but also as involving more pleasure and less pain than their opposites. Pleasure and pain are described as the very wires or strings whose pull causes people to act. They prefer pleasure and are repelled by pain, and in their actions they try to strike a balance on the side of pleasure. Pain and pleasure have "dimensions"—frequency, duration, intensity, and so forth—which people will take into account when striking this balance.

The citizens may enjoy the products of economic activities, but arts, crafts, and trades cut into people's leisure time; they stimulate undesirable appetites and tend to demean a person—especially one engaged in manual labor and retail trade. Hence, the citizens may only engage in agricultural pursuits connected with their farm holdings. They are not allowed to practice a craft or a trade. Such "sordid callings" are reserved for the resident foreigners, who are admitted, if they possess a skill, for a period of twenty years and may possibly be allowed to stay longer as a reward for having rendered some signal service to the community. The citizens may not possess gold and silver but only token money. Thus they are not permitted to accumulate wealth in the form of full-bodied money. They may travel abroad only with the permission of the government, and if they happen to acquire foreign moneys they must turn them over to the authorities. Credit transactions are discouraged; if they occur, they have to be based strictly on trust because the borrower has no legal duty to pay interest or principal. Prices and quality of goods are controlled by public authorities, as is foreign trade. Only necessities may be imported, and only goods that are not needed exported. An individual's wealth may not fall below a minimum—the family holding, which is inalienable—nor may it exceed a maximum, that is, the holding plus other property up to four times its value. In this manner, extremes of indigence and opulence will be avoided. The citizens will be protected against corruption resulting from commercialization. Economic inequalities will primarily result from differences in thrift and efficiency in the management of the farm rather than from trade or craftsmanship or from speculative windfall gains which enrich some and impoverish others. The very wealthy, Plato argues, cannot at the same time be good men. Care for wealth should rank third and lowest, after care for the soul and for the body.

APPRaisal of Plato's Thought. Those of Plato's ideas that have been discussed in our present context constitute only a small segment of his thought. His writings have cast their spell over countless readers for more than two thousand years. To this day Plato is the most widely read writer in college courses in philosophy in our country, holding a lead of two to one over others. Only a few have been able to resist the magic of his dialogues, which are addressed to perennial problems, besides being pieces of art of the highest order. One of the few was Thomas Jefferson, to whom Plato did not appeal and who marveled at his persistent reputation, ascribing it to "fashion and authority." Jefferson expressed great satisfaction that "Platonic republicanism" had not obtained favor; otherwise, he said, "we should now have been all living, men, women, and children, well together, like beasts of the field or forest."3 Indeed, the plea for solidarity is driven to such an extreme by Plato—see particularly the passage of the Laws paraphrased on page 19—that its fulfillment would destroy the individual and transform him into a mere limb of the political organism.

Plato's political ideas are pronouncedly authoritarian. Although they may not appeal to a democrat, they should compel a searching of souls of all who are attached to the democratic way of life. As a contemporary author has pointed out, the answer to Plato's apprehensions about the weakness of democracy lies in our lives rather than in arguments.9 Imaginative and exalted as Plato's thought is, his ideas about economics label him a child of his time. The city-state of his environment had a population of which slaves constituted one-third, and slaves and foreigners together one-half. Slavery he does not question, and with slaves and resident foreigners available to do the bulk of economic activities, the economic problem did not impress him as a particularly urgent one for the full-fledged citizens of the city-state. It is these with whom he is concerned, not with a wider political community or with universal humanity. As for the citizen himself, his heart is with the aristocratic families of ancient lineage, of whom he himself was a scion, and who at his time were the full-fledged citizens of the city-state. It is these with whom he is concerned, not with a wider political community or with universal humanity. As for the citizen himself, his heart is with the aristocratic families of ancient lineage, of whom he himself was a scion, and who at his time were on the defense against new social formations that did not offer him and his kind the opportunity for a career in politics. The fate of his teacher Socrates further compounded his apprehension about the value of democratic institutions.

Plato's rejection of private property, his disdain for commercial activities, his proposals for the breeding of human beings, his "noble lies," his lack of respect for the private sphere of individuals—all these are features that his work shares with a number of modern political ideologies. It makes no sense, however, to label him a Fascist or a Communist. He was no Fascist because in the Laws he expressly and at great length rejects the notion that a victorious war is the highest social ideal. Instead, he wants the

community to be organized for external and internal peace, insisting that this, rather than war, is its highest purpose. Furthermore, throughout his work, his appeal invariably is to reason rather than to violence and emotion. He was no Communist because he would have been aghast at the thought of having political power turned over to the self-appointed spokesmen of the toiling masses. The communal life that he proposes is both narrower and wider than that which forms part of the communist program. The communal life required in the Republic for the ruling class does not preclude private property of producer goods among the economically active class—the elimination of which stands high on the agenda of communism. Also, with the exception of a few nineteenth-century sects, communism does not reject the institution of monogamic marriage and does not require that women be held in common. Lastly, the motives that make Plato prefer communal property for the ruling class are quite alien to the utilitarian lineage of communism. It is not pleasure that he wishes the ruling class to share but austerity. Basic to him is a dualism of body and soul which deprecates the value of material goods and the strivings for them. This is an attitude profoundly different from the monism of the philosophical materialist who denies the dualism of body and soul and places no opprobrium on the craving for material goods.

Although Plato, as has been seen, does develop a sort of hedonistic calculus whose outward appearance seems to anticipate that of Bentham (see p. 20), he is far from identifying the pleasurable with the good. What at first glance may seem to be a utilitarian argument merely aims at putting up a second line of defense for a conclusion that is reached on other grounds: the good life and right conduct are preferable to the bad life and poor conduct.

Plato does not propose the sharing of goods in order to diffuse pleasure but because he considers private property a burden, conducive to internal strife endangering the equilibrium of society, and likely to bring out the worst of human qualities. In more positive terms, which stand out in the passage of the Laws referred to on page 19, he proposes the sharing of material goods and of everything else as a means of integrating society to an extent that he himself considers utopian—fit for a community of gods rather than of men.
ARISTOTLE

It is the extreme form of unity or solidarity of the state as it was espoused by Plato that Aristotle (384-322 B.C.), his principal disciple, found fault with. He held that we should not aim at it, even if we could, because it would mean the destruction of the state. The chain of reasoning that leads to this result will be examined shortly.

Aristotle did not have his master's vision and imagination, nor was he as dogmatic and as much inclined to radical proposals for change. He was, however, equipped with a more penetrating analytical power, and at the same time he was more of an empiricist than Plato cared to be. Aristotle's origin was less aristocratic—his father had served as physician to King Philip of Macedon, the father of Alexander the Great, whom Aristotle in turn tutored.

Aristotle's writings cover the whole span of human knowledge. Only a few of them refer specifically to economic matters, and if they do it is in connection with political or moral matters or with an examination of the general art of reasoning. A mastermind himself, but also a disciple of another towering figure, Aristotle often finds fault with the teachings of Plato, and at times his criticism does not seem altogether fair.

Aristotle's contributions to economics do not constitute a coherent system of thought but lie in different fields and are not connected by any one principle of integration. Moreover, his ideas, although always profound, sometimes lack consistence.

Essentially Aristotle's inclination is an aristocratic one, as was Plato's, and his belief in the fundamental inequality of human beings is as pronounced as was his master's. Unlike Plato, though, Aristotle does not propose as strict and severe a regulation of society, and his solution of the economic problem places more emphasis on moral improvement than on regimentation. People can be changed by the proper environment, by suitable institutions, and by the power of persuasion, and if they become better men, the economic problem of pervasive scarcity of material goods will be less oppressive. Moreover, as will be seen in connection with Aristotle's defense of private property, a point is made of the greater productivity of the latter as compared with Plato's proposed communal property, a consideration to which Plato would have given little weight.

In Aristotle's thinking change and growth play a more significant role than do in the rigid categories of Plato. This is illustrated by the central role that he assigns to the concepts of "nature" or "natural." To Aristotle, something is natural or according to nature if it leads to the realization of a thing's final end or purpose. Thus the family, the village community, and the state are all natural in the sense that they are indispensable in enabling man to lead the full and rich life that puts all his capacities to use.

Aristotle's contributions to economics treat of the economic organization of society, communal versus private property, and value and exchange. Most of these ideas are found in his Politics, the first treatise on political science; some in his Ethics; and a few in his Topics and Rhetoric, in which he discusses the art of reasoning.

The word economies is of Greek origin and literally means "management of the household." It is in this sense that Aristotle uses the word in his Politics. The social relations relevant for the management of the household are those between husband and wife, parent and child, and master and slave. Discussing slavery, he admits that some consider the institution a mere convention made by man, contrary to nature and therefore unjust. This opinion he rejects because "from the hour of their birth, some are marked out for subjection, others for rule." The master, he argues, can foresee by the exercise of his mind; the slave can with his body give effect to such foresight. A man is by nature a slave if he participates in reason to the extent of apprehending it in another without possessing it himself, a subtle distinction which borders on hairsplitting. Aristotle admits that not all who happen to be slaves by virtue of the law of the land are slaves by nature, and in such cases it is only power that sanctions slavery. On the other hand, if the relationship is a natural one, master and slave form a community of interest and there is no reason why they should not be friends. Such a thought, whether meant to refer to an ideal or to actual practice, would have been strange to Plato.

THE ART OF ACQUISITION

From the management of the household there is conceptually distinguished the "art of acquisition." The former has the function of using
what the latter provides. Different methods of acquisition correspond to
different ways of life—altogether five, which may occur in pure form or in
combinations: pastoral, farming, fishing, hunting, and, surprisingly
enough, piracy. The practice of these arts of acquisition yields what nature
has provided for man—true wealth that is limited in quantity by the needs
of the household and the city. "Life is action, not production."

Aristotle then goes on to discuss other exercises of the art of acquisition,
which are distinguished sharply from the "natural" ones considered earlier.
The natural ones are functionally related to the satisfaction of needs and
thus yield wealth that is limited in quantity by the purpose it serves—the
satisfaction of needs. The unnatural exercises of the art of acquisition, on
the other hand, aim at monetary gain, and the wealth they yield is poten­
tially without limits. Why unnatural wealth of this type has no limit is
explained by means of two not altogether compatible explanations. It is
said that it has no limit because it becomes an end in itself rather than a
means to another end—satisfaction of needs—which would set a limit to it.
But Aristotle adds that such wealth has no limit because people's
desire for material goods has no limit, whereby the acquisition of wealth
is turned again into an instrument or means rather than into an end
in itself.

USE AND EXCHANGE

In line with this reasoning, Aristotle makes the important distinction
between use and exchange, which later was to be expanded into the dis­
tinction between value in use and value in exchange. The true and proper
use of goods, he argues, is the satisfaction of natural wants. A secondary
or improper use occurs when goods are exchanged for the sake of monetary
gain. Thus, all exchanges for monetary gain are labeled as unnatural. This
includes specifically commerce and transportation, the employment of skilled
and unskilled labor, and lending at interest. The exchange of money for a
promise to pay back the principal with interest is considered the most un­
natural one, and this for two reasons. Lending at interest yields gain from
currency itself instead of from another exchange transaction which money
is designed to facilitate. Money begets no offspring; if nevertheless there is one—interest—this is contrary to all nature.

The ideas here developed indicate that Aristotle shared Plato's rejec­
tion of commercialism and his low opinion of the qualities of hired labor.
It should be pointed out, however, that not all commercial transactions are
condemned by Aristotle but only those that aim at monetary gain. Barter is
expressly exempt. A more dubious status is assigned to exchange trans­
actions that involve the use of money, but only as a measure of value and
not as a source of gain. It would seem that these must be considered natural
if the consistency of Aristotle's thought is to be preserved. As will be seen
later, he makes a strong point in his Ethics of the fact that the city is held
together by mutual give-and-take, by each rendering to others something
that is equivalent to what he receives from them. In the Politics this prin­
ciple is referred to as "the salvation of states." Moreover, the Ethics treats
specifically of justice in exchange, and if all exchanges were unnatural it
is hard to see how some could have the quality of justice.

Basic to the difficulty is of course the very fineness of the distinction
between natural and unnatural acts of acquisition, the criterion of the one
being the limited character of human needs and of the other the unlimited
character of human wants. Aristotle nowhere makes plain at what point
a need turns into a want, and the difficulty can only be resolved by his
general appeal for moderation, a moral rather than an economic principle.

MONEY

In conjunction with his discussion of the art of acquisition, Aristotle
develops his theory of money. Money, he holds, is not "natural" in the
sense of being indispensable for man's self-fulfillment but arises from law
or convention. It came into use to serve the requirements of foreign trade,
where distance made barter impracticable. First serviceable commodities
were used as money, measured by size and weight. Later coins were used,
where the stamp marked the value and dispensed with the trouble of
weighing. With the use of coin there were established a medium of exchange
and a measure of wealth—that facilitated accumulation of the unnatural
type. Nevertheless, money and wealth must not be confused. Money is not
wealth because the replacement of one commodity by another may
make the former worthless. Money does not immediately satisfy the neces­
sities of life, and who is rich in coin may be in want of food, as was the
fabled King Midas, whose touch turned everything into gold.

In the Ethics, the discussion of money is further amplified. Money is
a sort of representative of demand, which "holds all goods together." As
money exists by convention, its value can be changed or canceled. Thus,
while its value is not always constant, it is nevertheless more stable than the
value of other goods. Money is further recognized as constituting a claim
to goods that can be asserted in the future.

PRIVATE PROPERTY

Although Aristotle frowns on moneymaking and exchange transactions
aimed at moneymaking, he nevertheless has left behind a spirited defense
of private property, opposing not only its replacement by communal property
but also restrictions on the maximum amount of private property to be
held, such as had been proposed in Plato's Laws. His defense of private
property was written as a critique of Plato's ideal Republic, in which the
rulers are to own property in common.
Aristotle first takes up Plato's goal, the perfect unity of the state, which the abolition of private property for the rulers is to serve as a means. Such a perfect unity, he holds, runs counter to three principles—diversity, reciprocity, and self-sufficiency—and even if it were obtainable, it would mean the ruin of the state. The principle of diversity requires that a state be made up not only of so many men but of different kinds of men. How else would it be possible to live up to the principle of reciprocity, according to which the city is held together by the mutual give-and-take of the citizens, each rendering to the others an amount equivalent to what he receives from them. Moreover, the city also aims at self-sufficiency, which makes life desirable and replete. This has been interpreted to mean that the city must be a place that is equipped with resources, material and others, adequate to enable the citizens to develop fully their personalities, without reliance upon outside resources. Self-sufficiency is inversely related to unity. An individual is all unity and least self-sufficient; the family has less unity and more self-sufficient—and this is still more true of the city. If self-sufficiency is to be desired, the lesser degree of unity, according to Aristotle, is preferable to the greater one, because without diversity there can be no self-sufficiency.

Having thus shown that the extreme type of unity in the state is not desirable, Aristotle goes on to scrutinize the means proposed by Plato for the attainment of such unity, that is, communal property for the rulers. He compares communal property with private property and finds the latter superior on five grounds—progress, peace, pleasure, practice and philanthropy.

1. Private property is more highly productive than communal property and will thus make for progress. Goods that are owned by a large number of people receive little care. People are inclined to consider chiefly their own interest and are apt to neglect a duty that they expect others to fulfill. The greatest interest and care are elicited when a person is applying himself to his own property.

2. Communal property is not conducive to social peace because people, when involved in a close partnership, face all sorts of difficulties. They will complain that they have contributed more work and obtained a smaller reward than others who have done little work and received a larger return.

3. Private property gives pleasure to the owner. Nature has implanted in him, as in all other human beings, the love of self, of money, and of property. This feeling is frustrated when all persons "call the same thing mine."

4. There is an appeal to practical experience. If communal property were such a good thing, it would surely have been instituted long ago. The experience of the ages testifies to the widespread use of private property. To renounce it signifies disregard for such experience. Things are not good just because they are new and untried. Rather the opposite is true, and the social cost of abolishing private property may weigh more heavily than the social cost of private property itself.

5. Private property enables people to practice philanthropy and provides them with training in the practical virtues of temperance and liberality. Instead of compulsion, there is an opportunity for moral goodness to develop among the citizens if the property of each is made to serve the use of all. Part of one's property may be devoted to one's own use, another part may be made available to friends, and still another part may be devoted to the common enjoyment of fellow-citizens. "Friends' goods are goods in common." People must have enough property to be able to practice both temperance and liberality, not only the former, as Plato taught in the _Laws_. Temperance without liberality tends to turn into miserliness, and liberality without temperance tends to turn into luxury.

Aristotle is also opposed to limitations on the amount of private property an individual is allowed to hold, and he describes the practical difficulties that such restrictions would face. In his words, "it is more necessary to limit population than property." The neglect of this matter is a never-failing cause of poverty, and "poverty is the parent of revolution and crime." Even if it were feasible to equip every citizen with a certain amount of property, it would be "more important to equalize people's desires than their properties." This might be accomplished with the help of education, but one that would have to take into account individual differences rather than offer the same program for all. Moreover, economic inequality, although an important cause of social unrest, is not the only such cause. Inequality of office or prestige is important as well, but they operate in a different manner: the masses are incited to revolution by an unequal distribution of property, whereas the elite is so incited by an equal distribution of office or prestige. Thus, whereas poverty may be said to be the parent of revolution and crime, Aristotle points out that both types of social malaise may well be the offspring of other than economic factors. Not all crimes are caused by want, especially not the greatest ones: "men do not become tyrants in order that they may not suffer cold." Hence, the economic factor, although important, is not the only one that operates in history.

It is the use to which property is put that is of the highest moral significance. People always want more and more; their desires are unlimited and are never satisfied. In this situation it is neither the abolition of private property nor its equalization that impress Aristotle as helpful. Instead he proposes a reliance on education and suitable institutions: the better sort of people, who are capable of receiving such training, should be taught to limit their desires and thus refrain from wanting more wealth, whereas those
ARISTOTELIAN JUSTICE

The principle of moderation, which we have already mentioned, is indeed a central one in the thought of Aristotle. It underlies Aristotle's concept of virtue. The virtuous man, for example, will practice courage because by doing so his action will hold middle ground between certain excesses: daring on the one side and cowardly restraint on the other. Similarly he will practice liberality rather than be a miser or a spendthrift.

The notion of mean or average thus assumes great importance in the Ethics of Aristotle, which, as in his other writings, absorbs many of the mathematical teachings of the Pythagoreans and other schools of thought. To these, the world seemed ordered by mathematical relationships which the reality either reflected immediately or at least in a symbolic or analogous fashion. No wonder then that such relationships were found in the analysis of social activities, including economic ones. Since persons, rather than goods, are linked in Aristotle's economic analysis, they will appear side by side with goods in the terms of mathematical formulas, in a manner not acceptable to modern students.

The mean or average in turn is linked with the notion of proportionality, and all these concepts are put to use in the Aristotelian analysis of justice. Various types of justice are distinguished, including distributive justice and corrective justice. Distributive justice deals with the sharing of wealth and honor in society. They are distributed not equally but in proportion to the individual citizen's merit or worth. As an illustration, Aristotle refers to the distribution of expenditures from the public treasury, which are divided in the same proportion that the citizens' contributions to the public fund stand to each other. If \( A \) and \( B \) are the contributors; and \( C \) and \( D \) are public expenditures

\[
A: B = C : D.
\]

This would, according to Aristotle, reflect a "geometric proportion" under which people who are unequal receive unequal shares.

While distributive justice differentiates in this manner, corrective justice equalizes. It relates to the judge's correction of wrongs by means of reducing the gain of one party and the loss of the other. This is accomplished with the help of what is called an "arithmetic proportion" whose middle term is equidistant to the extremes:

\[
A - C = C - B.
\]

For example, if merchandise that has been sold for 10 units of money is found faulty and the buyer claims that the price should be reduced to 2 units of money, the arithmetic proportion would be \( 10 - 6 = 6 - 2 \). The judge would set the price at 6 units of money, the arithmetic mean of the original price and the one the buyer claims the merchandise is worth.

JUSTICE IN EXCHANGE

It is subsequent to this discussion of distributive and corrective justice that Aristotle turns to an analysis of justice in exchange. The passage in which he expresses his thoughts on this matter is obscure, and to this day opinions are divided whether or not he meant to develop the argument in terms of a third type of justice, referred by some authorities as commutative justice, to cover this case.

Aristotle starts the examination of justice in exchange by introducing the notion of reciprocity, which to the Pythagoreans meant retribution both in the biblical sense of "eye for eye, tooth for tooth" as well as in the sense of "one good turn deserves another." Men seek to return evil for evil, and good for good, the latter constituting the reciprocal element in exchange. Reciprocity of this type is an important element of integration of human society: "it holds the people of the city together."

Aristotle makes it clear that reciprocity in exchange does not imply precisely equal returns but "proportional" ones, and here the difficulties of interpretation begin. Side by side with the Pythagorean meaning of reciprocity there also exists another one, epitomized in the Elements of Euclid for example, and it is possibly this notion of reciprocity that underlies the ideas that Aristotle now develops. He says: If \( A \) is a builder, \( B \) a shoemaker, \( C \) a house, and \( D \) a shoe, and if the builder and the shoemaker wish to exchange their products, proportionate return will be secured by reciprocal action—each turning over his good to the other—provided there is proportionate equality of the goods before the exchange takes place. This will be so if the number of shoes exchanged for the house corresponds to the ratio of the builder to the shoemaker, or

\[
A: B = xD: C.
\]

The interpretation of Aristotelian justice in exchange in these terms, that is, in terms of an Euclidian "reciprocal proportion," immediately poses two questions. First, we will want to know how to determine the \( x \) in the right side of the equation—the number of shoes that is equivalent to the house. Second, we will want to know the meaning of the left side of the equation, the ratio of builder to shoemaker.
The answer that successive generations of interpreters of Aristotelian thought have given to the first question has reflected the economic thinking of their time. From the Middle Ages until the last quarter of the nineteenth century it was common to derive economic value from labor, that is, goods were believed to exchange in proportion to the amount of labor incorporated in them or commanded by them. Consequently, over this long period of time the usual interpretation placed on the Aristotelian theory of exchange was that the \( x \) would equate the labor of the shoemaker with that of the builder. In the course of the past hundred years, however, the "labor theory of value" has been discarded, at least by the economists of the Western world, although Marxists still tend to adhere to it and do so at the cost of considerable intellectual difficulties if the adherence is a substantial one rather than a mere matter of words. According to the view that gradually has come to replace the labor theory of value, the economic value of a good is interpreted subjectively and derived from its utility. This turn of economic theory, to which greater attention will be given on a later occasion, has not failed to affect the Aristotelian theory of exchange.

Some contemporary students of the matter would determine the \( x \) in such a way that it would equate the utility—rather than the labor—of the goods to be exchanged. Such an interpretation would do no less justice to the thought of Aristotle than did the alternative interpretation which has prevailed for so many years. This resilience constitutes a testimony to the breadth and depth of Aristotle's thought which in varying interpretations has retained its relevance over a period spanning two millennia. As for the words used by Aristotle, the interpretation in terms of utility appears to be based upon more solid foundations than the interpretation in terms of labor. As he says, the goods to be exchanged must somehow be equal, and they must therefore be measured by a common yardstick. This yardstick, he continues, is demand or need, "which holds all things together," with money serving as its representative: "if men did not need each other's goods at all, or did not need them equally, there would be either no exchange or not the same exchange."

That valuation in terms of utility was not alien to Aristotle can be documented with the help of a number of passages drawn from his Politics as well as from other works such as the Topics, which treats of the art of reasoning, and the Rhetoric. In Politics (1323 b 7) it is said that there may be too much of a useful thing, and if there is, it either will harm or will be of no use to the possessor. Interpreted with some generosity, such thoughts may be said to anticipate the modern notion of diminishing utility. In the Topics (117 a 2 and 118 b) a statement may be found to the effect that the desirability of a good should be judged by the gain resulting from adding it to, or the loss resulting from subtracting it from, a group of goods; and this, again with some generosity, may be interpreted as an anticipation of the marginal principle.

The second question—the meaning of the left side of the equation—has been especially puzzling to many students of Aristotelian thought. What did Aristotle have in mind when he wrote of the ratio of the builder to the shoemaker? To attempt a solution of this puzzle we must remember what we have noted already in connection with Aristotle's examination of distributive justice, that is, that in his equations persons will appear side by side with goods and that to him the relationship between persons is more significant than that between goods. Once \( xd \) is equated to \( C \)—in terms of labor or in terms of utility—and once the exchange has taken place, the relative position or standing of the two parties remains undisturbed. Moreover, if

\[
xD = C, \quad A = B, \quad \text{and} \quad A + XD = B + C,
\]

which might be interpreted to imply that the exchange of equivalents has made the partners equal in terms of satisfaction.

In the light of his theory of exchange it is not inappropriate to speak of Aristotle as a builder of mathematical models which have become so prominent in modern economic theory. The model that he has constructed applies only to an isolated pair of trading partners, not to a market made up of a larger number of traders. It is expanded, however, beyond the case of barter and covers the exchange of goods for money. If \( A \) is a house, \( B \) 10 units of money, \( C \) a bed; and if

\[
A = \frac{1}{2} B \quad \text{and} \quad C = \frac{1}{2} B, \text{then}
\]

\[
A = 5 \text{ units of money} = 5 C, \text{and}
\]

"it makes no difference whether it is five beds that exchange for a house, or the money value of five beds."

**MONOPOLY**

Aristotle's discussion of isolated exchange is expanded further to include the case of monopoly. This is done in the Politics in conjunction with his examination of the different types of acquisition. Several case studies are found there, which illustrate the collection of data as one aspect of the Aristotelian method of investigation. He reports a story told of Thales, the well-known philosopher, whom people reproached for his poverty which, they said, proved the uselessness of philosophy. In this situation Thales put his knowledge of meteorology to practical use when, anticipating a heavy crop of olives, he rented for almost nothing all available olive presses early in the season. At harvest time his corner of the market for olive presses paid off because he then rented them out "at any rate which he pleased," making a lot of money and showing the world that philosophers can easily be rich if they want to be, but their aim is directed at other things.
The creation of monopolies, Aristotle adds, is practiced not only by private individuals but by the government as well, which when in need of funds may create a monopoly in provisions. No moral blame is expressly attached by Aristotle to this kind of money-making. He does not mention operations by rings or trusts, which Greek law forbade.