

The Economic Ideas of Classical Athens

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Before I discuss the main theme, I first discuss the modernist-primitivist controversy and the formalist-substantivist controversy regarding the state of the economy in Classical Athens and its method of analysis, for I consider this topic to be the best introduction to the subjects that follow. Second, I give a brief review of the Athenian economy of the 4th century B.C., the period about which relatively good information about the economy is available, as a background for the economic ideas. I take a modernist view of the Athenian economy of the 4th century B.C. The main theme begins with the discussion of the economic writings of Xenophon, for among classical writers he showed a best understanding of the working of the economy. After this, I discuss Ethics of Plato and Aristotle, Plato's economics, and Aristotle's economics, in that order. This order is chosen because for Plato and Aristotle economics is a part of ethics. I call their economics the economics of a broad sense, in contrast to the narrow modern economics devoid of normative considerations.

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1. Modernist-Primitivist Controversy, Formalist-Substantivist Controversy

Modernist-Primitivist Controversy started in 1893 when Meyer opposed Buecher, who explained that the economy of ancient Greece was a primitive one based on bartering among households rather than markets. Meyer, on the other hand, argued that it was well-developed, differing from modern economy only in the matter of degree. Finley, who was influenced by Weber and Polanyi, said that in ancient Greece, economy did not exist independently and was imbedded in society. He called this position substantivist. Therefore, he argued, that ancient Greek economy could not be understood by the method used for understanding modern economy, and that an original behavior model must be developed. In

contrast, the position that every economy can be analyzed by the same method used to analyze a modern market economy is called Formalist. We might say Finley changed the focus of Modernist-Primitivist Controversy and replaced it with Formalist-Substantivist Controversy. Obviously, the two controversies are conceptually different. The former is concerned with facts of economic development, whereas the latter with the method of analysis. Often, however, primitivists tend to be substantivists, as Weber, Polanyi, and Finley are, and modernists, formalists.

Substantivism was especially popular in the early 20th century. It was influenced by cultural relativism advocated by cultural anthropologists such as Ruth Benedict and Margaret Mead. Their ideology contradicted the view that all men are essentially the same no matter when and where they lived. As a result of this fundamental error, Mead fabricated a ridiculous model of Samoan culture and Benedict created a distorted image of Japanese culture. This cultural relativism influenced Finley to underestimate men's universal desire for profit and substitute pursuit of honor for it in ancient Greece. It is hard to believe that pursuing honor was more important than pursuing profit, and such a view is not substantiated by various writings of that time. However, formalism that tries to explain all economic activities by the principle of maximizing profit and utility is the other extreme, and it is clear that not only ancient Greek but also modern economy cannot be explained by only these principles alone. In this sense, we may say substantivism has an element of truth.

It may be said that the original Modernist-Primitivist Controversy has already been settled. The general consensus of the last decade is that by the 5th and 4th century, the Athenian economy was considerably developed in terms of production process, market, and monetary institutions (See Cartledge, Cohen, and Foxhall, eds., *Money, Labour, and Land*, Routledge, 2002).

2. Athenian Economy in the 5th and 4th Century

Before considering the economic ideas of classical Athens, let us look at an outline of the economy of the time. First, from what sources can we learn about the economy of the time?

Historians:	Herodotos, Thucydides, Xenophon
Philosophers:	Plato, Aristotle, Theophrastos
Orators:	Demosthenes, Lysias, Andokides
Comedy writer:	Aristophanes
Inscription:	Inscriptiones Graecae

However, the numerical values that appear in written works are often extremely inaccurate. For example, Demosthenes said in Speech #20 that Athens imported 400,000 medimnoi (1 medimnos equals approx. 51.8 liters) from the Black Sea region and about the same amount from the remaining regions, but it is unclear

how dependable this number is. It is not certain whether Demosthenes had reliable sources, and orators sometimes change numbers in order to bring out a point. Aristophanes, in his comedy, often quoted the prices of daily necessities. It is said that these numbers are mostly accurate, but it is possible that he exaggerated the numbers for comical effects. Numbers that appear in inscriptions are more credible. However, many inscriptions have been lost, and many existing ones are partly undecipherable.

Even if we use all these writings and inscriptions, it is impossible to quantify economic phenomena exactly. At best, we can only set a broad range of the upper and the lower limit. If we use some accounting identities, however, it may be possible to narrow the range. For example, if A = population, B = grain consumption per person, C = arable area, D = agricultural productivity, and E = grain import, then we get the identity $A \times B = C \times D + E$. The range of numbers that satisfy this identity must be narrower than the original one. Next, I will give an outline of the 4th century Athenian economy obtained from a model constructed on the basis of the following five identities: the revenue and expenditure of the poor farmer, that of the rich farmer, that of the commercial sector, that of the public sector, and the trade balance. I will give some numerical values, but it should be noted that they are very rough estimates.

2.1. Population

Citizens (including families):	100,000
Foreign residents:	30,000
Slaves:	90,000

One-third of slaves worked in households, engaging in housework and farming, one-third engaged in commerce and industry, and one-third worked in the silver mines. Many foreign residents also engaged in commerce and industry. Citizens of the poor class also engaged in manual labors, but a major occupation for citizens was taking part in politics. It can be said that the Athenian economy was supported by slaves and foreign residents.

2.2. Grains (barley and wheat)

Domestic production:	750,000 med
Domestic consumption:	1,730,000 med
Import:	980,000 med: 612 talent (1 talent = 6,000 drachmas)

2.3. Trade

Import (Export) total:	2,760 talent
Main export items:	Manufactured goods: 1,466 talent
	Silver: 825 talent

2.4. Public finance

Polis expenditure was approximately 1,000 talent, 70% of which was spent

on military affairs. Other expenditures included compensation for participating in political and judicial affairs, holding festivals including sports and drama competitions, and social welfare. Income tax was not collected except for special cases and the state revenue largely depended on voluntary contributions (*leitourgia*) from the wealthy class. In the 5th century, a large part of the state revenue was tributes from the Athenian League, but in the 4th century, they significantly decreased.

2.5. GDP trial calculation

4,400 talent (breakdown: industry 2,500; silver 1,000; agriculture 900)

2.6. Market and monetary institutions

Since gold coins were minted in Lydia in the 7th century and silver coins were minted in Athens in the 6th century, they were used extensively. In Athens in the 5th and 4th century, monetary economy grew significantly, and most of agricultural and industrial goods were bought and sold in the market. Prosperity of the Athenian agora is evident in historic remains and is noted in many writings. For example, Xenophon wrote that since many goods in the agora were sold in specific places, he could send his slaves there without worrying about them getting lost (*Oikonomikos*, viii, 22). In his humorous work called *Characters*, Theophrastos gives 30 examples of obnoxious characters, many of which involve greedy attitudes at the agora. Also in Aristophanes' *Acharnians*, various goods sold at the agora are listed. Banking was also well-developed; drafts were issued and money was invested in industry and trade. In the 4th century Athens, the names of 30 bankers are known. The most famous was Pasion, who started out as a slave and ended up as one of the wealthiest men in Athens and eventually acquired citizenship.

2.7. Economic development

In Athens during this period, no significant progress in technology was apparent except in the military and agriculture. Abundance of slaves may have weakened the incentives for innovation. There is no evidence of economic growth in Athens during the 5th and 4th century. This can be attributed to Athens spending nearly half of the time on war and the resulting population decrease. On the other hand, looking at a longer period of time, it has been estimated from human bones and house remains that consumption per capita increased nearly double in all of Greece from 800 to 300 B.C. This is equal to 0.14% increase per year. Let us compare this number to modern data: between 1580 and 1820, annual per capita consumption increase of Netherlands was 0.2% (Ian Morris, "Economic Growth in Ancient Greece", *Journal of Institutional and Theoretical Economics*, Dec. 2004).

The numbers given above were calculated based on a model consisting only of accounting identities. In order to specify this kind of model, it is not necessary to hypothesize a behavior principle of economic units. Therefore, it can be said that this model transcends the Formalist-Substantivist Controversy. In reality, when estimating a model, a majority of econometricians place more emphasis on statisti-

cal fitting than to behavior principles. Brown and Deaton (“Models of Consumer Behavior: A Survey”, *Economic Journal* 1972, pp. 1145–1236) stated that most estimates of the consumption function done after World War II were based on practical statistical considerations rather than the principle of consumer behavior. At a graduation speech given at Berkeley Economics Department in 1994, Thomas Shelling said that if he were to list five things he learned in economics that are true, important and not self evident, they would all be accounting identities.

2.8. Democracy in the 5th and 4th century Athens

Democracy in classical Athens was sustained on an equilibrium of the conflict between the elite and the mass. The elite is defined by three elements: good birth, wealth, and ability. Therefore, the conflict between the elite and the mass is not exactly the same as that between the propertied class and the proletariat class; nevertheless, it has much of that element. In order to understand this conflict, it is necessary to consider general attitude toward wealth and poverty at the time. To put it simply, both wealth and poverty were regarded as evil. The poor did evil out of necessities, and the rich did evil out of arrogance. The Greek word used for arrogance here is *hybris*, which was considered to be the most heinous trait. The word can be translated in many ways. Liddell and Scott list wantonness, insolence, lewdness, outrage, and grievous assault. We might say that the word describes the sin of a mortal man to behave as if he were immortal. Looking at various descriptions of wealth and poverty in the writings of the time, we get the impression that although they are both evil, wealth is the greater evil of the two. Unlike modern capitalistic society, a person who has built a fortune by sharp business sense, originality, and untiring pursuit for profit (such as Bill Gates) was never respected. Therefore, the elite abstained from boasting about their wealth and donated their money willingly for public service so as not to provoke antipathy of the mass. Otherwise, they would not only face the stigma of *hybris* but also the danger of being sued in a public court for a large sum of money. Also, when submitting a motion in the assembly, they would not get the support of the public. The equilibrium of Athenian democracy was maintained under this kind of mutual give and take between the elite and the mass. This equilibrium was quite stable. Since its establishment by Cleisthenes in 510, it continued until 322, when Athens was conquered by Macedonia, except for two brief interludes of oligarchy.

Then, can we say Athenian democracy was successful? Athenian democracy was direct democracy, where all the important policies were decided by votes of its citizens (male over 18 years of age) at the assembly (*eklesia*). There was no position equivalent to prime minister or president of the present day. There was an organization that decided the agenda of *eklesia* as well as enacted the policies adopted by the assembly, called *boule* (council). The members of *boule* were chosen from the citizens by lottery. The assembly was held in a semi-circular outdoor meeting place called Pnyx, and as many as over 6,000 citizens attended. Although every citizen had the right to vote and speak, it must have taken a man of considerable eloquence and charisma to present a motion in front of over 6,000

often rough and rowdy audience and get their approval. Examples of such politicians were Pericles and Demosthenes. Because they laid out relatively good policies, Athens in their time flourished. This does not mean, however, they were above the afore-mentioned class conflict. In order to win public approval, Pericles submitted a motion to pay 2 obols (6 obols = 1 drachma) per day to a juror of the public court (jurors were also chosen from the citizens by lottery). The motion was obviously approved. Demosthenes started a speech at the assembly as follows: “Citizens of Athens, I could mention that I have always generously contributed money to public funds, such as for constructing warships, holding festivals, other cash donations, and for paying ransom for hostages, etc. But I shall not speak of them at all” (VIII, 70–71).

There are also examples of failures of the democratic system. Citizens, incited by demagogues, often supported policies they would later regret. Some of the striking examples are as follows: in 428, incited by Cleon, citizens decided to kill all the adult males of Mytilene who rebelled against Athens (this was repealed next day thanks to a composed and rational argument by Diodotos); in 425, incited by Alcibiades, citizens decided to send troops to Syracuse in Sicily, which contributed to the eventual defeat of Athens in the Peloponnesian war; in 406, citizens voted to execute six generals (*strategoí*) for not saving the sailors who were drowning in the naval battle of Arginusai (only Socrates voted against it). Lastly, Socrates’ undeserving execution must also be mentioned as a prime example of the failure of Athenian democracy.

3. Economic Ideas of Classical Athens — Introduction

English word “economy” is derived from Greek word *oikonomia*. This is a compound word of *oikos* (house) and *nomos* (custom, law). Therefore, the literal translation of *oikonomia* is “household management.” One of Xenophon’s works is called *Oikonomikos*. Since this is the adjective form of *oikonomia*, it means “regarding household management.” This work has two parts: part one is conversation between Socrates and Critobulos while part two is conversation between Socrates and Ischomachos. In part one, Socrates develops a strikingly original theory of values. Goods have use values and exchange values. A flute does not have any use value to a person who does not play the flute, but because it can be exchanged for money at the market, it has an exchange value. If the person misused the money he obtained at the market, however, it would become worthless. Also, for Socrates, knowledge and friends are included in a list of a person’s wealth. In part two, it talks about how a rich landlord Ischomachos educated his young wife to become a capable house manager, and about farm management in general. Xenophon highly valued a wife’s contribution to the household economy. He wrote that a wife is an equal partner of her husband and even remarked that her contribution is greater than that of her husband’s (vii, 13–14). In this respect we can say that Xenophon was more progressive than the average intellectual of the time. Plato, as we will be mention later, was also progressive in this way; he

included women among philosopher-kings. Aristotle, on the other hand, slighted women's intellectual abilities, and regarded a wife not as her husband's equal partner, but as a being who should merely follow the husband's orders. In the latter half of part two in *Oikonomikos*, Xenophon describes how Ischomachos' father bought a bad piece of farm land at a cheap price, improved it to raise its value, and sold it for a large profit. This passage is valuable for understanding people's economic ideas at the time. Upon hearing this, Socrates asked Ischomachos if what his father did was similar to a grain trader buying grain when cheap and selling it at higher price. Socrates was teasing Ischomachos because it was generally considered dishonorable to gain profit from trade, but honorable if the profit came from farming.

Xenophon also wrote the work called *Poroi* (Ways) in 355. In it Xenophon proposed some measures for reconstructing the Athenian economy, which had lost an important source of revenue as a result of the collapse of the Second Athenian League in the same year. It is said that a part of this proposal was carried out by Eubulos, who was appointed as chief of financial affairs that year. Xenophon shows sharp economic sense in this work as well. One of his proposals was to give favorable treatment to foreign residents and traders so as to contribute to the growth of the port of Peiraeus, and another was to increase profit by expanding investment in the Laureion silver mines. Reading *Poroi* makes it evident that Xenophon had thorough knowledge of economic principles such as the law of diminishing returns and supply following profit.

The two works of Xenophon mentioned above and Aristotle's *Nicomachean Ethics*, Book V, which will be mentioned later, contain discussions which belong to the category of modern economics. When I say economic ideas in this paper, however, I include contents beyond the boundary of modern economics: namely, contents that would be considered part of ethics today. Why should we consider both the narrow and broad sense of economics, so to speak? It is because modern economics considers only how people do behave and not how people should behave in economic activities involving production, consumption, and distribution. Modern economics has tried to acquire the status of science by excluding the ethical aspect of human behavior. As a result of this, however, it has unwittingly fallen into a trap of thinking as if maximization of profit and maximization of utility, a hypothesis adopted to explain human behavior, were a good thing. Hausman and McPherson, in *Economic Analysis and Moral Philosophy*, Cambridge University press, 1996, mention that because economists hypothesize that men constantly pursue selfish motive, people who study economics tend to become egoistic.

Plato and Aristotle discussed much about the broad sense of economics. For them, economics was a part of ethics. Therefore, we must first understand their ethical theories. I will discuss Plato and Aristotle's ethics, Plato's economics, and Aristotle's economics, in that order.

4. Plato and Aristotle's Ethics

Now, I will discuss Plato and Aristotle's ethical ideas. I believe that their ethical ideas are fundamentally the same. There are differences in details, however, which I will mention as we go along. In discussing Plato and Aristotle's ethics, I will consider the following two principles: (1) Good and evil of character takes precedence over good and evil of action. (2) Good and pleasure are different. (Here, pleasure is not restricted to physical pleasure. It may be replaced by the word utility.)

(1) Generally speaking, modern ethics may be said to focus on action, while ancient ethics focuses on person. What concerned Plato and Aristotle most was how a man can live an ideal, worthwhile life. Such an ideal life is called *eudaimonia* in Greek. If this word is translated as "happiness," Plato and Aristotle's ethics may be categorized as utilitarianism, which is inappropriate. Happiness can be used to describe a state in a short period, such as "I am happy now." *Eudaimonia*, on the other hand, describes the whole life of a man. Therefore, we do not know if a person is *eudaimon* (adjective of *eudaimonia*) until his life is completed. In an extreme case, we may not know it even after a person's death. If one's son were to become a thief, one's life could not be said to be *eudaimon*.

An ideal, worthwhile life is a life in which virtues such as wisdom, justice, moderation, and courage are fully developed. Education's highest goal is to produce an excellent human being who can lead such a life. Once an excellent person is created, excellent action will naturally flow from him. This is the state Confucius described when he said, "At 70 I could follow my heart's desires without overstepping the boundaries of right." This is the sort of education that Plato described in detail in *The Republic* for the education of philosopher-kings. Plato regarded this kind of education as making people turn toward God. Aristotle also says in *Nicomachean Ethics* that the best life is the life of looking toward God. In contrast, utilitarianism only focuses on the good and evil consequences of actions. Even if a motive is bad, as long as the consequence is good, an action is considered good. A good action for Plato and Aristotle is an action which is carried out with a good motive and after rational deliberation.

(2) Both Plato and Aristotle considered pleasure and good to be different and good takes priority over pleasure. Unlike stoics, they do not say that pleasure should be avoided. Unlike utilitarians, however, they do not use pleasure as a criterion for action. Right action is taken because it is right. Although pleasure (mental) may often accompany action, we should not choose the action for the sake of pleasure.

Plato's view of pleasure is presented in a clearest way in his work *Gorgias*. In it, Socrates engages in dialogue with hedonists, Polos and Callicles. He tells them that because there are good pleasure and bad pleasure, pleasure cannot be a rule of conduct, and a person should seek justice for justice's sake, regardless of whether it is accompanied by pleasure. Socrates mockingly asks Callicles, "Isn't your

idea of *eudaimonia* scratching your itchy place for ever?" If you read *Gorgias* (pp. 466f), we learn that for Plato, just (*dikaios*), good (*agathos* or *kalos*), and *eudaimon* are synonymous. The same theme appears also in *The Republic*, Book II (p. 361). In it, Plato explains that a just man is *eudaimon*, even if he is deprived of all his pleasures. Simone Weil, in *Intimations of Christianity among the Ancient Greeks*, remarks that Christ on the cross is an archetype of a being who is most *eudaimon* while being stripped of pleasures.

In *Protagoras*, Socrates ridicules Protagoras by showing utility calculation reminiscent of Bentham as *reductio ad absurdum* of Protagoras' superficial understanding of ethics. Here we see a prime example of Socratic irony.

Aristotle, in his *Nicomachean Ethics*, Book X, discusses pleasure. Although his view of pleasure is somewhat more positive than that of Plato, it is essentially not much different. Aristotle wrote, "It seems therefore that pleasure is not the Good, and that not every pleasure is desirable, but also that there are certain pleasures, superior in respect of their specific quality or their source, that are desirable in themselves" (tr. by H. Rackham, Loeb Classical Library). An example of the superior pleasure referred to here is the pleasure of contemplating God. Like Plato, Aristotle says an excellent person does good deeds for the sake of goodness (1105A31-32). Bentham believed that pleasure was a feeling that occurs as a result of action and that pleasures from different activities are homogeneous and can be added together. This, Aristotle points out, is a common mistake. According to Aristotle, although some pleasure may occur as a result of action, pleasure in general is the degree of enjoying an action and, therefore, is unique to each action. Professor Urmson explains this by saying, "one could not chance to get the pleasure of, say, reading poetry from stamp collecting" (*Aristotle's Ethics*, Basil Blackwell, 1988, p. 104).

Ethical theory is roughly divided into deontology and utilitarianism. The former is represented by Kant and the latter by Bentham. Simply put, in the former one takes action because one should, whereas in the latter one takes action for the sake of pleasure (including psychological pleasure). Because Plato and Aristotle believed that for an excellent person, good and pleasure coincided, we might think as if their ethics were a compromise between deontology and utilitarianism. Since they believed right action should be taken even if it did not bring pleasure, however, their ethics is much closer to deontology than utilitarianism.

John Stuart Mill is generally considered to be a representative utilitarian; however, at one time he turned away from Benthamite utilitarianism and became ideologically closer to Plato and Aristotle. In later years he regressed to Benthamism. In his work *Utilitarianism*, we can observe him swaying between Bentham and anti-Bentham. For example, in Chapter One, he states that we must consider not only quantity but also quality of pleasure; furthermore, he states that unhappy Socrates is more valuable than a content pig. This undermines the foundation of utilitarianism. In Chapter Five, however, he completely follows Bentham's idea and says that utility, just like any other quantitative substance, should follow mathematical principles. In Chapter Four, he states that virtue

should be sought not for any other purpose but for itself. This is no different from Plato and Aristotle's ethics. Right afterward, however, he lapses back into Benthamism and states that man seeks virtue because virtue is accompanied by pleasure. Each reader must decide for himself which is the true Mill.

It should be added here that utilitarianism is not necessarily equal to pursuit of individual profit. There are parts which indicate it, and parts which contradict it. Utilitarianism has the same foundation as pursuit of individual profit in putting primary value on profit or pleasure. However, utilitarianism as advocated by Bentham and adopted by economists emphasizes the maximization of public welfare rather than personal profit and, therefore, is different from maximization of individual utility. Rawls, in *Theory of Justice*, criticized this point saying that under utilitarianism individuals' basic rights might be violated as a result of maximizing public welfare. It seems that Bentham unwittingly thought that public and individual utility somehow coincided. In the famous doctrine of an invisible hand, Adam Smith argues that pursuit of personal profit results in promotion of public welfare through the market principle. For example, he states, "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard of their own interest" (*The Wealth of Nations*, Chapter 2). Incidentally, it is interesting that Marx criticized this point saying that no matter what good may result from an activity, if the motivation is not good, the action cannot be considered good. This criticism gets at the core of utilitarianism, which cares only about consequences.

Plato's ethical theory is founded upon his theory of form (*idea*). The first role of the theory of form is to explain the relationship between true reality and what is seen by the eyes. Norio Fujisawa in *Greek Philosophy and Modern Age* (Iwanami Shinsho), explains that while a materialist would say, "Here is a desk, which is seen by the eyes," Plato would say, "The form of a desk is reflected here." The second role of the theory of form is to give absolute values to justice, good, beauty, etc. Plato thus tried to rebut sophists' relativism. Justice, good, beauty, etc. exist in heaven, and before a person is born, he or she could see these forms clearly. This is the reason why we can still see them on the earth, although not as clearly. The purpose of education is to make people remember form by metaphors and examples. The famous allegory of the cave appears in *The Republic*, Book VII. A majority of people (including university professors) believe the shadows of the puppets reflected on the wall to be real existence and are unaware of the bright sun outside of the cave. (In professors' case, the shadow represents status and honor.) Only a few who are to become philosopher-kings go out of the cave and look at the sun. Here, the sun is the metaphor for good. This is the same concept as the previously mentioned "looking towards God." In *Symposium*, Plato describes this idea as *Eros* (love). Love means turning one's body and soul toward a certain direction. "According to Plato, the right aim of human life is to understand the order and harmony that characterize the most fundamental part of reality and embody this also in our lives" (Julius Moravcsik, *Plato and Platonism*, Basil Blackwell, 2000, p. 98). This is where Plato's metaphysics and ethics are connected.

In the case of Aristotle, metaphysics and ethics are not connected this clearly, but his metaphysics and ethics share teleology. Aristotle says the all things have their own inherent functions. Good (*arete*) is a state where this function is developed to its highest potential. *Arete* for eyes is to see well; for horses, it is to run well. Then what is the *arete* of man? It is interesting to note that for Aristotle, unlike eyes and horses, human *arete* is not to develop humanness to the fullest. It is to look beyond human, namely, contemplation.

5. Plato's Economic Ideas

5.1. Division of labor

Plato did not write much about economics in the narrow sense. An exception is the explanation of division of labor in *The Republic*, Book II. Here, Plato explains how polis is formed. Individuals have differences in abilities and preferences. For example, people who are suited for farming will become farmers, and those who are suited for making shoes will become shoemakers. It is wiser and more efficient to exchange each other's products than to make everything by oneself. This is the start of polis. Adam Smith, in *The Wealth of Nations*, Chapter One and Two, also discusses division of labor. Smith agrees with Plato in that division of labor increases efficiency, but his theory for the origin of division of labor is different from Plato's. According to Plato, each individual chose division of labor after rationally considering each other's abilities and preferences, whereas, according to Smith, division of labor is based not on rational decision, but man's instinct for exchange. Smith believes that people's differences are not the cause but the result of division of labor. Also, while Plato cites farmers, shoemakers, carpenters, and so on as examples of division of labor, Smith gives an example of a needle factory where one person extends a wire, another cuts the wire, and another puts a hole in the wire. This sort of division of labor was already known in the classical period, however. For example, Xenophon gives an example of a shoe factory where one person cuts leather, another sews, and another shapes it into shoes (*Cyropaedia*, VIII, ii, 5).

Classes are formed as a result of division of labor. Plato recognized a potential conflict between the classes. Conflicts are controlled by philosopher kings in *The Republic*, and by various regulations in *Laws*. Aristotle, as will be mentioned later, argued that the selling and buying of goods resulting from division of labor must be done in such a way that social ties of the parties involved are strengthened.

5.2. Admonition against monetary greed

Plato's condemnation for pursuit of profit and monetary greed can be found in *The Republic* and *Laws*. As was mentioned earlier, Plato discusses the formation of polis in *The Republic*, Book II. First, polis starts out with the minimum constituents such as farmers, carpenters, weavers, and shoemakers. Then, it expands with the addition of blacksmiths, various artisans, shepherds, cattlemen, and merchants. From 372D starts a description of more luxurious polis. Newly added to this

luxurious polis are luxurious furniture, perfume, high class prostitutes, embroidery work, poets, actors, beauticians, doctors, etc. These exist in any country, and it is hard to imagine that Plato was against all of them. The reason Plato talks about the luxurious polis is to show that as polis gets more luxurious, things which satisfy people's desires increase, human greed expands, and opportunities for injustice also increase.

In *Laws* we find countless passages which admonish greed. It is impossible to list all of them, but let me cite a few examples: "The greatest is lust, which masters a soul that is made savage by desires; and it occurs especially in connexion with that object for which the most frequent and intense craving afflicts the bulk of men, —the power which wealth possesses over them, owing to the badness of nature and lack of culture, to breed in them countless lustings after its insatiable and endless acquisition" (870A, tr. by R. G. Bury, Loeb Classical Library). "... the good man, since he is temperate and just, is fortunate and happy, whether he be great or small, strong or weak, rich or poor; whereas, though he be richer even 'than Cinyras or Midas,' if he be unjust, he is a wretched man and lives a miserable life" (660E). "... yet all the gold on earth, or under it, does not equal the price of goodness" (728A). "... it is impossible for them to be at once both good and excessively rich" (742E). The last quote reminds us of a passage in Gospel According to Matthew, 19:24: "It is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God." This is another example of intimations of Christianity among ancient Greeks suggested by Simone Weil. For Plato, the order of importance was: (1) soul, (2) health, and (3) wealth. This order is repeated in 661A, 697B, 743E, and 870B. The ideal country Magnesia of Plato's *Laws* was to be built away from the sea. The reason for this was to avoid a large amount of gold and silver from coming in by foreign trade (705B). This is the exact opposite of today's economic policy.

5.3. Political theory

Plato's ambition must have been active participation in politics like that of any other Athenian youth of aristocratic descent at the time. Distressed by the unjust execution of his teacher Socrates, however, Plato must have gradually become disappointed in Athenian democracy. At such a time *The Republic* was written. In it, Plato proposed autocracy by the philosopher-kings who went through special education. Under the philosopher-kings there are two classes: warriors and workers. They are to obey the philosopher-kings; it is not clear whether they obey willingly or unwillingly. Plato does not talk much about them. The philosopher-kings are not allowed to possess personal property and must share wives and children. Here we see an extreme prototype of communism. There are some democratic features in Plato's proposal: women are allowed to receive special education, and if they are capable, they may be selected as philosopher-kings; even a person born in the lower two classes, if capable, can receive the special education to be a philosopher-king; conversely, even an offspring of a philosopher-king, if incapable, may be relegated to one of the lower classes. Plato's ideal nation was

extremely unpopular in the West right after the World War II, and Plato was compared to even Stalin and Hitler, but this was due to a complete misunderstanding. In *The Republic*, Book XIII, Plato regards tyranny as the worst political form. We should not forget the fact that for Plato the purpose of a nation is to let its citizens live most virtuous lives. It is true that Plato valued fostering of public spirit (*Laws*, 875A and 923B); however, it should not be mistaken for totalitarianism.

5.4. Various economic regulations in *Laws*

As Plato puts complete trust in the philosopher-kings' control in *The Republic*, laws and regulations are kept to a minimum. In *Laws*, on the other hand, various rules covering all the areas of citizens' lives are laid out. This is said to be because between writing *The Republic* and *Laws*, he failed in the attempt to train philosopher-kings at Syracuse in Sicily and became more realistic. If the polis described in *The Republic* is Plato's ideal, the polis described in *Laws* is his second best. Plato says that the constitution of the polis in *Laws* is a mixture of monarchy and democracy. Something like the Assembly of Athens seems to exist (764), and the Nocturnal Council, which is the most important organ of the state as will be mentioned later, tries to incorporate the opinions of the citizens including young people. But the two works share the same goal of building a polis in which its citizens can lead the most *eudaimon* life. The difference lies in the means by which this goal is attained. Below I shall list various regulations instituted in *Laws*.

5.4.1. Private ownership

Although the ownership of private assets was prohibited for the ruling class in *The Republic*, it is permitted in *Laws*; however, citizens are divided into four classes according to the amount of wealth and the upper and lower limits are set for the wealth holding of each class. Although there is no class limitation regarding participation in government, there are some restrictions regarding certain public offices: for example, only the citizens of the first class can become city-wardens, and the first and second class can become market-wardens. Lands and houses are initially distributed equally among the citizens by lottery, and the buying and selling of lands and houses are prohibited. The reason Plato set the upper and lower limits on wealth is that he was well aware of the danger of an internal strife if a difference between the rich and the poor increased to the level where an equilibrium is broken.

5.4.2. Unskilled labor

Citizens should not engage in the manual labor that does not require skill (*banausikos*). Plato believed that this kind of labor would have bad effect on personal development.

5.4.3. Skilled labor

Citizens should not engage in skilled labor (*demiourgos*). The reason for this is completely different from the prohibition of unskilled labor. Plato did have respect

for skilled laborers (craftsmen). He prohibited even skilled labor because he believed that citizens should engage in only one job, which is to participate in government and civic duties. Managing farm land was permitted, however.

5.4.4. Retail trade

Citizens should not engage in retail trade (*kapeleia*). Although Plato recognized that retail trade is necessary, he believed that it should be avoided because it would engender greed. The law regulates the profit rate that can be earned from retail trade. The three jobs mentioned above—i.e., unskilled labor, skilled labor, and retail trade are to be carried out by foreigners. Slaves will engage in farming and house work. It should be noted that in *The Republic* slaves are hardly mentioned, but in *Laws* their roles are clearly defined and the treatment of slaves is spelled out in detail (776B-778A).

5.4.5. Foreign trade

I have already mentioned that the ideal nation should be built away from the sea in order to avoid a large influx of gold and silver by foreign trade. Furthermore, foreign trade is forbidden except for securing necessary goods for national defense. In this case, the state will directly engage in trade.

5.4.6. Currency restriction

Only fiat money is to be used domestically, and gold and silver coins are not used. If a citizen must go abroad for government business or any other necessary reason, the currency that can be used internationally will be provided, but it must be returned upon coming home.

5.4.7. Agricultural produce

Buying and selling of agricultural produce is only permitted for foreign residents.

5.4.8. Credit sale

Credit sale is prohibited.

5.4.9. Market regulation

Buying and selling of goods are permitted only in specific markets. Prices may not be changed within a day.

5.4.10. Fair prices

Craftsmen (*demiourgoi*) must set the prices that are equivalent to the “true value” of the products.

5.4.11. Interest

No interest shall be charged on money loans.

5.4.12. Administrative officers

Various administrative officers are defined in *Magnesia*, the ideal polis of *Laws*. The following is a list of officers including the ones that are not related to economic activities. The most important are the guardians of the laws. They protect the laws as the name suggests. The position is similar to that of a Supreme Court judge, but the guardian of the laws also legislates and engages in administrative details such as managing the registration of wealth and controlling foreign trade. A unique position is the minister of education. He is chosen from among the guardians of the laws. This shows how much emphasis Plato put on education. The next come the public examiners. They supervise the other officers to make sure that they are performing their duties properly. The nocturnal council is an important organization mainly consisting of the three kinds of officers mentioned above. The meetings are held at dawn, as the name suggests, to discuss and deliberate not only laws but also the other important national matters. The following officers engage directly in economic activities: city wardens in charge of the order of the city, market wardens in charge of the market, and agricultural wardens in charge of agriculture. City wardens also handle legal issues involving craftsmen.

6. Aristotle's Economic Ideas

6.1. Price theory

This is discussed in *Nicomachean Ethics*, Book V. Price theory may sound like belonging to the typical narrow sense of economics; however, since Aristotle's discussion of it has a strong implication of just price, it may be better to regard it as apart of the broad sense of economics. The modern economics is not concerned with the concept of just price because it is content with any price that is determined by an equilibrium of demand and supply in the market. The main theme of *Nicomachean Ethics*, Book V, is justice. Therefore, it is certain that Aristotle was concerned with just price. First, he divides justice into general justice and special justice. What Aristotle calls general justice is *dikaiosyne* in Greek, which has a broader meaning than Japanese word for justice (*seigi*) and is closer to virtue itself. Special justice is justice pertaining to the distribution of values (honor, status, wealth, etc.) and is closer to the Japanese word for fairness (*kousei*). The main theme of Book V is this special justice. Aristotle says that distribution should be based on proportions. It means the following: If A's share and B's share are $S(A)$ and $S(B)$, and the their values (honor, wealth, etc.) are $F(A)$ and $F(B)$, respectively, then $S(A)/S(B) = F(A)/F(B)$. An example of this distribution appears in *Politics* (1318a10-40). Here, Aristotle considers determining people's votes according to wealth: i.e., if A owns twice the wealth of B, A is given twice as many votes as B.

Next, Aristotle presents a price theory, more precisely, an exchange rate between two commodities, and proposes that an exchange rate should also follow the principle of proportions. The main point of this argument is given in the following quotation: "... as farmer is to shoemaker, so may the shoemaker's product be to the farmer's product" (1133a33-35). The vagueness of this sentence

caused various different interpretations by later scholars. Let us denote farmer by N and shoemaker by K , the price of farmer's product by $P(N)$, and the price of shoemaker's product by $P(K)$. If the above sentence is literally interpreted, it becomes $N/K = P(N)/P(K)$, which is meaningless. Therefore, we must interpret it to mean $F(N)/F(K) = P(N)/P(K)$, where function F is appropriately defined. The question is, What is F ?

The most natural interpretation is to regard F as need or utility (*chreia*). In this case, $F(N)$ is defined as shoemaker's need for farmer's product. The basis for this interpretation lies in the following quotation: "for without this reciprocal proportion, there can be no exchange and no association; and it cannot be secured unless the commodities in question be equal in a sense. It is therefore necessary that all commodities shall be measured by some one standard, as was said before. And this standard is in reality demand, which is what holds everything together, ..." (1133a26-33). The Greek word which Rackham translates as "demand" here is *chreia*, which it would be better to translate as "need" or "utility". I will call this interpretation the utility theory of value.

The second interpretation is the labor theory of value. This was advocated by Thomas Aquinas and Karl Marx. In this case, $F(N)$ is considered to be the labor that was used for producing goods. Aristotle did not directly refer to labor. This interpretation is based on the following quotation: "But in the interchange of services Justice in the form of Reciprocity is the bond that maintains the association: reciprocity, that is, on the basis of proportion, not on the basis of equality" (1132b32-33). The keyword here is the maintenance of association. As I mentioned earlier, Plato's ideal was to build a polis where citizens can live *eudaimon* life, and this was the same for Aristotle. The maintenance of association is necessary for this. If the cost of labor were not compensated sufficiently, there would be discontent and the maintenance of association would not be possible.

The third interpretation is that proposed by Polanyi (Karl Polanyi, "Aristotle Discovers the Economy", in George Dalton ed., *Primitive, Archaic and Modern Economies. Essays of Karl Polanyi*, Doubleday & Co., Inc., 1968, pp. 78-115). It interprets $F(N)$ and $F(K)$ to be the social status of farmer and shoemaker, respectively. This replaces one's shares in afore-mentioned Aristotle's distribution theory with prices.

It should be noted here that Aristotle's price theory is concerned with the determination of an exchange ratio when two people bring to the market the goods which have been already produced and try to exchange them. The process of production is ignored except for its psychic effect on the persons about to be engaged in exchange. The existence of other producers and consumers is also ignored. Therefore, it differs from the main objective of modern economics, which is market price determination resulting from an equilibrium between demand and supply. There are situations, however, where modern economics analyzes the problem considered by Aristotle. The most well-known example of this is Edgeworth's contract curve. Edgeworth showed that two people's exchange ratios are contained in the set of points (i.e. contract curve) where each other's indiffer-

ence curves have the same tangent lines and are not uniquely determined by the principle of utility maximization alone. In reality, a unique exchange ratio must be determined and will depend on the negotiating power of the two people involved in the exchange. Since the negotiating power is likely to be determined by things such as their status, honor, wealth, labor used for production, all the three interpretations mentioned above are somehow relevant.

Aristotle, after noting that need or utility makes exchanges possible, says that what makes exchange smooth is money and expounds a surprisingly modern theory of money. Aristotle, like Plato, did not consider currency to have value by itself, but as legal tender. This is not unrelated to the fact that the Greek word for currency *nomisma* has its origin in *nomos* (custom, law).

6.2. Admonition against monetary greed

Aristotle's condemnation of monetary greed is just as severe as Plato's. In *Politics*, Book I, Aristotle discusses the art of household management (*oikonomike*). According to Aristotle, its purpose is to supply things necessary for everyday life and any further pursuit of wealth is severely criticized as the art of retail trade (*kapelike*). *Oikonomike* is naturally limited by necessity, but pursuit of money in *kapelike* does not have any limit. Above all, lending and borrowing of money with interest, in which money begets more money, was considered most abominable. As is well known, this thinking was passed on to Scholastics in the Middle Ages.

6.3. Political theory

Plato explained the establishment of a nation (polis) by expanding division of labor. Aristotle, on the other hand, explained that first, there were households that were smallest self-sufficient units, then due to necessity of trades between households, villages were established which attained a higher degree of self-sufficiency, and at last, came a nation that is most self-sufficient. Aristotle says that people cannot exist by themselves, and by forming a nation, they can finally satisfy all their needs and become completely self-sufficient. Aristotle's famous remark "Man is a social animal" (*Politics*, 1253A2) expresses this fact. Plato and Aristotle agree, however, in that the birth of a nation is a result of men's rational decision.

Since Aristotle was a resident alien (metic), he was not allowed to participate in politics. In *Politics*, however, he puts forth his own political ideas making use of an extensive empirical study of the various political forms that existed in Greece at the time. Also, in *The Constitution of Athens*, he presents the political history of Athens from ancient times to the latter half of the 4th century. As Aristotle, like Plato, had an aristocratic tendency, he was sympathetic to aristocracy (i.e. government by those who excel—*aristos*); however, he recognized the advantages of democracy more readily than Plato. Aristotle seemed to regard a combination of aristocracy and democracy as ideal, like the one advocated by Plato's *Laws*. Aristotle was less democratic than Plato, however, in that he was more discriminatory toward women and slaves. He regarded a majority of slaves to be incapable of rational deliberations and therefore slaves by nature. He also said that women's

rational capacity was half that of men. In contrast to Xenophon's Ischomachos, who recognized his wife's individuality and treated slaves as humans, *Politics*, Book I, describes an ideal interpersonal relationship within a household, in which a wife is completely subordinated to her husband and slaves are managed as a property.

Aristotle strongly criticized Plato's proposal in *The Republic* that the philosopher-kings should not own private property and share their wives and children. His reason was that people care only for the things that they own, and if one does not own private property, there would be no occasion for showing benevolence.

Although Aristotle could not participate in politics himself, he commended participating in politics as *eudaimon* life, except in *Nicomachean Ethics*, Book X. There he advocates life of contemplation as *eudaimon* and relegates participation in politics to the second best. Ever since, classical scholars have been continuously debating about which of the two Aristotle regarded as the best life. The question of contemplation or practice is a major problem confronting human beings in general. It is an important point in both Christianity and Buddhism. Luke, 10: 38–42, tells the story of Jesus visiting the house of sisters, Martha and Maria. Martha was working busily while Maria sat down at Jesus' feet and listened to him attentively. When Martha complained about this to Jesus, he said, "Maria has chosen a better thing." When Dogen's ship arrived in China, an aged monk came to the ship to buy Japanese shiitake mushrooms. Dogen asked why he was cooking and not doing *zazen*, to which the monk smiled and answered that cooking was his *zazen*. I do not know the answer to this question. I would only say that Plato's allegory of the cave, in which the philosopher-kings who saw the sun went back to the cave to enlighten the people, is very suggestive. Socrates did this. He would have loved to meditate all day, just like the day he was going to the symposium, but once he was there, he enjoyed conversing with people and drinking. When necessary, he went to war and fought courageously. Everyday he went to the agora and devoted himself to the education of the youth.