

## On Whether a Relationship Between Use Value and Exchange Value is Possible or Necessary

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**Abstract:** *Critics of modern market systems often are drawn to Aristotle's distinction between value in use and value in exchange, with the goal of finding a connection between value in use and some standard against which the operation of markets can be judged. In this paper, I argue that modern economists are correct in focusing on exchange value rather than use value. Both use value and exchange value are social constructs. A commodity usually does not have a single use that determines its value intrinsically. In addition, following Adam Smith and James Buchanan, the primary task of economists is to draw out the effects of specialization of labor. Economics is a social science, and exchange is related to human interactions. Another approach used by critics of markets is to seek for a goal for the economic system. But the extensive specialization of labor and pluralistic societies make this impossible. JEL codes: B11, B12, B40.*

Adam Smith began *The Wealth of Nations* by ascribing increasing living standards to an increasing division of labor. The productivity of specialization also applies to the work of academics. While Smith was a moral philosopher who wrote about the emerging commercial society, philosophy and economics have diverged in the succeeding centuries. It may be true, though, that economists and philosophers can do their jobs more effectively if they are aware of the work the other is doing.

Scott Meikle, a philosopher, has written extensively on philosophy and economics, especially as related to Aristotle's philosophy. He proposes that philosophers should strive to provide an analysis of exchange value that rests on sound metaphysical foundations. He describes the analysis

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of exchange value as, "...the main problem in social philosophy" (Meikle, 1995, p. 200). He claims that the metaphysics of neoclassical economics, to the extent there are any, are Humean, and are inadequate to the task.<sup>1</sup> The task Meikle has in mind is that of relating use value and exchange value. He argues that Aristotle tried to do this but failed. Modern economists do not even try; instead, they ignore use value and concentrate exclusively on exchange value.

Classical economists discussed use value and exchange value. It can be argued, though, that any attempts to relate the two proved to be unsuccessful and it made sense to give up on the effort. Modern physicists do not try to connect Aristotle's scientific work to their own. However, in the case of economics, there are reasons for some concern because modern critics of market economies are often drawn to Aristotle's framework.<sup>2</sup> As Meikle (2001) notes:

The Aristotelian theoretical structure, its concepts, distinctions, supporting analyses, and overall conceptual dispositions, has carried great weight with modern critics of market economy, because it holds the possibility, which it itself partly realizes, of an integrated set of definitions of wealth, human nature, and human well-being, that are drawn up, not in economic terms, but in terms that are theoretically independent of economics. This independence allows such a theory to act as a standard against which it may be possible to test how well or badly market economy, and its dedicated science of economics, are doing in serving human good (pp. 44-45).

Further, there are many Christian economists who have expressed an interest in finding a more firm philosophical foundation for economics.

In this paper, I argue that there is not a link between use value and exchange value under any metaphysical system. In fact, both use value and exchange value are social constructions so there is no real reason to try to reconcile them or derive one from the other. This does not imply that exchange value is divorced completely from use value, but that Aristotle failed to find a direct link between the two because such a link does not exist. Further, I argue that the starting point of economic analysis should be exchange value rather than use value, because economics is a social science that is concerned with interactions of people.

In Section 1, I argue that use value is not a standard independent of economics and that use value is socially determined. Section 2 still is concerned with whether use value can be related to exchange value, and I

argue that use value is an individualistic notion but economics is a social science. It makes more sense to focus on exchange value than a notion of use value when examining the interactions of people in society. The third section introduces a second concern that stems from Aristotelian analysis—whether a focus on exchange value promotes the wrong ends for society.

### 1. Aristotle on Use Value and Exchange Value

Meikle (2001, pp. 44-45) argues that modern critics of market economies are often drawn to Aristotle's framework because it offers a way to establish a standard by which we can test the outcomes of market economy and determine whether the economy is serving human good. Aristotle offers definitions of wealth, human nature, and human well-being that are not derived in economic terms. Aristotelian metaphysics provides distinct categories and distinctions between means and ends. Consequently, there is also a boundary between the ordinary world and the economic world—a distinction modern economists normally do not make. Value in use falls in the category of quality and value in exchange falls in the category of quantity. Aristotle also provides two definitions of wealth—one in terms of use and one in terms of exchange. In terms of use, wealth involves useful things while exchange relates to money.

For the purposes of this paper, I will accept most of what Meikle has to say about Aristotle's metaphysics and the relationship between his metaphysics and his analysis of value in use and value in exchange. According to Meikle, Aristotle sought to relate value in use and value in exchange, but was unsuccessful because the metaphysical underpinnings of his work. Because value in use is related to quality, and value in exchange to quantity, and because they are contained in different categories, in utilizing Aristotle's metaphysics it is not possible to relate the two types of exchange. A quality cannot be converted into a quantity. Aristotle suggested that need (*chreia*) was adequate from a practical matter, but not in terms of scientific knowledge (*epistēmē*).<sup>3</sup>

Meikle also argues that modern economists follow Hobbes and Hume in rejecting Aristotelian metaphysics. Although the classical economists such as Smith and Ricardo referred to the difference between value in use and value in exchange, by the time of the marginalist revolution the distinction was ignored and all work focused on value in exchange.

Meikle claims that in antiquity societies focused on use value rather than exchange value. Use value is something everyone can identify since

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everyone uses goods to satisfy human needs. There is a strong teleological dimension as well. A good is designed to meet a certain need or to aid in the attainment of some goal or end. The purpose of making the good is to meet this need. I want to suggest that use value is not so simple a concept.

The first question to address is, “Whose end?” Is it always obvious what the end of a good is? An example from the automobile industry can illustrate. When Nissan first started to sell cars in the United States, their first success was with their pick-up truck. Mr. Katayama, the Nissan official in California, noticed that Americans used trucks not just for work, but as transportation. Many people still lived in rural areas, and even did some farming as well as work in the city. Halberstam (1986) writes:

Tokyo had wanted to arrive in America and be classy and sell cars and make a reputation; it had not wanted to come and sell trucks. Yet here were the trucks doing better than the cars. So when Katayama kept talking about the need to improve trucks, management refused to listen. Katayama was trying to tell the home office that more than half of these Datsun trucks were used for commuting, that they were in effect being used as cars, and that the market would explode if Nissan would simply upgrade them a little. But Tokyo would not listen. A truck was a truck. Katayama was relentless. If only, he asked, they would add some decent upholstery, better springs, perhaps even an air conditioner. The answer was always the same: A truck was a truck, and Americans had no right to use them to drive to work, particularly to offices. It was wrong of them. The trucks should be used for carting heavy goods around (p. 428).

Is the purpose of a truck to cart heavy goods around, to work on a farm, or to provide transportation and flexibility of uses to its owner? Who decides the proper purpose? Does the manufacturer decide or the one who uses the good? What is the use value of a truck? Is there one and only one use value for a truck? An economist would tend to answer the above questions along the lines that the person who decides the use value is the one who uses the good, and the use value would depend on the purposes of the owner. There is not one and only one use value, and users of goods often value flexibility.

In *Nicomachean Ethics*, Aristotle used an example of an exchange of a house for five beds. Presumably, each has a use value—either as a dwelling place or as a place to sleep. But, is this the only end of a bed?

Is a bed used nightly the same as a bed that is used only for occasional visitors? Is a bed used by several children the same as a bed used for an elderly parent? What about when the children use a bed as a trampoline? What about a bed used in a hospital or an inn? Do they have the same purposes? What about a bed in a brothel? The use of a good is not always obvious, and certainly not limited to one use. To think there is a specific use value for each good is misguided.

We can see another difficulty with Aristotle's categories by altering this example slightly. Suppose we take Aristotle's numerical example as a starting point, and the "proper" ratio of beds to houses is 5:1. Following Aristotle, there would be some criterion by which it has been decided that this ratio is correct and just. Suppose something happens to one-fifth of the beds such that they are destroyed. Or, suppose family sizes increased so that the five beds per household could no longer accommodate the family. Would 5:1 remain the true value of beds relative to houses? We might be inclined to think that the "use value" of the remaining beds would increase, if for no other reason than they have to be used more intensively, at least for some time period. But use value is a quality and not a quantity, so we cannot say that the use value would increase. This ignores the commonsensical notion that the intensity of use of the beds would change. In an important sense, it appears the use value of a good depends on the quantity of the good available relative to the size of the population. It also depends on other factors that are determined by human decision—family size, for example. Use value as a quality is of very limited usefulness if quantity cannot be related to it in some way, and here I am speaking of quantity in a way that is not necessarily related to exchange. If Aristotle's categories prevent relating use value and exchange value, the problem lies with the categories rather than the idea that a good is useful to people and that people often exchange goods.

## 2. Economics is a Social Science

Use value is the wrong starting point for economic analysis. If economics is a social science, then the proper end of economics is to study situations when there is more than one person.<sup>4</sup> Robinson Crusoe can be used to illustrate many economic ideas—production, trade-offs, opportunity cost—but not the social dimension of economics. Buchanan (1979) argues that Robinson Crusoe alone on the island should not be the starting point of economics, but Crusoe and Friday on the island.<sup>5</sup> Once Friday is there, "...Crusoe is forced into *association* with another human being"

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(p. 28, emphasis in original). The association requires a new sort of behavior unless Crusoe treats Friday only as a means to his own ends. The new sort of behavior will include "...exchange, trade or agreement" (p. 28). Obviously, other types of behavior could be included—conflict, for example—but cooperation provides more stability. Trade, exchange and agreement are variants of cooperation.

While Buchanan explicitly rejects the idea that Crusoe could treat Friday as only a means to his own ends, the possibility should be recognized. When that is the situation, we are back, at least as far as behavior is concerned, to the situation when Crusoe was alone. Friday would be another tool for Crusoe to use. Further, we are at the position of the householder in the estate management texts of classical Greece. There were other people on the estate, but they were slaves, children and women, i.e., people not regarded as citizens or equals to the head of the household. Booth (1993) points out that the purpose of household production was leisure for the householder, so he could participate in the life of the *polis*.<sup>6</sup> Both the household and the *polis* were communities utilizing hierarchy, domination and exclusion. Aristotle explicitly regarded the slave as a tool. There is not exchange in this situation, there is only command. The use value of a good to the slave is irrelevant, only the use value to the owner is important. Aristotle's focus on use value is not merely a reflection of the smaller scale of the *polis* but also of his willingness to focus on the householder as the only relevant decision-maker, for whom value is relevant. Again we see that use value, while seeming to offer an approach to value that is objective, is actually socially determined.

From a social standpoint, the key variable is exchange value rather than use value. It is not necessary to base exchange value on use value, and the inability to do so is not a weakness of modern economics or of Aristotelian attempts at economic analysis for that matter. How could it be otherwise for a society characterized by large numbers of people and a high degree of labor specialization?<sup>7</sup> It will also be the case that exchange value will be determined by a social mechanism—one person cannot dictate the value.<sup>8</sup>

We are back to Meikle's problem—the analysis of exchange value. Meikle argues that Aristotle failed to solve the problem of exchange value. In an oft-quoted passage from the *Nicomachean Ethics*, Aristotle discussed exchange:

What brings about proportional reciprocity is the coupling of diametrical opposites. Let A be a builder, B a shoemaker, C a house, D a shoe: the requirement then is that the builder receive from the shoemaker what the

shoemaker had produced, and that he himself give the shoemaker a share in his own product. If, then, there is first of all equality in proportional terms, and reciprocal exchange occurs after that, the stated requirement will be fulfilled... (113a6-13).

Somehow, the relationship between the builder and the shoemaker, A:B, is to be the same as the relationship between the house and shoes, C:D. As Meikle (1995) discusses, ultimately there must be some  $x$ , such that  $xD = C$ . But what determines  $x$ ?

Aristotle's interest in exchange is to determine what is just, and many who come to Aristotle's *Ethics* are also interested in knowing what is just. As I noted above, Meikle (2001) argues that people turn to an Aristotelian approach because they want a standard of judgment independent of economics to evaluate economic outcomes. A notion of a "just price" underlies the question. Whatever determines the value for " $x$ " consistently with the independent criteria of justice is the just price. Once this is known, one can compare " $x$ " with the market price to determine if the market price is just or not. For Aristotle, the determination of  $x$  may have been the social position of the two people.

Economists of the main schools of economic thought today reject the idea that there is an objective criteria outside economic calculation that can be used to find  $x$ . For the critics of the economic system and of modern economics, economists' arguments carry little weight. Yet, the critics fail to offer alternatives that are workable. Need is an amorphous concept in which people can easily disagree about what constitutes a need. People need to eat, but few people in modern market economies eat at a bare subsistence level. Milbank (1990, p. 192) has argued that a just exchange is found through a consensus of society rather than by the intersection of supply and demand. How the consensus would be achieved is not stated.

Can the criteria be something inherent in the goods themselves? Given that there are often new goods available, that the means of producing goods change frequently, and that people can find substitutes for any given good, inherent characteristics of a good are not a good choice.

What, then, are the bases for exchange value? Since people obtain goods because the goods are useful to them in some sense, it seems that use value is still involved. This is so only in the very broad sense that people will not exchange for something that they regard as totally useless. As argued above, use value as traditionally understood is not precise enough to be the basis of exchange value. Utility is another possible source of the value. But utility is a concept that is applicable to Robinson Crusoe

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alone on the island and not a social concept. While economists retain the term, “utility,” and many are utilitarian in outlook, a measurable form of utility or a concept of utility that permits comparisons across people is not needed in modern economics.

The classical economists, including Marx, placed labor as the ultimate source of value. The modern equivalent would be to say that the value of a good, at least in the long run, is determined by the costs of production. Carl Menger (1950) offers a good refutation of labor or other intermediate goods as the ultimate source of value:

There is no necessary and direct connection between the value of a good and whether, or in what quantities, labor and other goods of higher order were applied to its production... Whether a diamond was found accidentally or was obtained from a diamond pit with the employment of a thousand days of labor is completely irrelevant for its value. In general, no one in practical life asks for the history of the origin of a good in estimating its value, but considers solely the services that the good will render him and which he would have to forgo if he did not have it at his command (p. 146).

Even if one argues that the costs of production determine value in the long run, the fact remains that virtually all economic activity takes place in the short run.

The intermediate textbook account of exchange uses the idea of the marginal rate of substitution. While the concept can be applied to Crusoe, it more readily enters into multi-person settings. The rate at which a person is willing to give up one unit of a good in order to get more of another good easily translates into exchange with other people. If Ludwig is willing to exchange two cups of coffee for one donut and Michael is willing to exchange one donut for two cups of coffee, then the donut must at least be as valuable to Ludwig as the two cups of coffee, and the two cups of coffee must be at least as valuable as the donut to Michael. The Edgeworth-Bowley box and the contract curve then explain exchange value.

But the Edgeworth-Bowley box is used to examine exchange independent of production. Ultimately, as economists, we are left with the “scissors” of demand *and* supply to explain the prices at which goods trade in the economy. These prices are the measures of exchange values. They depend on the subjective values of individuals as well as on the costs of production. If people’s subjective values are not adequate to cover the

costs of production, over time the good will not be produced. Since the subjective value of an additional unit of a good depends on the quantity of the good held by a person, there are incentives to increase the production of the good when the subjective values of individuals exceed the costs of production. *Ultimately, exchange value is a social construct.* It depends on the subjective wants of individuals as well as the costs of production, but the costs of production also depend on the value people assign to other goods, as well as the institutions society develops for the production and the exchange of goods. As much as one might want either a metaphysical foundation for exchange value, or an objective measure of exchange value, attempts at providing these foundations fail and are bound to fail.

### 3. Proper Ends of Society

Another possible approach is to find an agreed upon end for the economic system. For example, Polanyi (1977) argues that the purpose of economic life is to provide for the livelihood of people. He advocates what he calls a realistic approach to economic problems, and distinguishes between two definitions of economics, one formal and the other substantive. The formal definition corresponds with what most economists do and the substantive definition recognizes that human beings cannot live for long without a physical environment that sustains them (p. 20). He distinguishes between the laws developed relating to the formal definition of economics as laws of the mind while those relating to the substantive definition of economics as laws of nature (p. 27). It appears he is looking for the answer to economics in nature rather than human convention, but his examples include custom and tradition, which surely are also conventions of human beings. Since Polanyi proposes a criterion related to an end for human beings, it can be subsumed under the discussion below.

Other ends could be suggested. Meikle (1995, p. 198) notes that Aristotle's aim was what is good for man, and that Aristotle was engaged in the art of *politikē*, with ethics as the most equivalent modern term. An end to consider is that the economy should promote the welfare of human beings. But then the question is, "What constitutes human welfare?" Another question is, "Who decides what constitutes human welfare?" Do human beings themselves decide what promotes their welfare, or is this left to philosophers or experts? If everyone agrees on the proper end of humanity, it may be possible to work from that agreement to a determinant of "x." Or, if society is organized like the Greek estate of Aristotle's day, and the head is responsible for determining the proper end of society, the

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ruler could determine the value of “x.” However, it is difficult to see how societies that are not structured hierarchically or are heterogeneous could come to agreement about the ends of society, or even a part of society such as the economy. There is not an objective basis for either use value or exchange value.

There is another concern related to ends that Aristotle discusses and that has been taken up by Marx and by Meikle.<sup>9</sup> This involves the impact that the introduction of money into the society can make, and how it can transform a natural process into an unnatural process. If we take C for commodity and M for money, then barter is an example of trading a commodity for another commodity, which can be characterized as C-C'. Barter has obvious drawbacks, especially when people have different goods of significantly different value, so money comes into being. Still, a transaction can be thought of as C-M-C'. That is, someone exchanges a commodity for money and then money for the commodity. The purpose of the exchange is to obtain the second commodity and money is merely the means to bring this about. There is nothing unnatural about this process, according to Aristotle.

The natural process just described can degenerate into an unnatural process, though. Here Aristotle distinguished between natural and unnatural *chrēmatistikē*, or the art of making wealth. The natural way involves obtaining goods that provide use value. There is a natural limit to this type of wealth. The unnatural way is to obtain money, and there is no natural limit to this type of wealth. So, when a trader exchanges money for a commodity to exchange for more money, he is involved in the unnatural type of wealth creation. This can be characterized as M-C-M'. And, as Marx (1976, p. 248) noted, the process makes no sense if  $M = M'$ . One would be as well off hoarding the money.

Meikle (1995, p. 71) claims that the point Aristotle made was that the pursuit of exchange value is a distinct activity with a purpose of its own—accumulation of money. This unnatural form of wealth corrupts other worthwhile activities, harming the people in society. An economy that is organized on the basis of exchange will fail to bring about the good for human beings. People seek money rather than useful things, and the ultimate source of value, use value, is obliterated by a focus on exchange value.

The problem with this analysis is that its focus is too limited. While C-M-C' may be reasonable when looking at a society where most households are almost self-sufficient and exchange is carried on in a limited basis, it is inadequate for a society where there is extensive division

of labor. The shoemaker obtains other commodities only by selling shoes first. The shoemaker first spends money for raw materials and sells the shoes for more money, so the M-C-M' designation can be applied, but it is a truncated designation. Actually, the shoemaker is involved in M-C-M'-C'. The shoemaker still wants to purchase commodities such as food, clothing, and shelter. Over time, the designation would be M-C-M'-C'-...-C''. That is, over time the person is engaged in numerous transactions, some involving selling a commodity or one's labor services and using the money to buy the commodities that satisfy one's needs. While some people may focus on wealth accumulation to an unhealthy extent, there is nothing about the process that implies that the focus will become all-consuming for the vast majority of people in society.

Exchange is not a necessary condition for some people to have a drive to accumulate. Hoarding can exist with goods as well as with money. Wars over territory are not a function of the marketplace. The parable of Jesus found in Luke 12:16-21 refers to the rich fool who has an abundant crop and decides to tear down his barns and build bigger barns. In this parable, the rich fool accumulated the grain rather than money.<sup>10</sup>

#### 4. Conclusion

In this paper, I have tried to argue that the task of relating value in use to value in exchange is unnecessary. Use value turns out to be a vague concept, and not one on which we can build an economic theory of value. Further, I argued that economics as a social science is primarily interested in exchange value rather than use value. Karl Popper (1966) argued:

The development of thought since Aristotle could, I think, be summed up by saying that every discipline, as long as it used the Aristotelian method of definition, has remained arrested in a state of empty verbiage and barren scholasticism, and that the degree to which the various sciences have been able to make any progress depended on the degree to which they have been able to get rid of this essentialist method (p. 9).

This is not to denigrate Aristotle as a philosopher—Christian economists learn a lot from virtue ethics, for instance—but to argue that we have to recognize where adherence to Aristotle's philosophy hinders rather than enhances scientific progress.<sup>11</sup>

Perhaps philosophers will ultimately develop a metaphysical rationale for exchange value. Economists do not need to worry that their foundations

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are wrong in the meantime, nor have to accept the rationale if one should come. Ultimately, exchange value is a social construct and is not based on some kind of ontological reality.

### Endnotes

- 1 Meikle (1995), p. 18 and pp. 112-118.
- 2 For a discussion of reasons many theologians give for disliking market systems, see Lunn (2011).
- 3 Meikle (1995), pp. 6-27.
- 4 For a discussion of the evolution of economics from a “natural” science to a social science, see Schabas (2005).
- 5 Levy (2002) discusses these ideas in more detail, showing how they stem from Smith’s view of the importance of language in causing trade and exchange.
- 6 “...the first principle of all action is leisure” *Politics*, 1337b,32.
- 7 Of course, Aristotle probably would have objected to the extensive division of labor since it makes it more difficult for political entities to be self-sufficient. Murphy (1993) sees the extensive specialization of labor as a key reason that markets are not moral since many jobs do not support human flourishing.
- 8 While a monopolist has a great deal of control over the price, it is still constrained by what customers are willing to do.
- 9 I am following Meikle (1995) in this discussion.
- 10 Admittedly, there are possible physical limitations when it comes to hoarding commodities that do not apply to money.
- 11 Several times Meikle (1995) claims that the economist Joseph Schumpeter described Aristotle’s thinking as “...decorous, pedestrian, slightly mediocre, and more than slightly pompous common-sense” (p. 111). However, Schumpeter’s statement actually comes after an analysis of Plato’s thought: “Aristotle’s performance is quite different. It is not only that in his works Platonic glamour is conspicuous by its absence, and that instead we find (if such a thing may be said without offense of so great a figure) decorous, pedestrian, slightly mediocre, and more than slightly pompous common sense” (Schumpeter 1954, p. 57). He goes on to say that Aristotle showed an analytic intention that is absent in Plato. The writings of few philosophers will come off well in comparison to Plato.

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