

# Labour Value of an Easily Duplicatable Commodity

Takao Fujimoto

Ravindra R. Ranade\*

1. There are many occasions while reading *Marx* when one may want to take issue with the writer. It is, however, impossible to find fault with the clarity he maintains in defining things. While some of his concepts are not that easy to handle in modelling the modern economic world full of new kinds of commodities, it would be improper to conclude about the absurdity of those concepts. The basic concepts of value, exploitation etc., may not be apparently observable but are very clearly definable, and do not always fail to be useful. We live in a world which has commodities with brand names tagged on making them distinct. We also see copies of these commodities commanding a lower market price but in fact quite indistinguishable from the originals. Consider the hypothetical case of these copies being produced at no or negligible cost from the originals. Probably the more concrete case of books or videos being copied with little cost. Or even more realistically, the computer softwares (or programs) copied effortlessly. Recently there have been efforts to study these new commodities of the era of information and some Marxian concepts have been applied, unfortunately not with the required clarity. This has resulted in the statements like “ the value of the copied

---

\* Department of Economics, University of Kagawa

computer software is zero,” and so on. We want to put the record straight and indicate the extent to which some of the Marxian concepts can be applied yielding meaningful insights into the economics of the high technology era.

2. Marx defined the value of a commodity as the amount of labour *socially necessary* for its production. The argument of the value of a copied computer software being zero is then based on the reasoning that the direct labor input and the other material inputs in the production process are zero: after all it takes only touching some keys and an extremely small amount of electricity to copy a software, and some medium (like a floppy disk) to copy on, with no damage to the computer itself on which it is being done. This is an argument full of holes based on the inadequate understanding of what is meant by the basic concepts of production process, commodity, and the all important words “socially necessary” in the Marxian definition of value. It seems important to clarify the situation to the modern ‘high-tech’ nocrats trying to use classical economists’ concepts. Also it seems necessary to attempt to adopt the classical doctrines, refining them if necessary, for the study of the economic phenomenon that has been thrown in by the great technical advances. If they are found inadequate after a rigorous analysis, only then it would be proper to discard them. In this short note we take up the copied software as just an expository commodity. One can find a surfeit of such commodities in the present day economy.

3. Inevitably, Marx starts the first volume of *Capital* defining a commodity as the object outside us which satisfies any type of human want whether

directly as means of subsistence or indirectly as means of production. A copied computer software, if we insist on differentiating it from the original marketed one, would certainly qualify to be a commodity. In the capitalist process of production such a commodity is manufactured with the intention of selling in the market according to the rules of the game. If one makes the effort to go through the elaborate description of the concepts of commodity, production process and the market in Marx's writing, it would be quite clear that he does not concern himself with what we can now call a black market. This is another interesting problem challenging our analysis. Here it is convenient to classify softwares into three groups. (1) games on hobby machines; (2) business application softwares (e. g., word-processor, spread-sheet, and data-base programs); (3) factory softwares (CAM, CAD, CAI (?), etc.). In (3) we should understand 'factory' in the broad sense. Let us start from games.

(1) Games softwares are exactly like musical cassette-tapes, and represent no particularly new phenomenon. Long before the gramophone record appeared as an easily duplicatable commodity. This, however, is only on the *supply-side*. Cassette-tapes are easy to copy also on the consumer-side. Softwares have one more characteristic that they can be *safeguarded* by some protecting devices. These guards are vulnerable to special softwares as well as hardwares which are designed to break protection. After all, black markets may play an important part in this category. And yet labour value is not zero or negligible. Various concepts due to Marx are frequently 'social average' and have nothing to do with their marginal counterpart. Thus, *marginal* labour value may be zero, while the proper one is not. Clearly as the share of black market is

enlarged, the average labour content of an individual product will be diminished. This viewpoint reflects that of political economy, taking an economy as a whole. When we adopt producers' standpoint, the size of black market should matter because it affect their profits, but it cannot change the amount of labour force contained in what they have sold to the other sectors.

(2) The reader may regard the second group as redundant. Similar but different. The above remark on the 'average' rather than the 'marginal' labour content is applicable here as well. Softwares in the first category are (durable) *final* commodities, while office-work softwares render some productive services in production processes. A word-processor software used at home for private communication acts as a final commodity. When used in offices, it exhibits a role of capital good. Thus, to estimate the labour value of a commodity of a particular production process, it is vital to know labour contents of softwares used in that process. The sector-wise sizes of black markets will have a great relevance on labour values of almost all commodities. Nevertheless, we expect that at present the degree of 'development' of black markets dealing with office-work softwares is not so large to distort the general labour value structure of commodities. In other words, Japanese companies are not so crafty to cheat software-houses, apart from probable practices that clerical workers make illegal copies and bring them back to their home.

(3) Two points stated above, that is, the average amount and productive services are applicable in this class. One more remark specific to this group of softwares is that they are inseparably tied up with

particular sets of machines (hardwares) including robots. And so, illegal copying is quite easy but useless. When useless, they are not called commodities, and cannot convey any labour value. A factory software may be copied by an individual secretly, then kept on his/her shelf. However expensive the original may be, we need not bother ourselves with the labor value of such a property.

4. Softwares certainly have some challenging properties. Among them, the most important is the fact that once completed, they are duplicatable at little cost. One may then be tempted to regard them as carrying no labour content. Labour theory of value is *not* for a particular individual commodity, but for the total mass of commodities existing in an economy as a whole. And this is not a mystification of the reality. Simply, it is the standpoint of one of social studies for better understanding of an economic system.

The second feature, deriving from the first one, is continuous technical progress fused into the original product, implying continuous changes in labour values both in products and softwares themselves. Sometimes these changes may not be small because productivity can be enhanced in a drastic way by a single version-up of a software. Almost needless to say, substantial revision of a software often must be accompanied by a purchase of a new type of hardware.

5. Whether scientific work done in national research institutes is productive or not is related to a possible way to look at the software as some kind of a public good. Even a private software company, investing much in the extremely skilled labor, produces a software with the full

knowledge of possible free rides by others. It expects to sell the product as a private good profitably, and then as the availability of that software increases, it (or a portion of its program) starts becoming a public good. It then has no exchange value, and we may safely declare that it is of no labour value.