

ACCEPTANCE SPEECH FOR WORLD MARXIAN ECONOMICS AWARD

(II)

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It's a great honor to receive the highest award of the Marxian economist in the world. My international academic exchange had started from 1995 especially with Chinese Marxists, and linked with the Japanese Marxist academy through the Japanese Association of Political Economy. At that time, the Chinese influence on the world was so weak and almost no Marxist economist in Japan paid enough attention to China, but I did not think so, and started to learn Chinese as my third foreign language. Without such efforts, I could not exchange my research with the Chinese Marxists closely. In my opinion, each country has its own special Marxism, and it's very important to improve our own Marxism. My new type of Marxian economics is neither an exception.

My research had started in the field of Marxian economic statistics when I was a graduate student of Kyoto University, and after graduating from the Graduate School of Kyoto University and serving at a university in Japan, I became the professor of Kyoto University to teach economic statistics. But during all my research days, I emphasized the basic theoretical framework to analyze the real economy in Marxian economics. Without Marxian theoretical framework, no research can be regarded as a Marxian economics.

Therefore, among my over 50 books and 300 articles, half of the research belongs to the theoretical field, and most of them are based on mathematical

methodologies, for example, a Lenin type of mathematical model which expresses the uneven development of the world economy caused by the international capital movement to seek for the higher profit rate in the developing countries. By this research, I was awarded the first “Distinguished Achievement Award of World Political Economy of the 21st Century” in 2009.

However, my most important academic achievement is called the Marxian Optimal Growth Model to express the birth, growth and death of capitalism using a dynamic growth model. I proved the historical materialism by this model mathematically, while Professor Okishio proved surplus value theory (exploitation theory) mathematically. In this sense, my research is also regarded as belonging to the Japanese tradition of mathematical Marxism.

This theory was first shown in the academic world by an article written with my graduate student Yuuho Yamashita in 2002, but its own original basic theory had been made up before 2002 like many other mathematical models. In our case, it was a special understanding of feudalism and capitalism based on each technological condition: feudalism on the tools and capitalism on the machines.

Before the Industrial Revolution, we did not have machines but only tools, and in this situation, quality and quantity of products was determined not by the quality and quantity of tools but by the skill of the craftsmen, and therefore, the most important task of the societies became to improve skill. Furthermore, for this purpose, those societies should make special relation between craftsmen and masters as apprenticeship whose seniority system reflected the difference of skills between the senior craftsmen and younger craftsmen. This type of feudalistic human relation was crystallized as Confucianism in the East Asian societies.

Another necessary characteristic of those societies was the limitation of the sizes of crafts because too many craftsmen were not good to learn skill from their one master in one craft. Modern types of skill can be taught in a large classroom, but feudalistic skills could be learned only by imitating their master’s way by close watching. Therefore, that society had to divide its market village by village to restrict its size of crafts by forming a special type of agreement among crafts. That was the guild system.

However, all these necessities were lost after the Industrial Revolution due to machines. Here, quality and quantity of products are determined by quality and quantity of machines, and workers became unskilled. And the most important change was their weakened bargaining power against capitalists, because now capitalists can find unskilled workers easily through the labor market.

Therefore, under this condition, workers’ wages become lower and lower, and profits become higher and higher, and the majority of profits were re-invested to make sizes of machines larger, and increase their productivity. It is because here the amount of machines determines the amount of products after the Industrial

Revolution, and only this re-investment caused economic development. That is the capitalist way of economic development!

The above way of understanding is historical materialism, because here technology determines its whole social system, and both the technology and society change historically. But such a descriptive expression is not enough for mathematical economists, and we have spent about 10 years finding the new mathematical methodology. That is, the abovementioned Marxian Optimal Growth Model is our answer, and it proved why capitalism has become necessary after the Industrial Revolution and why it should be thrown away in the future.

All this research was summed up as a textbook titled *Marxian Economics* for university students in 2012 and its second version in 2015. This Japanese book was also translated into Korean in 2013, Chinese in 2014, and English in the near future. Therefore, today, I want to introduce some of the important characteristics of this model as below.

First, this model justifies the birth of capitalism when the Industrial Revolution occurred, and in the same way, it justifies the end of capitalism by using the so-called social planner's model. It is because the social planner's model can express the best growth path which is the best solution for the representative individuals. This is not the best for the capitalists but for the whole people.

Second, because that criterion is not the "justice" but the interest, it can be said as the materialistic model. In historical materialism, people's purpose to act is the interest, and "justice" is regarded as just the tool to realize someone's interest by "justifying" their interest. This is the essence of ideology. Furthermore, as I said above, historical materialism is expressed in this model by identifying capitalism as the machinery-based production system after the Industrial Revolution. While "tools" made feudalistic society, machines have made capitalism.

Third, although this model expresses the physical term of production because the actual purpose of consumption is in the physical term, this term can be translated into the value term. In this sense, this model can be accepted also by the Western economists, and makes the communication with them available. This horizon has been opened by formulating the model of labor allocation which is different from the Western modeling of money allocation.

Fourth, by proving the existence of the optimal capital-labor ratio, it proved not only the end of capitalism but also many long-term tendencies, for example, rise of the organic composition of capital and falling rate of profit. However, it also concludes that there is no special tendency of the preferable growth of the investment goods sector and that of the increase of the relatively surplus population. These are the controversial issues, but they may be the reality.

Fifth point of this modeling is that this model projects are now in progress and many young researchers are engaging in its extension, for example, three-factor

production modeling, agricultural revolution modeling, uncertainty-incorporating modeling, two-country modeling, decentralized market modeling and so on. All these characteristics show that this research is a prominent pioneer which should be examined by all the Marxist economists in the world.

Once again, I must say thanks for giving me such a prestigious award. If my work contributes to the further development of the Marxian economics, I will be very happy.