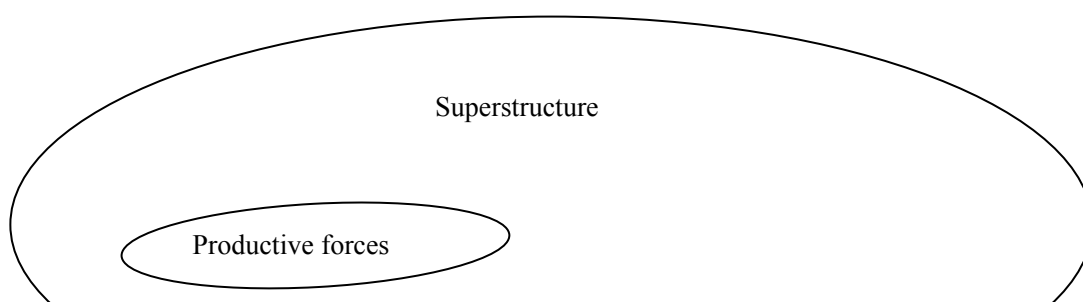


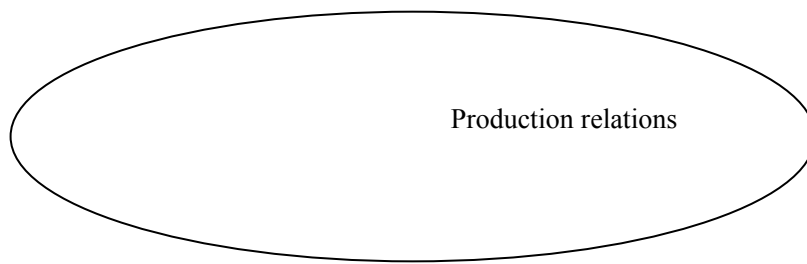
Scientific Theory and Scientific Method

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As a scientific theory, the fundamental principles of Marxism elaborate the dialectically interrelated laws among productive forces (material content), production relations (social existence) and superstructure (formal formality). So we research by a dialectical method that content determines form and form reacts content. Marx says that his works is artistic integral, but if others want to reach this state, they have to use his dialectical method. And in the view of material productive force Marx remolded Hegel's dialectic coming out of absolute spirit, Marx's method inherits critically Hegel's idealistic dialectic. Hegel's special mode of expression is circling method. Marx narrating style in writing On Capital coincides with the circling method. But, they both did not display in circling method. At the end of 1970s, one student said "Is this cycling method?" when I was teaching On Capital. This aroused my particular attention, and after this I tried graphic method in cycling mechanism to narrate the fundamental principles of Marxism and blaze new trails in economics.

To be concrete, we can graphically represent the fundamental principles of Marxism as follows:

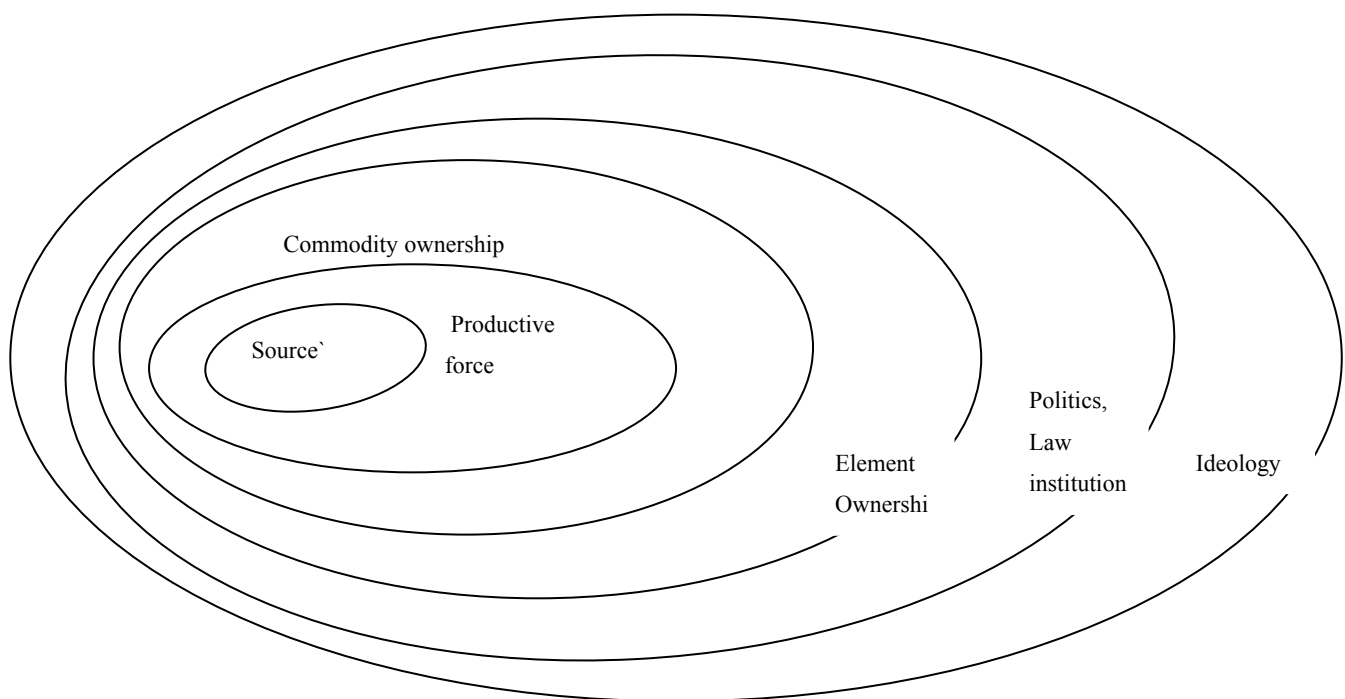




The inner circle is material content; the in-between cycle and the outer one are social existence. The intrinsic relations among them form the law of development.

Since the 1990s, the problems of sources(environment, resource, population) of productive forces have protruded seriously, which are involved in the sustainable development of the whole cycles; in productive relations these problems protrude as whether or not the proper combination of socialism and market economy. To keep pace with the times, I subdivide the above three cycles into six hierarchical structures; every cycle is divided into two, so the expanded six cycles are graphically represented here:

The inner four cycles are economic structure developed from social mode of production, and they are the dependant basic of the outer two cycles, in other words, "The mode of production of material life restricts the process of the whole social life, political life and spiritual life."



. **The inner two cycles as the core**

The source of core is carried by ecological environment, and supplies labor(population) and material(resource) for productive forces. If source is destroyed, not only the follow-up cycles can not develop, but also the human being can not live, so there would be no communist society. The reality enlightens us: The ecological environment is the base, and that human being reactive to environment by using resource is the conjunction. Since the past twenty years, environment economics, population economics, resource economics have vigorously sprung up. Marxist should do more in these new branches of economics, because this is related with the future of human being.

Marx referred to these problems in *On Capital*. For example, in the 14th chapter of Volume 1 he talked about the relation between human and environment. In the 22^{ed} chapter of Volume 1 and the 5th chapter of Volume 3 he related about thrifty usage and cycling usage of resources. And in the annotation of Volume 1 he favored that small-scale peasant economy is harmful to human multiplication. These scientific flashing ideas need us to develop and enrich. As about Engels, his discussion about these subjects is more in *On Anti-Duhring*. In a letter which is written to Engels by Marx, Marx referred that one bourgeoisie scholar became an involuntary socialist. This inspires us how to communicate and cooperate with environment economics scholars of non-Marxist.

In the cycle of productive forces, we should pay attention to these points in a view of scientific Conception of Development:

1. To distinguish “production” and “productive force”. To develop production can be the results of development of productive force, and also can be the results of destruction of productive force. So the main point of scientific Conception of Development lies in the optimization of resource to develop productive force.

2. To notice the mutual impetus between productive force and surplus labor. The development of productive force brings about surplus labor, and the materialization of

surplus labor bestows on accumulation to quickly develop productive force.

3. The agricultural productive forces to supply surplus goods are the basis of national economy. This is the key to anatomize “Sannong issues”(i.e..issues concerning agriculture, countryside and farmers).

4. Scientific technology is becoming the first productive force. So it is important to cultivate qualified personnel.

. The Two Cycles of Production Relations

The result of social production is products. Who owns the product is one kind of production relations (the third cycle).

That who owns or who uses elements (such as resources, labor force) to produce is another kind of production relations (the fourth cycle).

In the market, “people just exist as representatives of commodities”, and they don’t care who own these elements to produce these commodities. Hence, “commodity production and commodity circulation are the common phenomena in very different production manners”. In other words, market economy can combine with element private ownership, and also can combine with element public ownership. Hence, development of socialistic market economy is a very important innovation for On Capital.

Commodity production relations are embodied as value, and the carrier of interrelations lies in market. Thereby, the law of value is one of basic laws of market economy. It is not only restricted by inner two cycles (material content), but also has represented in the outer three cycles (social form).

Firstly, the law of value present as change of production forces in the second cycle. Its basic rule is “value quantity of commodity is in direct ratio to labor quantity of commodity and in inverse ratio to the labor’s productivity”. Hence, all the elements deciding production forces have themselves manifested. The difficulty lies in how to reflect the first cycle. Natural resource itself isn’t labor product, and has no value. However, it can circulate in the form of commodity in the market economy. There are two forms. (1) Valueless thing might have price. (2) “Every commodity value...is not decided by its necessary labor time contained in the commodity”, but by its social

necessary labor time. Natural resources' original values are zero, but due to overuse, people have to input labor to make these used-resources useful again. Hence, labors not only endow regenerating resources with value again, but also natural resources should have their value estimated according to labor used by regenerating resources.

As about the fourth cycle, any means of production ownership aim at improving productive force, reaching to take surplus labor. In the market economy, surplus labor is transformed into surplus value, which has nothing to do with socialism or capitalism, but rather who possesses surplus value. The production objective of capitalism is, by means of the form of surplus value, to seize on surplus labor and thereby to increase capital. Thus, capitalism can tightly combine with market economy. For the same reason, socialism may also be tightly combined with market economy, because public ownership economy needs developing and proliferating. Moreover, it is more important that production forces must be proportionately improved for development and proliferation. Improving production force makes the individual value of commodity down. Thus, in the market competition, producers can defeat the competitors, gain super surplus value and force other producers to improve their production forces. Bourgeoisie just utilizes market" to create tremendous production force within less than one hundred years which is bigger than that which all of past times created."

The ultimate objective of Socialism is to develop production forces. Hence, all the more socialism should use market value law and value proliferation law to eliminate feudalism fetters and accelerate the development of production force.

. The Two Cycles of Superstructure

Market economy calls for independent management, assuming sole responsibility for its profits or losses and equal exchange. To eliminate feudalism fetters, the society needs politic freedom, equality and legal governance instead of rule by man.

Due to the intervention of law, ownership of productive elements represents as ownership right or property right, and then, property economics springs up.

As for political system, country always represents interests of the class which

occupies dominant status in the production relations that is personified as class interests, and country wields “visible hand” to make macroeconomic control for every cycle. Government led by Chinese Communist Party manages every cycle, she upholds public ownership as main part and private ownership as main part and private ownership as supplement (the fourth cycle); she fosters market economy and makes it combined with public ownership forces (the second cycle); government shall take population number control, population quality, rational utilization of resources and environment protection as the fundamental national policies (the first cycle).

The inner five cycles are material being, and the sixth cycle is ideology. Existence decides consciousness, and consciousness feeds back existence. Now, the problems of nuclear two cycles - protecting environment, respecting science and talented person for developing production forces—have been realized by a great number of people. The middle two cycles is more complex. Market economy is in pursuit of freedom and democracy, and is against feudalism, all these aspects of market economy are positive, and these also superficially hold true for capitalism production relationship and its government, but in fact only bourgeoisie itself can really have the freedom and equality. Socialism’s development is the true combo of free people, making most people to have democracy. Market economy pays more attention to personal interests, which is prone to leading to individualism, and leads to commodity fetishism, even money fetishism and capital fetishism. This is the negative aspects of market economy. On the contrary, socialism pays more attention to macro interest and calls for collectivism.