

Labor Theory of Value in the Era of Artificial Intelligence and Robotics—
Is a Pure AI Capitalism Possible?

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Though it was once thought that low birth rate and longevity and consequential diminishing labor populations must be unique phenomena in advanced capitalistic countries typically like Japan and in terms of global view covering developing countries, population explosions, food crisis and environment destruction were seriously concerned, nowadays the phenomena once unique in advanced capitalistic countries are spilling over the countries headed by China with continuous economic growth for a past quarter century, for which we are positioned to cite universal introduction of Artificial Intelligence(AI hereafter) and Robotics to cope with them. In this context a report issued by Nomura Research Institute in a collaboration with Oxford University that in coming 20-30 years a considerable part of human jobs will be replaced by AI/robots have given a shock to people in the world. Similarly Ray Kurzweil, an American futurist and inventor predicts “Singularity” where AI capability surpasses human intelligence by 2045. Late Dr. Stephen Hawkins expressed his concern over AI as it could be the biggest and last invention in the human history.

While if we can extend such assumptions, we are to assume a world where everything is substituted with AI together with Robots, it automatically means that human will be utterly excluded from economic activities which is originally a part of human multiple activities.

Whether capitals can ever generate the profit in such circumstances, particularly how the Marx economics in reliance on the labor theory of value can approach the problems and whether and how capitalism without any kind of human labor can work while the labor theory of value confirms the single source of the value should be defined for human labor, all those kinds of questions this report serves for. Is a pure AI capitalism possible where only AI and robots “work”? As long as an economic system rely on productive production technologies, the system yields physical outputs on a tautological truth basis. On the contrary as far as the labor theory value tells, the system is totally lack of the labor substance which automatically means that in the system there exist no prices or profit, proclaiming the end of the capitalism. This report focuses how to manage this kind of a paradox at a glance.

In the conclusion, the labor theory of value commonly in reliance by Marx’s studies and

the successors substantially depends on an interpretation of the world in which an anthropocentrism in the succession from early Marx's critique of religion and a peculiar essentialism discovering invisible substance behind equivalent exchanges between commodities are insolvably tied together and as long as it tells itself, it fails to demonstrate its truth by itself.

And it will be shown that the theory can be replaced with "the machine labor theory of value" and therefore a pure AI capitalism where only AI/robots work is theoretically possible. Further this report will touch a drastic turning point for social views where meanings of labors for no rewards and introduction of the universal basic income are discussed to provide answers to how human being survives in such "post" human world.