

## Towards a Critique of Neoclassical Economics: how to neutralize and radicalize our understanding of neoclassical economics (Hoon Hong)

In order to neutralize and radicalize our understanding of neoclassical economics (NC), this paper attempts at: conceptualization of objects of analysis; revelation of assumptions; concentration on qualitative aspects; systemization; contextualization and socialization. On the basis of the view that NC is built upon two pillars, that is, price mechanism and individuals' rational choices, this exploration leads to a few preliminary results.

### **Independence or interdependence**

NC is embedded in the Western way of atomistic or analytical thinking in distinction from the East Asian way of contextual or holistic thinking. Decades of studies have accumulated enough evidence to advocate social preference, social comparison, social capital and social relationships. Radicalization of all this allows us to conceive of an ego as being interdependent as well as independent. This is more relevant in East Asian capitalism and in East Asian firms. A step further, an interdependent self may be composed of relational self and collective self.

The fact that choices and decisions are specific to contexts constitutes a serious critique of logical atomism which is very often reducible to a few axioms of independence in NC. It seems that there are two kinds of context in behavioral economics, which could be denoted by context in its narrow sense and in its broad sense.

NC has made little distinction between a consumer and a household. Moreover, it has not allowed for household production, at least not until recent decades. The theory of 'industrious revolution' recently sheds new lights on the role of household as a unit which has been exercised over individuals in coordinating consumption, production and labor supply. This is especially true of the process of East Asian economic development. Although Becker contributed to opening up the black box of household, he was preoccupied with discovering market and rationality in it.

NC tends to import properties of an ideal market into characteristics of a rational agent. A representative agent which is employed for this purpose is not a depiction of a real agent of the real world, but a fiction in that it does not allow for heterogeneity of agents. In this regard, it may be even possible to search for an, albeit imperfect, analogy between agent and market.

### **Substitutability or complementarity**

Individuation and division to the greatest possible degree cohere with NC's other postulates of private property, competition, mobility, marginality, substitution and efficiency. This also explains why NC addresses the issue of indivisibility of public goods so seriously. Uber and Airbnb seem to represent examples of an extension of the unlimited desire of NC for subdivision as well as cases of the sharing economy. The level and the extent of substitution, division and classification depend not only on preference and technology but also on prices and income

Substitutability and complementarity between goods are not functionally defined but are dependent upon prices and individuals' income constraints. Moreover, the notions of substitution (S) and complementarity (C) are understood as being opposed to each other on neoclassical terms. However, they may be amenable to dialectical reinterpretation. Two notions can be combined with each other, if

they are transubstantiated by incorporating historical, social and technological aspects of goods. This process would enrich S with C and C with S, respectively, as a result of which S and C evolve into compounds.

An apartment house and a mid-sized car for four persons are complements to each other, as they are combined to qualify their owners to be middle class people. At the same time a house and a car are substitutes for each other in so far as economic agents can substitute a larger (smaller) house for a smaller (larger) car for the purpose of maximizing their utility. They make their choices not only within their usual price/income constraints but also within the range imposed by their middle class norms.

This relies on the way how Marx and Vygotsky developed their concepts. In broad terms, a system of needs and a system of use values go hand in hand. The compatibility between needs and use values gives rise to complementarity, as well as substitutability, among goods. As a consequence when a new product is introduced into the market, it competes with other products until it succeeds in becoming a part of the system of needs. Very often this dynamic process comprises innovation, imitation and emulation, on the part of consumers as well as on the part of producers. This process is not to be grasped by the distinction between complements and substitutes or by parametrized optimization in particular and rational choice in general.

### **Rational or irrational choice**

From NC's postulate of rationality it follows that a consumer is able to discriminate between content and wrapping or between substance and appearance and that s/he can distinguish the real from the fake or the real from the nominal. In this regard, at first blush a consumer's purchase of a fake brand over a cheaper useful product can be regarded as rational in so far as the imitations exist within his/her income constraint. However, the choice violates the formal logic, in particular, the axiom of the excluded middle, as it is rational (A) and at the same time irrational (non-A).

The purchase can be taken as irrational in that the fake brand was favored over the more useful product under the influence of the expensive brand which lies beyond his income constraint. A more radical view would be to interpret this brand fetish as a dialectical combination of rationality (A) and irrationality (non-A), relying upon Marx and Veblen. The consumer pretends to respect the rationality that her income constraint imposes on her. But at the same time she unconsciously defies irrationality of the economic system which is due to inequality and low social status attended with her income constraint.

### **Tradeoff or conflict**

Procrastination, conflict and contradiction are not to be confused with the familiar notion of tradeoff. Tradeoff as understood by NC stands for a situation where economic agents successfully arrive at exchange ratios among heterogeneous goods in their minds. By contrast, conflicts connote lack of such an equilibrium state of mind due to failure to make commensurable goods due to its heterogeneous dimensions.

To illustrate, suppose that one is to choose between a computer with a higher capacity and a higher price and another computer with a lower capacity and a lower price. The notion of tradeoff of

standard theory tends to assume that one always succeeds in finding how much money one is willing to pay for a unit of a computer capacity. Tradeoff, on NC's view, is too smooth and continuous to allow for conflict or contradiction. By contrast, one succumbs to procrastination or runs into conflict, when one is hard-pressed to compare a unit of money price with a unit of capability. A consumer would contradict himself, when he chooses A over B, even if it gives him/her more utility than A both in the short run and in the long run, and s/he knows it. This is the case of a fake brand, as was discussed above. This could be a social contradiction as well as a contradiction within an ego. It could be connected with the classical tradition, if use value and exchange value are reinterpreted as two incommensurable dimensions of a commodity or good. A building block is provided by Menger and behavioral economics.

Thaler made explicit another hidden assumption for rational choice. For NC, a smooth flow of goods between agents and across markets presupposes not only substitutability among goods but also fungibility of money. Fungibility stands for versatility of money among diverse uses such as food, clothing, housing, transportation, education. Substitutability and fungibility refer to goods and money that constitute the two poles of the same exchange which bring movements of goods and money into operation. However, mental accounting places limits on fungibility, which makes it more difficult to find a smooth tradeoff between any pair of goods.

### **Externality or internality**

Economists are accustomed to the notion of external economies (innovation) and diseconomies (pollution) with little consideration of the internal as a counterpart of the external. It turns out that (a) price mechanism and (b) rational choices offer criteria for the distinction between internal and external. This reveals the reason why NC does not mention internality. It seems to be that NC takes internality for granted and natural, while it takes externality as unusual.

NC seems to regard the two criteria (a) and (b) as equivalent. However, there are many cases where externality in terms of (a) is compatible with internality in terms of (b) such as home cooking. The distinction between internality and externality is not neutral but crucially dependent upon the way how socioeconomic systems are conceptualized. If either price mechanism or rationality is not upheld as seriously as by NC, "noneconomic" factors (pollution, education, innovation) should no longer be treated as residual or as external. Instead, they have to be highlighted and conceptualized as internal to socioeconomic systems. The distinction between internal and external is analogous to the age-old distinction between natural and unnatural.