

# Review of: "From General Equilibrium to Algorithmic Equilibrium"

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This essay is an interesting reflection on the concept of equilibrium. I agree with the author that there is much more that needs to be explored and debated beyond the concept of neoclassical equilibrium associated with rational thinking and optimal decisions. Though, as an economist, I see some of the presented arguments as problematic and needing to be reassessed. I give a few examples:

1. In the abstract, the author claims that algorithmic equilibrium can replace all other kinds of equilibria; this seems exaggerated and overly ambitious.
2. In the beginning of the Introduction, it is stated that "Equilibrium means a position in economics where human intelligence has reached its maximum. " Not necessarily; e.g., underlying the trivial decentralized market equilibrium is simply the idea of people's reaction to prices and not necessarily some superintelligent reasoning.
3. In section 2, second paragraph, what does the author mean by "an equilibrium achieved in this way would be "general", more or less"? In the same paragraph, what are "thoughts relating to the globe"?
4. In section 4, the following sentence is also problematic; I see in it no economic meaning: "Thoughtful entities endogenize money and financial phenomena. All goods are unnecessary to instantly sell out because assets, inventory, innovation, and many other measures can be taken to mitigate the necessity and difficulty of market clearance."

Two additional points:

- a. The manuscript is about a notion of equilibrium (algorithmic equilibrium) that the author apparently has approached in other studies, but in this study, it is not duly formalized. A short rigorous formalization of the concept would be helpful.
- b. The author omits any reference to the voluminous literature on economics that has extended the concepts of rationality and equilibrium and that apparently is closely associated with the arguments in this essay. I'm referring to the extensive literature on behavioral economics, complexity economics, and agent-based economic models.