

Comments on “Lucas on the Relationship between Theory and Ideology”, by Michel De Vroey

De Vroey’s article deals with Lucas’s methodology, especially as regards the relation between theory and ideology in Lucas’s writings. In my view, one interesting aspect of this article is the reference to unpublished papers. Despite this element that is worth noting, I should confess that I met difficulty to grasp the original contribution of the article. In other words, what are the points of the article?

De Vroey outlines three results whose originality can be questioned:

- The first result is that Lucas has been engaged in detailed reflection on methodological issues. This result is not a surprise for a reader of Lucas. Moreover, a sensitive number of macroeconomists have discussed on methodological issues, *also* in a subtle way: Tobin (1980), Solow (1997, 2000, 2005), Hahn and Solow (1997), Blanchard (1997, 2000), Hansen and Heckman (1996), Kirman (1992), Rogerson (1997), Woodford (2000) ...

- The second result is that the consistency of Lucas’s overall conception can be questioned. Yet, the methodology of Lucas’s conception had been questioned, especially as regards its capacity to explain stylized facts. For instance, Laidler (2009) highlights the limitations of Lucas’s macroeconomics to understand and explain the current crisis. In this perspective, De Vroey’s article under-estimates the impact of the principle of verification in Lucas’s methodology. The principle of empirical verification involves that models that does not fit with reality should be rejected on methodological grounds. This principle of verification had also become one pillar of the methodology of real business cycle theory. Now, this principle explains on the one hand the empirical failure of the modelling strategy of Lucas and of real business cycle models and on the other hand why a convergence had occurred towards a new neo-classical synthesis (Zouache, 2004).

- The third result is that “Lucas’s methodological conception comprises a core principle, namely that macroeconomics ought to consist exclusively of mathematical models, which must be microfounded” (De Vroey, p. 22). I have serious reservation about this result. Indeed, in a paper that Michel De Vroey does not quote, Lucas (2000) presents a numerical simulation of a model of world dynamics. In my view, this paper offers an enlightening illustration of Lucas’s methodology where working with model economies does not necessarily implies strong micro/theoretical foundations:

“The model underlying Figures 1-3 is mechanical, without much in the way of explicit economics. It lacks an explicit description of the preferences, technology, and market arrangements that give rise to the implied behavior. Its parameters are not (I hope!) invariant under changes in policy. It entirely omits factors, like capital flows and the demographic transition that continue to play essential roles in the diffusion of the industrial revolution. (...) But for all these deficiencies, it is undeniably an *economic* model: No one but a theoretical economist would have written it down. It is not a theory formed by statistical methods from the Penn World table or any single data set. Despite its obvious limitations, the model has non trivial implications about the behavior of the world economy over the next century.” (Lucas, 2000, p. 166).

Furthermore, macroeconomics involves making predictions from a utopian world (represented by a model economy):

“How did the world economy of today, with its vast differences in income levels and growth rates, emerge from the world of two centuries ago, in which the richest and the poorest societies had incomes differing by perhaps a factor of two, and in which no society had ever enjoyed sustained growth in living standards? I have sketched an answer to this question in this note, an answer that implies some very sharp predictions about the future. If you are reading this in the year 2100, in a retrospective issue of the *Journal of Economic Perspectives*, I ask you: Who else told you what the macroeconomics of your century would look like, with such accuracy and economy?” (Lucas, 2000, p. 167).

Lucas (2000)’s paper reveals the loyalty of his methodology to a conception of macroeconomics as a field using model economies that should be simulated, **whatever, finally, the theoretical framework.**

My trouble with De Vroey’s article could be linked to the structure of the article. The first part proposes a methodological reconstruction of Lucas’s theoretical writings and the second part offers an assessment of Lucas’s ideas. The issue is that, firstly, the link between the methodology, the ideology, the political agenda and the theory in Lucas’s writings is not clear. This is not surprising given the difficulty of such an analytical exercise. Nevertheless, De Vroey should be clear on the topics he aims to address. For instance, how does Michel De Vroey understand the concept of ideology? De Vroey’s article is derived from one particular premise that the reader has no choice but to accept: Lucas is not *a priori* an ideologist. But defending mathematical modelling strategies does not involve that you do not also promote an ideology. Secondly, a new methodological element appears in the assessment exercise, that is the divide of macroeconomics between Walrasian and Marshallian-Friedmanian universes. De Vroey should make clear since the beginning that this divide is –again– a premise of his demonstration; given that this view of macroeconomics can be disputed, and particularly concerning Lucas. Indeed, if you look at Lucas’s business cycle theory, it is acknowledged that there is a correspondence between the early Hayek and Lucas, even if this correspondence does not hold anymore when one considers Hayek’s later works (Butos, 1985). Hayek’s influence is confirmed at the methodological level by Lucas’s himself in one of its methodological writings (Lucas, 1977). Now, it is worth noting that Hayek was critical of the methodology adopted by walrasian theory. Hayek has strongly rejected the use of mathematics in economics.

Should the reader accept De Vroey’s methodological reconstruction, several other issues appear. De Vroey’s article misses one crucial element in Lucas’s methodology related to the distinction between short and long run in macroeconomics. Lucas had always argued for a methodological convergence between short run and long run and this is one of the main successes of Lucas’s research programme. It seems that Lucas has assumed the failure of his methodological revolution because of the principle of empirical verification. This may explain why his later works mainly deal with long run growth (Lucas, 1988) since there is less debate on the use of applied general equilibrium models in the long run. Another reason may be that, in the long run, one can use model economies as utopian worlds that can be simulated. “Macroeconomics for the 21st century” (Lucas, 2000) should then be based on model economies.

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