The past thirty years of Neo-Schumpeterian evolutionary economics are an impressive story of successfully reviving Schumpeter’s powerful ideas on the innovative nature of capitalism. Schumpeter mainly focused on entrepreneurship, innovation competition, restructuring of the industries, and the cyclical growth patterns of the economy. Neo-Schumpeterians shifted emphasis to R&D, innovations, growth of firms, technical change, and the rise of new industries. In doing so they profited from an extensive exchange with the contemporary (non-evolutionary) innovation research. Except for shaping a characteristic vocabulary and influencing the modeling strategy (most cogently in Metcalfe 1998), the “evolutionary” part (added by Nelson and Winter 1982) had little impact on the applied and empirical research activities.

Some of the components, claimed to be characteristic for the evolutionary approach, like the notion of bounded rationality are in no way genuinely “evolutionary”. Like with the emphasis on dis-equilibrium dynamics (not really showing up in the own models) the main motive here was opposition to the mainstream optimization-cum-equilibrium paradigm. The selection metaphor did become part of the brand identity, but as a special form of dynamics it is not enough to substantiate a genuinely evolutionary agenda. Already the method of “population thinking” (a modest implication analogously to evolutionary biology) is far from being recognizable as a significant feature, if one reads the Neo-Schumpeterian literature.

There is no lack of important, insightful works. But the more empirical this literature gets, the less distinguishable from non-Neo-Schumpeterian research it is – except for some rhetorical concessions. Nobody can foresee the future, but the current trend is in my view easy to extrapolate. With the founding generation of the approach now slowly stepping down, the Neo-Schumpeterian research is likely to be absorbed into the mainstream (as innovation research already is). In a rear action, theoretical opposition to mainstream concepts gets ever more eclectic now, for example with proposals to even align with the Keynesians. Under such conditions, the “evolutionary” connotations lose the rest of their significance.

However, this would not be the end of “evolutionary economics” as such. The Neo-Schumpeterian brand of it now pays the toll for failing to go beyond lose analogies in their conceptualization of an evolutionary agenda. One major failure was to abstain from serious efforts to develop a micro basis, i.e. a substantial theory of economic behavior (as evolutionary psychology, for instance, did). Bounded rationality is important, but it does not
comprise of a positive theory of how economic agents make decisions and of what motivations they pursue. Another, related, failure was not to define the own understanding of the human economy and its transformations in relation to a broader Darwinian world as it would have been straightforward for a truly evolutionary theory. (This would follow, if an evolutionary micro basis for explaining behavior would be developed.) Also, Neo-Schumpeterians rarely appreciate a naturalistic interpretation of the economy as it was suggested by authors like Kenneth Boulding (publishing a largely ignored book outlining an evolutionary economics based on such an interpretation the same year as Nelson and Winter published theirs) or Nicolas Georgescu-Roegen. Georgescu-Roegen considered himself an evolutionary economist – he has become one of the fathers of ecological economics instead.

In view of these criticisms, my suggestion of how to do better in accomplishing a coherent evolutionary paradigm in economics will not be surprising. It will be essential to develop the micro basis. Understanding boundedly rational decision making (as in behavioral economics) is important. But even more important is understanding the underlying motivations humans pursue in incessantly transforming their economy. This will not least be necessary to get a grip on policy advice that now is informed by an objectionable, static welfare theory. It will also be essential to merge the interpretation of the micro basis with a naturalistic view of the economic process, e.g. in the spirit of Robert Ayres' "industrial metabolism". Such a move will put many topics on the evolutionary economist's screen that are high on the agenda of ecological economics.

Innovative capitalism may appear more ambivalent in such perspective than it is usually seen by Neo-Schumpeterian. It certainly improved the human lot and expanded the human niche. But it did so by putting the natural long-term carrying capacity for the human kind at risk. It unleashed desires and expectations that are not sustainable for the entire world population. Exponential economic growth cannot go on forever. A long term trend of dwindling growth rates in the most developed economies is not accidental. But together with continuing labor-saving technological progress (the consequence of much appreciated process innovations with cost reducing effects) rising employment problems are inevitable.

Given the unleashed desires and expectations of their electorate, most governments insist on a shortsighted economic growth strategy. With the fiscal and monetary policies by which they try to stimulate economic growth where there is no real basis for expanding production and employment, debt crises are preprogrammed. And, as Schumpeter (1934) had it already, when the debt needs to be paid back, this is the time when an economy falls into depression. At least at this point evolutionary economics seems to be able to connect back to Schumpeter (if not the Neo-Schumpeterians). With an elaborate micro basis it will be able to better explain the motivations behind desires and expectations driving capitalist evolution. And with a naturalistic view of the economy it will be better equipped to understand why and when there is no basis for expanding production. Eventually this may also enable more sustainable ways of solving the employment problem.