Mutual exclusion: The case of economics and business studies.

Abstract

This letter narrates the failure of an attempt to integrate economics and business studies in a joint research institute cum PhD school, analyses the fundamental underlying differences in basic assumptions and methods, and tells of the recurrence of the problem in an appoinment procedure at the Royal Netherlands Academy of Arts and Sciences.

Here I present a case study that happens to be my personal experience. That may seem cantankerous and vindictive, but it seems somewhat artificial to pretend that it is the experience of someone else. This letter may read as a crusade against maintream economics, as a reviewer suggested, but that is perhaps not so bad, considering the damage right-libertarianism has caused society, with increasing disparities between rich and poor.

Exclusion

Lakatos (1970) proposed that scientists are committed to a 'research programme', of which there may be several, in a discipline, with a series of theories that share a 'hard core' of basic assumptions, with the 'negative heuristic' that they are not to be challenged, shielded by a 'protective belt'of subsidiary assmptions. When a theory in the programme fails, changes are made in this protective belt rather than the core. Theories that violate the core are ostracised or ignored, and are excluded from journals or edited books dedicated to the programme. This makes science inherently conservative. Tribal culture dominates science.

Conservative as this is, there are arguments for it. One cannot look at all directions at the same time, and a certain perspective is needed for focus, coherence and analytical rigour. There is also an evolutionary argument: if there were no different species, and all animals could interbreed, in due course no separate species would remain, and rivalry and evolutionary selection would vanish. This may yield an argument against interdisciplinarity.

On the other hand, innovation arises from variety, novel combinations, to generate new forms, genotypes, to be submitted to evolutionary selection. In nature, such variation is random, by novel configurations of genes in chromosome crossover, in sexual reproduction, copying errors of DNA, and mutations of genes. In society, in science and politics, it is not entirely random, but informed by inference, experimentation, and artificial selection (in simulation or testing of concepts or prototypes, in learning systems. This yields an argument in favour of some form of interdisciplinarity.

Behavioral factors involved are the urge of scientists, and people in general, to affiliate and congregate with like-minded people who more easily extend recognition to each other than to outsiders. They seek like-minded parters to collaborate with, who are prone to recognise it and refer to it, which furthers careers. It also takes less effort of understanding 'out of the box'.

A response to exclusion by a programme, whereby one cannot gain access to publication channels, is to craft one's own association in a new programme, with one's own proprietary journal, conference and publishers.

Economics

Programmes of unorthodox economics emerged from criticism of orthodox economics. An example is 'Institutional economics' (Hodgson, 1998), which instituted its own 'Journal of Institutional Economics' and dedicated conferences. Another is 'Evolutionary economics'

(Nelson and Winter, 1982), with their own 'Journal of Evolutionary Economics' and the 'Journal of Economic Issues'. A third is 'Behavioural Economics', though that has been incorporated to some extent in mainstream economics. Other examples are a programme in studies of trust (Bachmann and Zaheer, 2012), with the 'Journal of Trust Research' and studies of 'Post-Keynesian Economics'. These examples illustrate that there are also different research programmes within a discipline.

In Institutional economics, institutions are 'rules of the game' (Hodgson, 1989), with legal arrangements such as property rights, rules to protect the environment and constraints on advertising, and beyond those the effects on economic issues of cultural habits and rules, language, power groups, lobby groups, network effects, corruption and politics. One type of institutions is so-called 'transaction costs', which are costs of the market, such as the costs associated with supply and demand finding each other, judgement of quality, negotiation, crafting agreements and contracts, controlling their execution, litigation in case of breach, and so-called 'specific investments' in contracts or collaborative arrangements that are lost, not useful in other relations, when the relation breaks. Those can be used to leverage power of threatening to walk out if not given a greater share of jointly produced profits. These costs can yield a reason not to use markets but integrate activities in a single organisation.

Evolutionary economics looks at the economy as an ecosystem, governed by the evolutionary principles of variety creation, rivalry and selection in markets, and transmission of surviving success in imitation, growth, and education and training. In biology variety creation arises from chromosome crossover, in sexual reproduction, and copying errors and mutations of genes, in the economy it arises in entrepreneurship and environmental and technological change. The key feature of evolutionary theory is that there is no 'intelligent design', as opposed to economic planning and control. Evolutionary economics has its puzzles: What consitutes the selection environment; not only markets but also institutions. Who or what is being selected: firms or ideas and practices, and what does 'survival of the fittest' mean, when ideas can be partly adopted from firms that fail? Firms can merge to survive. Transmission entails communication, and there variety arises from variety of understanding and interpretation, so that variety generation and transmission get entangled. Also, institutional effects of lobbying and political influence can yield 'co-evolution', i.e. influence of the units to be selected on the selection environment, more so than found in biology, and when strong, this effect can prevent effective selection.

Trust beyond a balance of reciprocal advantage, in mutual dependence, is not accepted by mainstream economists, as seen to be in conflict with competition in markets, which enforce breach of trust to maximise advantage, needed for survival. Trust researchers have objected that a leap of faith beyond calculable advantage is needed for collaboration in innovation, which also needed to survive in markets (Moellering, 2009).

Behavioural economics makes use of insights from social psychology, in the role of subconscious, routinised 'decision heuristics' that limit free will and rationality. While the heuristics are non-rational, they can be adaptive, assisting survival, and in evolution have developed for that reason.

One heuristic is *loss aversion:* we make greater efforts to avoid the loss of what we have than to acquire things we do not have. This can lead to irrational, fruitless litigation to defend against the loss of a deserting partner. Loss aversion is adaptive, however, in that in evolution loss often was loss of life or livelihood.

A second heuristic is statistically *unwarranted generalisation*, raising incidents to the level of law-like regularities. Mishaps or incidental misconduct is seen as 'always' happening. However, this is adaptive in making people alert to the possible recurrence of opportunities warranting engagement, and reducing vulnerability to recurrent threat.

A third heuristic is *escalation of commitment*, where past losses of a line of action give a motivation to stick to it. This is not rational because bygones are bygones, water under the bridge, and rationally, only future costs and benefits matter. Thus, loss of the lives of soldiers prods continuation of the war, because otherwise those losses 'would be in vain'. It is done in spite of its non-rationality, for reasons of reputation, because withdrawal would signal an admission of having made a bad decision. Thus, it was hard for the USA to withdraw from Vietnam and Afghanistan. However, it can also be an indication of perseverance in the face of setbacks, but how far should one go before one makes an adjustment?

Another heuristic is *anchoring and adjustment*, where people stick to established practices, or allow only for marginal adjustment, even though what is established is arbitrary or counterproductive, requiring a more radically different new approach. Yet, this also may be adaptive as perseverance in the face of setbacks.

Psychology has shown that intuition often works better than rational calculation. When you buy a house, you need to rationally consider things like the state of the roof and of foundations, the drains, electricity wiring, water pipes, conduct of neighbours, proximity of public transport, and so on. But you generally don't then decide by sitting down to make a list of pro's and cons, attaching weights, and calculating the balance. You may do that, but generally that does not clinch the issue. You sleep on it and decide on how 'it feels'. Such decision making often works out well. Apparently, there is some process in the mind that does the balancing, mixing rational considerations, feelings, memories, and emotions. The conscious, rational considerations are not useless, but they feed a wider, subconscious process that we call intuition.

Economics and business

I experienced the cliff between economics and business when I was appointed scientific director of a research institute cum PhD school at a university in Netherlands, by the board of the university, in the 1990's, with the task of integrating those disciplines. Such integration stands to reason: business forms an important part of the economy. I accepted the commission because I saw parts of economics as promising bridgeheads for making the connection: Evolutionary, Institutional, Industrial, Behavioural and Transaction Cost Economics. Unfortunately, it turned out that those parts of economics were not represented in the Economics Faculty. At the Business Faculty there were practitioners of Systems Theory, Organisational Behaviour, Personnel Management and Legal Management who wanted to include sociology, psychology and law, which was anathema to the economists. I tried to cross the cliff, but the effort was thwarted by both sides. The rejection was mutual. I failed miserably, at least substantively, and could only erect a facade, a stage set, behind which everybody just continued to play his or her familiar game. After much wasted effort, I left that university, but I remained intrigued by the failure: what was it that made integration so difficult? After a time I arrived at the following analysis.

For mainstream economics the core had, still has, the following basic assumptions and perspectives:

- It is *outcome oriented*, constructing models that maximise utility or efficiency (Hodson, 2019), taking that as a goal of policy, regardless of how that outcome is to be achieved. Indeed, in some areas such an approach is valid and useful, such as in optimising the scheduling of a refinery or a loading facility for ships, a stream of goods, conditions for efficient timing and queuing, and optimal location, to name a few things that are relevant to business. It mostly misfires in other areas, such as strategic management, personnel management, leadership, innovation, collaboration, and the development of financial instruments. An interesting and useful innovation in

economics was game theory, analysing strategic interaction, but it was limited in its assumptions that players knew all options and their potential 'pay-offs'.

- It is aimed at *mathematical models*, as the paragon of being scientific.
- It assumes *rationality* in making choices
- It uses statistics to calculate risk, where one does not know what is *going* to happen, knows what *can* happen, but cannot deal with 'real' *uncertainty* of not knowing all that can happen.

Business, by contrast, requires he following perspectives:

- It is *process oriented*, in designing and guiding processes, of production, marketing and distribution, organisation, strategy making, and learning.
- It is not limited to mathematical models, because the required measurement is not always possible, and it is not always clear what the available options are.
- It cannot assume rationality because people and sytems are often not rational.
- It has to face uncertainty, beyond risk, in innovation and strategy.

In retrospect, in view of these fundamental differences, it is not surprising that economics and business could not be integrated. They reside in different worlds, with different perspectives, in different cultures.

Mainstream economics had a rhetorical comparative advantage, in the eyes of practitioners and policy makers, in its use of mathematics, and the clarity and simplicity of optimal outcomes, in comparison with the complexity of evolution, seen as muddling and yielding no determinate outcomes, in the absence of intelligent design. It was imposssible to predict the outcomes of evolution. I was member of an advisory committee for a Max Planck institute for evolutionary economics in Jena, in Germany, and once we had to defend the institute in front of a visit of board members of the Max Planck, we failed to make the merit of evolutionary economics clear, and the institute was abolished and replaced by an institute for mainstream economics.

The situation has since changed, in the emergence of 'Agent Based Simulation', where conduct is simulated in a computer on the level of interacting agents, to model markets and their failures, in evolutionary processes. See T. Klos & B. Nooteboom (2001). This serves to also give a mathematical, rigorous gloss to evolutionary economics. That method has problems of its own, in that complexity explodes as one adds variables and parameters, and it becomes difficult to understand what is going on, and to test models. One option is to compare aggregate outcomes with available statistics.

Conflict in the academy

The cliff between ecoomics and business studies re-emerged many years later, in 2020, in the Royal Netherlands Academy of Arts and Sciences, of which I had become a member in 2000. This has a section for economics and business studies, and the problem arose on the occasion of the nomination a new member. Someone submitted a proposal, which I seconded, for the nomination of a scholar with a background in applied psychology, with a wealth of publications in excellent journals in the area of organisational leadership. The proposal was waylaid by the economists, on the ground that she had not published in top economic journals. I came up in arms, on the ground that economics and business had been combined in the academy not because of some common method or theory, but because of being related phenomena in the economy. I sent around a brief statement of the differences between the disciplines, along the lines indicated above, with a proposal for a debate on it. The only response I received was a thank-you for 'offering these personal reflections'. No one responded to my suggestion for a debate. I went to he presidency of the Academy with the suggestion for a separate section for the programme of business studies, but was fobbed off

with the assurance that the current leadership of the joint section would attend to the issue. That is the last I heard of it. The mutual exclusion of economics and business studies, to the point of refusing debate, but this was accepted without debate, even in the Academy.

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