

## Economics and business studies

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I was once asked to institute and lead a PhD school and research institute where economics and business studies were to be combined. That succeeded formally, but the arrangement was a facade, behind which economists and business scholars continued to play their different games I felt I had failed, but it was an interesting failure. Why was the coupling of the two so difficult? In business studies the following features are essential:

- Conduct is limitedly rational, and not everything can be calculated. Not everything is commensurable; not everything can be included in an objective function to be maximised, as economists want to do.
- There is ubiquitous uncertainty in Man and society, beyond risk. Under uncertainty, one does not know all that could happen, and what all possible consequences of an action are. As a result, one cannot attach probabilities in order to calculate. There is environmental uncertainty, epistemic uncertainty about the truth of what you think you know, and behavioural uncertainty, also concerning yourself.
- Not only outcomes are important, but also the processes by which you may or may not achieve optimal outcomes. It is in the process, not in outcomes, that policies intervene.
- The human being is not only self-centred and autonomous.. Man develops himself in interaction with others, and in evolution has developed an instinctive sense of benevolence and altruism, up to a point. This sense competes with a sense of survival that favours self-interest, and the latter usually wins, but not always.
- Many business issues, such as human resource management, organisational behaviour, strategic management, marketing, research management, production management, international management and information management require an interdisciplinary approach, tapping from psychology, sociology, theory of knowledge and learning, theory of language and meaning, anthropology and different branches of philosophy (epistemology, moral philosophy, political philosophy, legal philosophy).
- Ecology is an urgent matter, and environmental management is in ascendance, but while there is some environmental economics, the matter is mostly neglected in economics.

In the mainstream of economics only some of those features do come in, but: man is assumed to be rational and self-serving, calculating his optimal benefit. It is recognised that there is an effect of reputation, by which it is good business to be trustworthy, but often the temptation to ignore it for the sake of self-interest is too large. Reputation is something for the long term, and often temptations are in the short term, and difficult to set aside. Shareholders and the stock market look at profits expected in the next term. It is about efficient, optimal outcomes, hardly the process towards them, and mathematical models for calculating optimal outcomes form the core of that economics. In early economics, e.g. that of Adam Smith, and utilitarians more generally, the aim was prosperity for as many people as possible, but optimality is still key, and it has gravitated towards individual gain.

In some areas economics has broadened its perspective, especially in so-called behavioural economics, derived from social psychology. There, non-rational, unconscious decisions play a role. Evolutionary economics is process-oriented, without prior 'intelligent design', but is outside mainstream economics. It is much more difficult to model evolutionary processes than

calculate optimal outcomes. In evolution, outcomes depend on a complicated interaction between a shifting selection environment of markets and institutions, the inventiveness of entrepreneurs, and a variety of ways in which what survives is transmitted. As a result, recognising this complexity, evolutionary economics has difficulty in making concrete predictions, which makes it unpopular with policy makers.

In a crucial meeting with a supervisory committee of a Max Planck institute for evolutionary economics in Germany, where I sat on an advisory committee, for that reason evolutionary economics lost out to mainstream economics, and the institute was abolished. However, with so-called 'agent based simulation', processes are now being modelled. That has its own methodological problems, but it is there.

In economics, game theory is oriented towards decision processes, in taking into account the possible response of rivals, but it does not systematically include the uncertainty concerning the set of possible strategies, their instability, and the possible outcomes. ('pay-offs'). Strategies are often not given a priori, but develop in the process of strategic interaction. The same applies to the preferences needed for calculating optimal conduct. Rather than being given beforehand, they develop or shift in the process of decision making. There is a heuristic of finding optimal choice as if it is a search for the highest top in a hilly landscape in the mist. But sometimes it is as if treading on the landscape causes earthquakes.

At the fringe of economics, uncertainty is dealt with by means of scenario analysis, where some possible futures are identified, though not all possible ones, and for each of those the best policy is determined, and then those are evaluated according to which policy is most robust, in giving a reasonable but not necessarily optimal outcome across those futures. Robustness here is seen as more important than optimality.

These differences came up in the Netherlands Academy of Arts and Sciences, where in a section on economics and business those are uneasy partners. Business studies were considered less scientific by the economists, who formed the majority, which maintained itself by voting in new members with an economic rather than a business study background. Proposals for new members and projects were evaluated by their contribution to economic science rather than by their contribution to society and science generally. I broached the differences between economics and business studies, and proposed a debate on them, but I received no reply, apart from someone thanking me for my 'personal reflections'. I took the matter to the board of the academy, with the proposal of instituting a separate section for business studies, but they waved me off with the vague promise of seeing to it that business studies would be given more access. My position was that the issue was scientifically interesting and merited a substantive discussion, but the proposal for such a discussion was ignored there as well.

This illustrates how tenacious prejudice and inertia can be, even in a society dedicated to the openness of genuine science.