

The Evolution of Cultural Entities

A two-day interdisciplinary meeting was held at the British Academy in April on 'The Evolution of Cultural Entities'. Sponsored jointly by the Academy and the Epistemology Group, it was planned by Professor Margaret A. Boden FBA and Professor John Ziman FRS, and organised by Rosemary Lambeth at the Academy. Professor M.A. Boden FBA reviews the event.

Over 130 people registered for the symposium, including members of the general public. The convenience, and elegance, of the Academy's new surroundings was remarked by several of them. The success of the conference can be gauged not only by the positive comments from participants but also by the fact that most people were still there at the end of the second afternoon!

The aim was to consider whether the 'non-biological' study of evolutionary processes could usefully be extended beyond the special case of technological innovation (the topic of an earlier meeting of the Epistemology Group). Ever since Darwin, scholars in different disciplines have noted that diverse cultural entities – such as languages, laws, firms, theories, etc., – 'evolve' through sequences of variation, selection and replication, apparently like living organisms. However, this analogy between cultural and biological change has more frequently been remarked than explored and analysed. Is it 'just a metaphor', or can evolutionary theory help us to understand the dynamics of a variety of cultural domains?

The disciplines represented – by speakers from Israel, Australia, Germany, Holland, and the USA as well as the UK – included biology, anthropology, sociology, economics, law, linguistics, cognitive science, and philosophy. Despite some 'talking across each other', there was a welcome attempt not only to communicate with scholars in other disciplines but to learn from them, too.

One thing we learnt (from the biologist Dr Eva Jablonka) was that modern biology sees the type of variation at the base of evolution as sometimes more 'structured' than is normally assumed. If this is so, then one must think twice about those criticisms of evolutionary thinking in the social sciences which complain that novelty in human affairs may be grounded not in senseless random variation but in creative thought directed to a particular end. (As several participants commented,

that is not to say that the intended end will be achieved: the effects of novel social policies may be very different from what was expected.)

Another idea that aroused interest was Professor Gunther Teubner's application of the concept of *autopoiesis* to legal institutions. This concept was originated by the biologists Humberto Maturana and Francisco Varela, who used it to describe the self-organization of the cell. Their work illuminated the formation and maintenance of the cell as an identifiable unity, bounded by the cell-membrane. They gave a highly abstract definition of autopoiesis, insisting that the concept could be applied also to social institutions. There, the self-organization would not be physically embodied as a biochemical metabolism, but constituted by a self-coherent and self-sustaining set of social practices – such as linguistic communications. But they gave no details, leaving it highly unclear how their ideas could be generalized from the physical to the social space. Professor Teubner offered some intriguing and persuasive examples, namely, various legal institutions. Outlining how the law can be seen as a closed, self-maintaining autopoietic system, he used these insights to explain variations between socio-legal practices in different countries. On this view, evolution (whether in biological or social systems) is secondary to, or limited/enabled by, the autopoiesis of the system concerned. Again, this suggests that importing evolutionary ideas into social science need not be inappropriately reductionist, still less sociobiological.

There were other thought-provoking papers, too, and there may be a future publication including some of them. If so, details will be announced in a future issue of the *Review*. Meanwhile, a book based on an earlier discussion-meeting sponsored by the Epistemology Group is currently in press and due for publication in 2000: Ziman, J.M. (ed.), *Technological Innovation as an Evolutionary Process* (Cambridge: Cambridge University Press).