SOCIAL SCIENCE OR BARBARISM?

Neither the future of operational research nor that of social science is knowable. Statements about their future inter-relationship therefore have the status of conjectures. But there are certain preconditions before one can even develop and support plausible conjectures. One is a clarification of concepts - without which general confusion can all too easily prevail. Another is that conjectures about the future need to be firmly based on an analysis not just of the present (a mere snapshot in time), but of the past.

Not everyone is agreed that the mutual involvement of OR and the social sciences is to be encouraged. Some may even deplore the tendency. Others, perhaps Conference participants, may base their support on particular assumptions about OR, social science and the form of their interaction, which others might not accept. The task of this Conference should surely be, not just to attempt an undifferentiated and uncritical boost to all OR practice with some arguable social scientific component. We should try, rather, to generate a continuing dialogue about what versions of mutual involvement hold out promise for a future operational research we would be eager to participate in.

WHICH SOCIAL SCIENCE?

There are a multiplicity of disciplines within the social sciences. My own academic institution has departments of sociology, social psychology, anthropology and economics. But it also has departments of geography, government, economic history, and international relations, among others. The standing of the various subjects is different. Some have a fairly well-defined subject matter and set of methodologies; some have only a defined subject matter, and borrow widely from the methods of other disciplines. Can OR make statements, or blank declarations of intention, concerning such diverse domains?

Another factor we need to encompass is the diversity within particular disciplines. There are divisions by subject matter - sociology of religion, sociology of ideas, sociology of development... But within one discipline there are also differing schools - functionalist, structuralist, neo-Weberian
... which may lay competing claims to particular subject matters. Their approaches are so at variance (for example, in the type of explanation sought for particular phenomena) that OR cannot propose a marriage, even of convenience, with all of them simultaneously.

This is by no means the end of the complexity. There is also the time factor. Operational research has experienced changes over the past quarter century, and so, perhaps more dramatically, have the social sciences.

Sociology can serve as one example. The topography of the subject bears little resemblance now to that of a generation ago. Much of what was then in place has been swept away, and the usurpers in turn usurped. Mathematical sociology, for example, appeared poised for great advances in the later 1960s, but its moment never came, and it is now quite marginal. Ethnomethodology seemed to have swept the field in the 1970s, but now merits only one question on the undergraduate Theory examination. And so on. Sociology has been, and doubtless will be, a moving target.

A similarly fluid and fragmented pattern is evident in anthropology. If any unity is to be found, it consists largely of a studied eclecticism of theory and method. Economics is in a not dissimilar condition, split between the warring tribes of monetarists and marxists, with only a few embattled neo-Keynesians stranded in the middle ground.

Certain changes which seem to be more enduring can however be observed. In 1964 sociology, like the other social sciences, was most often presented as neutral and value-free. Under the influence of feminist and marxist criticism few would hold to that posture today. The feminist influence in particular has been pervasive, both in its critique of gender bias in mainstream work, and in its construction of a feminist sociology - analysing, for example, women's (unwaged) contributions to work and economic development. The same is true of anthropology, where gender-insensitive work in any field is regarded as out of touch with modern developments.

Is this new feature of the landscape one which operational research can orientate itself to? Not, one would have thought, without quite radical changes within OR itself. The issue of the future relationship between OR and the social sciences raises not only the question of 'which social science?' but also 'what OR?'

NATURAL SCIENTIFIC OR?

Not all operational researchers think that social science content in OR is to be applauded. A distinguished academic, ex-President of the Operational Research Society of America, some years ago savaged a published case study dealing with personal perceptions and group dynamics in the following terms: "didn't say anything about anything... time for someone to stand up and shout that the emperor isn't wearing any clothes... no content in any of this... lots of words, some very impressive... self-styled operational research" and so on (Machol, 1980). The emotive force of such attacks stems from the sniffing out of sin, or at least the shocked discovery of a social science cuckoo egg in the OR nest.

Generally those who oppose a social scientific emphasis within OR do so because they favour a natural science model for our subject. Thus Rivett (1983) writes of the need to bring the world of problems where repeated experiment is impossible, that is the world of OR, "within the classical mainstream of science." "Operational Research" he continues "must always be part of that mainstream, and the task of the OR scientist is to remain a scientist while tackling problems which the traditional scientist has