

References

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Warwick University, UK

RJ Ormerod

Reply to Ormerod

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I am grateful to Professor Ormerod for taking the time and trouble to comment on my article concerning the evaluation of PSMs (White, 2006). I am also delighted he found it interesting and insightful.

The article had three aims: to provide a modest discussion of the main issues that have be-devilled the OR community in addressing evaluation; to adopt a moderate or pragmatic approach to evaluation (which is an attempt to preserve a systematic attitude towards evaluation at the same time as recognizing the importance of actors' meanings and incorporating them into the evaluation); and finally to reflect on and analyse the evaluation findings to generate middle-range theory(ies) in order to understand what characterizes successful PSM interventions. In meeting these aims the paper did not undertake a comprehensive review of the literature, only a selection of works were included and doubtless many important ones were excluded. Having said this, there were many influences drawn on for the article, particularly the work of Ormerod and his position on pragmatism. Another influence was the work of Keys (1997) whose insight—using concepts drawn from the sociology of scientific knowledge (eg Latour, 1987), is that OR processes are complex interventions (ie systematic or purposeful action by an agent to create change or bring

about improvements) and complex approaches are required to understand them.

It is clear that complex interventions require more than just descriptive methods to evaluate what works for whom and how. Also, there are no 'one-size-fits-all' approaches. Understanding will vary depending on specific situations. It often involves watching how the intervention is done, looking at participation in the intervention and what is produced, talking to stakeholders, and asking lots of how and why questions. To be honest, stakeholders are often somewhat nervous about discussing questions about an intervention. This is particularly so with the recipients of an intervention. It is often a tricky process, involving much negotiation and confidence building.

Most reported evaluations of PSMs in the literature are provided by practitioners and are often based on personal reflections. While it might be difficult to generalize from these accounts, they are, however, important in that they provide valuable insights for other people to share and review. Clearly, many of these practitioners are highly experienced and their reflections should be valued. I think more reflexive accounts of interventions should be encouraged such as ones provided by Ormerod (eg 1998) and Connell (2001). I would be particularly interested in ones which explore relationship issues such as trust and stakeholders' social networks. This would chime with an insight described in my article, which saw that PSM interventions involve bespoke relationship building. Here, further investigation of the intervention could look to see if these relationships can be described and whether they have a bearing (or not) on the success (or not) of an intervention.

Finally, I would like to thank Professor Ormerod for referring me to his viewpoint on Connell's paper (Ormerod, 2001). I particularly liked his description of the distinction between the stakeholders. I agree that an important category of stakeholders is the *done without* and it should not be underestimated how valuable this group is. One member of this group, I think, is the academic community and the needs of this audience have to be satisfied. In my view, to facilitate this, evaluation of complex interventions requires a complex translation of insights about practice, which may be achieved by constructing middle-range theories that steer a course between abstraction and reflections on practice.

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University of Bristol, UK

L White

OR and systems—some comments on Checkland's reply to Eden and Ackerman

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In the *JORS* Special Issue on *Problem Structuring Methods*, Eden and Ackermann (2006) offer a *Viewpoint* and Checkland (2006) replies. This echoes a previous *JORS* Special Issue on 'Systems in OR', which featured full articles by both Eden and Checkland. In these earlier papers, Eden (with Graham) was sceptical about the usefulness of systems theory; Checkland emphasised the weaknesses of OR.

'Systems theory is seen as stressing the rational mind (what we think about) to the detriment of the transactional mind (which we use day-to-day). This stress can be harmful to practitioners who must work in practical, transactional worlds' (p 723). 'We believe that system theorizing is getting in the way of the practitioner better understanding how people like Ackoff and Checkland manage to conduct effective work' (p 728) (Eden and Graham, 1983).

'... well structured problems [which OR addresses] are extremely rare in human situations.' '... OR will face difficulties in principle if the problem cannot be expressed in terms of an objective to be achieved.' '... it is extremely unlikely that the real-world problem situation will map neatly the well-structured situations with which algorithms deal ... OR methodology has a weakness to the extent that it imagines that pure problem forms map real-world problems.' '... because OR is a putative science ie it seeks to establish testable public knowledge, and because the currency of science is rational thought, OR will be able to deal with real situations to the extent to which they exhibit rational behaviour or are susceptible to rational analysis. Idiosyncratic irrational behaviour will be difficult to bring within OR's universe of discourse.' 'In a sentence, the weakness of OR ... is that it is wedded to logic in situations in which logic is not necessarily paramount' (Checkland, 1983, pp 667–668).

Thus both sides of the argument accused the other of being overly rational, of not working with the practical realities of the situation. Time has moved on; OR continues to be valued by clients; soft systems methodology has successfully established a niche for itself within OR and elsewhere. However, while in the latest exchange Eden (with Ackermann) chooses to emphasise the similarities between the more

established PSMs, Checkland continues to promote his systems approach (and other favoured PSMs) at the expense of OR more generally. He harks back to his earlier views. I would like to comment on some of his statements.

On the history of OR

Checkland's admittedly somewhat drastically abbreviated history in his *Viewpoint* seems to imply that OR was born out of the systems approach. He talks about a general interest in the systematic appraisal of work tasks (a more scientific approach) whose upsurge after the Second World War was fed by a greater interest in ideas about systems as whole entities, and in the feedback mechanisms by which systems can maintain their viability (Checkland, 2006, p 769). Now this may be so of other innovations that he cites (systems engineering, RAND systems analysis, Beer's viable systems model, early computer systems analysis, and Systems Dynamics) but it hardly applies to what Checkland calls 'classic' OR itself, whose roots (in the UK at least) lay in the desire to improve system performance by whatever means were to hand and not in any theoretical framework, let alone the systems approach. In the US, Churchman and Ackoff did embrace systems ideas but it can hardly be said that operational research in the US followed their lead in this respect.

On the sociological theories of OR

Checkland also says that underlying OR's approach (which he describes as carefully defining goals or objectives and then creating a system to meet these objectives) is an unexamined sociology of functionalism (Checkland, 2006, p 769). Let us examine this proposition. According to Wallace and Wolf (2006), sociologists tend to make distinctions between theoretical sociological perspectives in terms of aspects of their *methodology*, their *subject matter*, the *assumptions* underlying their approach, and the *types of questions* they believe social theory can and should address. In their subject matter, theoretical perspectives divide rather neatly between those perspectives that are concerned with the large-scale characteristics of social structure and role, or *macrosociology*, and those concerned with person-to-person encounters and the details of human interaction and communication, or *microsociology*. There are two essentially macrosociological approaches. *Functionalism* (with intellectual roots in Durkheim and his forerunners, the key exponents are Parsons and Merton) studies society as a system of interrelated parts. *Conflict theory* (with intellectual roots in Marx and Weber, the key exponents are Dahrendorf, Coser and Collins) sees society as an arena in which groups fight for power; power's unequal distribution leads to conflict—power is essentially coercive. Power in society can either be critiqued or accepted and studied. One of the key difference is that functionalism sees social activity as motivated by *values* whereas conflict theory sees it as motivated by *interests*. There are three microsociological approaches. *Symbolic interactionism* (with intellectual