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# CO-GUARANTOR ATTRIBUTES: A SYSTEMIC APPROACH TO EVALUATING EXPERT SUPPORT<sup>1</sup>

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## Abstract

The paper suggests features of a generic framework which can assist in highlighting good practice as well as revealing shortcomings in expert support for management decision-making. Following the earlier writings of Habermas, I argue that expertise might be identified and considered as a set of 'co-guarantor attributes' based upon knowledge constitutive interests. Co-guarantor attributes can be used as a benchmark for evaluation, where affirmative features of expert support can be identified as well as the incidence of 'false guarantor' attributes which might be significant in perpetuating costly and unsuccessful intervention.

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## 1. Introduction

This paper attempts to translate the underlying ideas of a systemic approach into a framework for evaluating expert support. Section 2 prises out what we mean by a 'systemic approach' as associated with the tradition of critical systems thinking. Section 3 explores the 'role of the expert' in terms of systemic intervention based on ideas from Churchman and Ulrich. Section 4 introduces Habermas' knowledge constitutive (KCI) theory and briefly reviews its application in critical systems thinking. Section 5 delineates an evaluative framework of co-guarantor attributes based on KCI.. The ensuing three sections (6-8) examines each of the three co-guarantor attributes in turn, relating each to key themes in systems practice. Section 9 summarises the main features of the co-guarantor attributes.

## 2. Systemic intervention

Midgley (2000) leads us to a definition of systemic intervention in three steps: firstly, systemic intervention is described as "intervention that embodies pursuit of the ideal of comprehensiveness" (p.103), reflecting concern for an overall shift from reductionist to holistic paradigms; secondly, a note of human intention and interaction is introduced "...purposeful action by a human agent to create change" (p.112) reflecting the notion that expert intervenors are co-creators of reality; and thirdly, systemic intervention is described as "purposeful action by a human agent to create change in relation to reflection on boundaries" (p. 129).

In re-arranging these features of systemic intervention, Midgley goes on to specify three specifications for a systemic methodology: first, the need for agents to engage with *boundary critique* in reflecting critically upon the choices between what ought to be included within, and therein excluded from, the remit of study or intervention; second, the need to focus on theoretical and methodological pluralism as a means of making a *judgement* on choices between theories and methods; and third, an adequate systemic methodology should be explicit about defining the parameters of, and acting for, *improvement*. Although not explicitly stated, the three activities of systemic intervention reflect precisely Midgley's own interpretation of three commitments associated with 'critical systems thinking' (CST) (Midgley, 1996). It is my intention to ground an evaluation framework within these three principles of CST. Before undertaking that task, I shall return to the question of what role might be assigned to 'the expert'. To address this question, we can turn to two systems practitioners who have been key players in contributing towards critical systems thinking and purposeful systemic design; C.West-Churchman and Werner Ulrich.

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### 3. Expert support in systemic terms

Churchman (1971) drawing on the work of Edward Singer, first hinted at an expert function in systems design with reference to the 'designer' role in providing a *guarantee* for systems improvement. His characterisation of purposeful systems dealt initially with only those involved in the systems design and identified nine conditions that must be fulfilled for a system (S) to demonstrate purposefulness (derived from the philosophy of Immanuel Kant). The conditions are reproduced in summary below (adapted from Churchman, 1971:43)

1. S is teleological (or 'purposeful')
2. S has a measure of performance
3. There is a client whose interests are served by S
4. S has teleological components which coproduce the measure of performance of S
5. S has an environment (both social and ecological)
6. S has a decision maker who can produce changes in the measure of performance of S's components and hence changes in the measure of performance of S
7. S has a designer who influences the decision maker
8. The designer aims to maximise S's value to the client
9. There is a built in guarantee that the purpose of S defined by the designer's notion of the measure of performance can be achieved and secured

Churchman (1979:79) later reordered these nine conditions into three groups of three categories; each group corresponding with a particular *social role* - client, decision maker, and planner. Each category is associated with two allied categories which Ulrich (1983) later termed *role specific concerns* and *key problems*. Ulrich also identified each category group with a term reflecting the primary source of influence - *motivation, control, and expertise* - for client, decision maker, and planner ( or "designer") respectively (Ulrich, 1983:250) (see Table 1).

**Table 1** Categories of ‘Involved’ in a Purposeful System’s Design  
(adapted from Ulrich, 1983:245-250)

<b>Churchman’s 1971 nine conditions for a purposeful system</b>	<b>Churchman’s 1979 three groups of three categories for a purposeful system</b>	<b>Ulrich’s 1983 sources of influence informing a purposeful system</b>
<i>Group 1</i>		
condition 3.	<i>social role:</i> client	sources of motivation: whose purposes are served?
condition 1.	<i>role specific concerns:</i> purpose	
condition 2.	<i>key problems:</i> measure of performance	
<i>Group 2</i>		
condition 6.	<i>social role:</i> decision maker	sources of control: who has the power to decide?
condition 4.	<i>role specific concerns:</i> components	
condition 5.	<i>key problems:</i> environment	
<i>Group 3</i>		
condition 7.	<i>social role:</i> planner/designer	sources of expertise: who has the know-how?
condition 8.	<i>role specific concerns:</i> implementation	
condition 9.	<i>key problems:</i> guarantor	

Later, Churchman (1979:80) also suggested a role for those *affected* by, but not involved with, systems design, and provides a self-reflective description of an additional three categories that centre around the role of what he called the *systems philosopher*; along with the two related categories, the *enemies of the systems approach* and *significance*. It is Ulrich (1983) in his formulation of *critical systems heuristics* (CSH) who systematically distinguishes between those *involved* in a system’s design and those *affected* by a systems design so as to define the latter role more concisely for social systems planning. The category of those affected by, but not involved in, systems design are designated by Ulrich as being the *witness*; those who in practical discourse will argue the case of the affected (*ibid*:252). The role specific concerns of the witness are conceptualised as those of *emancipation*; liberation from oppressive material conditions and false consciousness.

“... it [emancipation] reminds us that social mapping and design is not merely a matter of instrumental orientation toward some purpose (as functionalistic “systems

science” seems to assume), but that for *socially* rational planning it is essential that the planner initiate a *process of emancipatory self-reflection on the part of the affected*” (Ulrich, 1983:257; original italics)

The final ‘key problem’ category represents the possibilities of a conflict in *worldviews* (‘Weltanschauung’) - “different visions of what social reality and human life in it ought to be” (*ibid*) - between the involved and the affected. Consequently the “source of influence” for this category group is defined as the *source of legitimisation*. Table 2 summarises the twelve “critical-heuristic categories”.

**Table 2** Critical-Heuristic Categories.

(adapted from Ulrich, 1983 p.258; 1993 p.595 and 1996 p.43)

Categories			Dimensions of intentionality		
1	Client?.	(role)	Sources of motivation	Those involved	The purposeful System of concern (or context of application) on which depends the meaning of 'improvement'
2	Purpose?	(concerns)			
3	Measure of improvement?	(problems)			
4	Decision maker?	(role)	Sources of control		
5	Components?	(concerns)			
6	Environment?	(problems)			
7	Planner?	(role)	sources of expertise		
8	Expertise?	(concerns)			
9	Guarantor?	(problems)			
10	Witness?	(role)	sources of legitimisation	Those affected	
11	Emancipation?	(concerns)			
12	Worldview?	(problems)			

The role of experts in systems design was first problematised then by Churchman (1971): experts ("designers" or "planners") act as *guarantors* for securing successful implementation of plans. Guarantors provide a source of assurance that 'improvement', as defined by the purpose of intervention, might be achieved. Drawing on Kant's principle of *critique* associated with the limitations of pure and practical reason, Churchman emphasized that expertise by itself cannot secure or guarantee improvement. Werner Ulrich (1983), building on Churchman's work, suggests that expertise might at best provide a set of guarantors for *helping* to secure improvement, adding: "but such sources of guarantee are bound to become *sources of deception* as soon as the planner forgets that they might be *false guarantors* and that in any design there is necessarily a built-in *lack of guarantee*" (p. 261, my italics).

Later in the same book, with reference to the case study of a health system design, Ulrich introduces the term "co-guarantors" to refer to relevant people (including representatives of the general public as well as planners) who ideally should be included as 'experts' (p.412). I wish to use the term co-guarantors in a wider, more systematic, sense for identifying aspects of guarantee which must be addressed in the provision of any expert support. I propose introducing the idea of *co-guarantor attributes* which can be used as a benchmark

for evaluating levels of expert competence. An overriding Kantian principle behind this use of co-guarantor attributes is the assumption that there can never be any single or sole guarantor in assuring the success of intervention.

To find sources of possible attributes we turn to Jürgen Habermas (1972) and his early theoretical work on knowledge-constitutive interests (KCI).

#### **4. Knowledge constitutive interests and critical systems thinking**

The typology of *knowledge-constituent interests* suggests that knowledge is tied to underlying human interests. The KCI theory is based upon the anthropological premise of there being two fundamental forms of human activity, *work* (or ‘labour’) and *interaction* (‘language’ or ‘communication’). Each activity is associated with a particular *interest*. Work is associated with a *technical interest* in the prediction and control of natural and social affairs. Interaction is associated with a *practical interest* in fostering mutual human understanding. In order to realise the full potential of these two human activities - that is, having labour free from materialistic and economic constraints and demands, and communication free from distortion brought about by ‘false consciousness’ - Habermas postulates a critical third *emancipatory interest*. This is expressed through reflective consciousness and ensures freedom from coercive forces imposed by institutional and ideological barriers of oppression. The three constitutive interests are invariant though complementary, and are underpinned by three equally invariant though complementary ‘rationalities’ which can be referred to respectively as *instrumental*, *strategic* and *critically comprehensive* (Figure 1).

**Fig 1** Taxonomy of Knowledge-Constituent Interests  
(derived from Habermas, 1972)

Basis of Human Interest	Knowledge Constitutive Interests & Associated Rationalities
“Work”	<ul style="list-style-type: none"> <li>• <i>technical interest</i> in prediction and control of natural and social affairs</li> <li>• <i>instrumental rationality</i> (labour)</li> <li>• success depends upon technical mastery over social and natural processes</li> </ul>
“Interaction/language”	<ul style="list-style-type: none"> <li>• <i>practical interest</i> in fostering mutual understanding</li> <li>• <i>strategic rationality</i> (human interaction/ communicative action)</li> <li>• success depends upon practical mastery over ensuring mutual understanding</li> </ul>
“Power/Authority”	<ul style="list-style-type: none"> <li>• <i>emancipatory interest</i> in being free from coercion</li> <li>• <i>critically comprehensive rationality</i> (authority relations)</li> <li>• success depends upon being free from coercion imposed by power relations</li> </ul>

I suggest that the KCI categories underpin the three commitments of critical systems thinking and the systemic approach to intervention described in section 2. Boundary critique exemplifies a *technical* interest in critically choosing (and therein 'controlling') between the factors to be taken in to account with (and therein excluded from) any intervention. Boundary critique is inevitably concerned with exercising, as well as making visible, measures of control. Methodological pluralism prompts issues of *practical* judgement in relation to fostering complementarity or identifying conflicts between different methodological and theoretical perspectives. Finally, action for improvement might be regarded as fulfilling an *emancipatory* interest in prompting explicit statements and reflection regarding the purpose of intervention.

## 5 Knowledge constitutive interests and co-guarantor attributes

The three constitutive interest categories can be translated in more specific terms of co-guarantor attributes. The first co-guarantor attribute is associated with a *technical* competence. Different disciplines, or fields of expertise, represent or *objectify* different types of subject matter in different ways. Within any one particular field of expertise - whether natural science or social anthropology - disciplinary standards of *rigour* are applied in order to maintain technical competence in *representing* the real world. The co-guarantor

attribute satisfies a *multidisciplinary* imperative in broadening the *range* of expertise - including 'lay' expertise - therein improving the degree of comprehensive representation.

The second co-guarantor attribute is associated with a *practical* competence of *complementarity*, wherein expert knowledge from one source or discipline is subject to cross-disciplinary scrutiny in determining the *validity* of knowledge generated. The co-guarantor attribute here satisfies an *interdisciplinary* imperative behind valuing different perspectives through extending the *reach* and communication of expertise outside of individual disciplinary boundaries. In my terms of my reference, this reach also extends towards more informal sources of expert support in helping to secure public involvement with, and minimise exclusion from, the process of intervention.

The third co-guarantor attribute is associated with an *emancipatory* or 'purposeful' competence of *social critique*. Here, the actual impact of expertise is subject to scrutiny by wider society, and particularly those affected by the expert supported intervention, in determining its *relevance*. Knowledge is gauged according to whose *purposes* (social interests) are being served. This co-guarantor attribute necessarily and rightly falls, at least in part, outside the control of experts, therein supporting Churchman's claim that no set of guarantors can provide absolute guarantee for success. Thi co-guarantor attribute therefore satisfies what might be called a *transdisciplinary* (or 'extra-disciplinary') imperative towards highlighting the *social-responsibility* of experts.

Figure 3 summarises the co-guarantor attributes in terms of three levels of expert competence.

**Fig 3 Three Levels of Expert Competence**

Levels of competence and co-guarantor attributes		Framework of assessment
1	objectivity	<ul style="list-style-type: none"> <li>• <u>intra/multidisciplinary</u></li> <li>• based on criteria of <u>reliability/rigour</u></li> <li>• inviting <u>disciplinary responsibility</u> in <i>representing</i> the ‘real world’</li> </ul>
2	complementarity	<ul style="list-style-type: none"> <li>• <u>interdisciplinary</u></li> <li>• based on criteria of <u>validity</u></li> <li>• inviting general <u>academic responsibility</u> in valuing different representations</li> </ul>
3	social critique	<ul style="list-style-type: none"> <li>• <u>extra/transdisciplinary</u></li> <li>• based on criteria of <u>relevance</u></li> <li>• inviting <u>social responsibility</u> in making transparent the purpose of support</li> </ul>

Co-guarantor attributes are ideal types providing a normative benchmark for assessing expert competence. In circumstances where guarantors are transformed into *false* guarantors, sources of expertise become sources of *deception*. False guarantor attributes, I would argue, appear when:

1. the levels of competence associated with each co-guarantor attribute are intrinsically weak; and/or
2. any one of the three co-guarantor attributes assumes exclusivity; effectively being transformed to the uncritical ideological dogma of ‘isms’ (respectively - objectivism, ‘pragmatism’ and tokenism).

The next three sections identify key features of each set of co-guarantor attributes and associated false guarantor attributes respectively illustrated with examples from systems literature.

## **6 Co-guarantor attributes of objectivity**

The key role of any expertise is associated with objectifying or re-presenting the real world and this can be done using positivist as well as non-positivist tools. Positivist measures are

typically quantitative and include representation through statistical indices or the simple and complex mathematical models and cybernetic systems used in operational research. Non-positivist measures are typically associated with qualitative techniques and include, for example, rich pictures and other diagramming formats associated with soft systems approaches.

Objectivity is served in two ways:

1. by securing a degree of *comprehensiveness*, incorporating a wide range of empirical sources of information and means of representing information; and
2. through securing a degree of disinterestedness or *neutrality* either by diminishing the inevitable value-laden bias attached to objectifying knowledge - attempting to “let the facts speak for themselves” - and/or through revealing (making transparent) biases as an integral part in presenting information.

Securing comprehensiveness can be understood in terms of widening the input of both professional and non-professional expertise; the former as exemplified by the increasing use of multidisciplinary teams to provide expert support, and the latter exemplified by the increasing demand for wider participation of representatives of the general public. Systems practice/operational research (OR) has a pioneering tradition on both counts: OR has its roots in drawing together specialists from different fields to help support the Second World War effort; and since the late 1960s soft systems approaches have pioneered the way towards increasing the scope of participation in management practice. Such initiatives have in turn revealed the limitations of securing comprehensiveness.

Securing neutrality also has clear limitations. At best, attempts might be made to: (a) diminish the bias through, for example, commissioning ‘disinterested’ personnel (consultants) as experts or using verification techniques such as Denzin’s methods of triangulation where the reliability of information is tested against different approaches and under different conditions (Burgess, 1984); or (b) reveal and make explicit the biases of intervention. This would involve making explicit the possibilities of bias in the techniques

themselves as well as being explicitly reflective of personal biases that might impact on the knowledge generation. Again, the ‘scientific’ roots of systems practice provides appropriate grounding towards issues regarding sought-after neutrality, and the unique emphasis on ‘modelling’ and ‘diagramming’ amongst systems/OR practitioners reflects a concern for promoting transparency.

False guarantors are consequently associated with not securing appropriate comprehensiveness and assuming levels of neutrality incommensurate with evident biases. Securing co-guarantor attributes of objectivity provides the most common domain of *scientific* expert support. Privileging objectivity as a sole guarantor for success is manifest in the tendency towards *objectivism* or *technocentrism*. Habermas describes technocracy as decision making where “experts’ “rational” science determines the... criteria of rationality to which the politician must succumb” (quoted in Ulrich, 1983:75). Guarantors of objectivity assume technocratic leanings when elevated beyond the technical level of competence in which they operate. Such technocentrism has been the focus of criticism of earlier OR explorations in the social domain of organizational management (Churchman, 1971), generating in turn the subsequent identification and labelling of “hard” traditions (Checkland, 1978). Dogmatic perspectives regarding the importance of positivist technical tools are associated with assumptions of positivism and empiricism as well as sociological perspectives of functionalism (Burrell and Morgan, 1979). Technocentrism can be associated with the privileging of number-crunching predilections associated with mathematical modelling as used, for example, in early attempts at applying systems dynamics to global modelling (Meadows et.al., 1972). Technocentrism might equally be associated with the simple privileging of participant *numbers* in more qualitative approaches to intervention. Although this latter false guarantor attribute appears to be little acknowledged in mainstream management science (not surprising given the still novel idea regarding inclusiveness in management decision making!) there is concern expressed in international development discourse over participatory approaches occupying a “tyrannical” position (Bell, 1994; Cooke & Kothari, 2001) or claims of there being a “participatory orthodoxy” (Biggs, 1995).

## 7 Co-guarantor attributes of complementarity

Complementarity through expert interaction is served through processes of *facilitation*. It is important to remember that the term ‘expertise’ is used here in the wide sense of access to relevant knowledge from both *professional* expertise, associated with specialist disciplinary or interdisciplinary knowledge, and *non-professional* expertise, associated with less-formal tacit knowledge. Reference to expert intervention and expert support as described in this paper by default implies *professional expertise*. Facilitating expert interaction can then be regarded on three dimensions:

1. amongst non-professionals;
2. between non-professional and professional participants; and
3. amongst professionals (e.g., between members of a multidisciplinary team and/or between hierarchical levels of authority associated with the intervention).

Facilitating interaction amongst non-professionals is best exemplified through the range of ‘problem structuring’ approaches (Rosenhead, 1989), the most well-known of which is soft systems methodology (SSM) where the viewpoints of actors involved in the problem situation are privileged (Checkland, 1981). As critics of SSM point out though, the idea of equal weight being given to stakeholder viewpoints needs to be checked by the real world institutionalised relations of power which prohibits free and open dialogue as well as prompting incidences of false consciousness (Jackson, 1982); that is, perpetuating misguided perceptions.

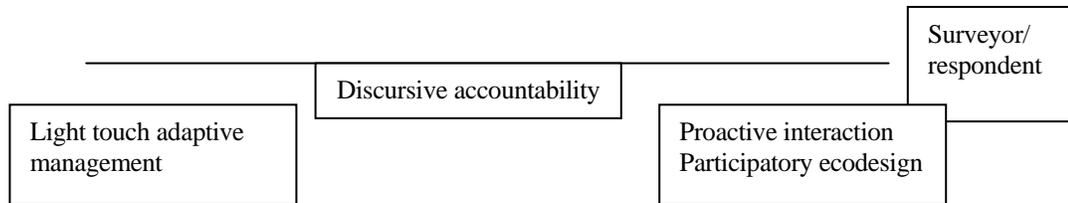
The degree of interaction between non-professional and professional expertise can be understood in terms of a continuum (see Figure 4).

**Fig 4 Continuum between less-visible and visible interaction.**

*less-visible*

*visible*

“the death  
of the  
expert”



At one pole is the minimalist idea of facilitator involvement implicit in many participatory approaches to intervention, more recently expressed through the recommendation of “light touch adaptive management” in facilitating sustainable community management of resources (Jones, 1999:300). Such ideas are conversant with the type of “pragmatic pluralist” initiatives suggested by White and Taket (1994) to help along “the death of the expert”. Concern here is given towards enabling external facilitators to withdraw without undermining continuity in stakeholder interaction. The risk here is that the professional expert loses visibility; a point echoed by Mingers (1997) in criticism of ‘soft’ and ‘critical’ methodologists, observing that “...they are generally silent about the users of the methodology” (p.420). Romm (1997) addresses this problem by suggesting an enhanced “democratization of knowledge construction process in society” (p.65) in her call for *discursive accountability*. More recently Midgley (2000) explicitly attempts to correct the tendency of concealment in his own writing; in a check against proclaiming “the death of the expert”, Midgley acknowledges that systemic intervention requires that the agency of professional expertise needs to remain visible (p.286).

At the other pole, professional experts take on the more conventional style of absolute control where non-professionals are treated as mere respondents for gathering relevant data. Between these two poles of interaction lies a pro-active style where professional experts – as intervenors - retain a necessary visibility. Useful examples of a more visible professional expert input can be found in the application of SSM techniques in “participatory ecodesign”; facilitating interaction between professional extension officers and farmers associated with the Australian Landcare Programme (Ison, 1993; Weber &

Ison, 1995). Such work resonate with the tradition of collegiate action research (cf. Fals-Borda & Rahman, 1991).

Facilitating interaction amongst professional experts prompts questions and problems of interdisciplinarity and methodological pluralism. Reservations over methodological pluralism in systems studies have been mostly framed by discussion of the *paradigm problem*. This is summarised by Midgley (1997b): “All systems methodologies make different philosophical and theoretical assumptions – i.e. they are born in different paradigms – so if we wish to mix them, or bring them together in a framework, we have to justify this at the level of philosophy” (p.256). The problem of associating systems methodologies (hard, soft, and critical) with philosophical paradigms (functionalism/ positivism, interpretivism, and radicalism, respectively), following the arguments of Burrell and Morgan (1979), is that the latter are deemed to be irrevocably incommensurable, hence leaving little room for facilitating methodological pluralism. Midgley, Flood, and in particular, Jackson, have since the late 1980s been prominent in addressing the *paradigm problem* (Midgley, 1989; 1992; 1997b; Flood, 1990; Jackson, 1990, 1997;1999). In my view, the association between methodologies and paradigms is questionable. Notwithstanding Thomas Kuhn’s (1962) own multiple usage of paradigms when first introduced, it remains the case that Kuhn was fundamentally using paradigm as an heuristic analytical tool for interpreting the *history* of science from a sociological perspective. He suggests that actual science (as distinct from Karl Popper’s ideal of science pursued through the process of objective falsification) can be described as a series of uneasy paradigm shifts.

In contrast to paradigms, different methodologies have a more *spatial* rather than historic quality. Furthermore, recognizing that different methodologies may be *practically* wedded to different ontological and epistemological assumptions regarding their subject matter should not imply that the associated practitioners are *ideologically* wedded to such assumptions. Ideological commitments to such assumptions signal what Burrell and Morgan describe as incidences of *philosophical paradigm incommensurability*. In this article I choose to refer to such dogmatic uncritical ideological commitments as examples of *false guarantor attributes*. Thus, with regards to the exclusive ideological commitments

to positivist assumptions underpinning co-guarantor attributes of objectivity (associated with the technical interest informing ‘hard’ methodologies) false guarantor attributes of positivism and technocentrism are identified. Co-guarantor attributes of complementarity assume the possibility of a critical interaction between different methodologies and between different disciplines. This does not imply such interaction is itself above ideology (or in Midgley’s terms, being “meta-paradigmatic” – above paradigms). In my opinion it is the overriding purpose of the third co-guarantor attributes of social critique to make explicit the ideological nature of the inquiry.

Apart from incidences of poor quality in facilitation at any one level of interaction, false guarantor attributes associated with privileging complementarity can be identified where co-guarantor attributes of objectivity and social critique are absent. Complementarity as a sole guarantor can have several manifestations. Incrementalist ideas associated with Charles Lindblom (1977;1979) – where complex problems are broken into small manageable (practically attainable) segments for small (incremental) though satisfactory improvements through negotiation, flexibility and responsiveness - have gained currency in promoting intervention in terms of managerial *process*, as against blueprint *prescript*, approaches. The uncritical adoption of *process* approaches can be described in terms of *managerialism* or what Lindblom calls “muddling through” - where the means is used to define the ends. The underlying flaw is neatly summarised by Ulrich (1983): “incrementalism assumes that comprehensive understanding of whole systems is not only impossible (which it is) but also unnecessary (which it is not)” (p.224). White and Taket’s pragmatic pluralism has been criticised by both Mingers (1997) and Jackson (1999) for being subject to the common sense notion of *pragmatism* (“if it works it must be good”). In particular the critics are uneasy with the authors’ injunction of doing “what feels good” as a guiding guarantor principle. Jackson (1999) himself though comes very close to adopting the very approach to which he warns against. In first sympathising with “those who wish to maintain the emancipatory option by privileging radical paradigms”, Jackson goes on to state (in marked contrast to his earlier work) “that this is not the job of pluralism... (and that) pluralists must learn to live with and manage a degree of paradigm incommensurability” (p.19). Whilst acknowledging the need for some tolerance in seeking

to address different value positions, it is my contention that reference to co-guarantor attributes of social critique can and should reinstate the privilege of a radical intent.

## **8 Co-guarantor attributes of social critique**

The purpose of critique is to provide feedback to the planning process in order that appropriate adjustments might be made (including associated adjustments to the character of co-guarantor attributes of objectivity and complementarity used in planning). Social critique can be served in two ways:

1. *monitoring and evaluation* (M&E), where attempts are made by involved experts to measure the actual impact of planned intervention on intended beneficiaries; and
2. *social auditing*, where involved experts subject their findings and recommendations for lay public scrutiny through seeking and inviting appropriate representation of those affected by, but not involved with, intervention.

Central to the task of any M&E exercise is the clear identification and articulation of appropriate *measures of success*. It is here that the opportunity exists for experts to make explicit the political/ideological biases informing their expert support. Success might be measured in narrow mechanistic terms of ‘performance’ indicators (i.e. measures of performance) or in wider social terms of ‘quality of life indicators’ (i.e. measures of improvement). The two indices are common with systems analysis. For example, Checkland’s (1981) step 6 of the modelling phase of SSM, in designing human activity systems, consist of adding a separate monitoring and control sub-system, where information from the main system is processed back to the system through action deemed necessary to keep the system viable. The indicators to be monitored are typically defined according to criteria of *efficacy* (measure of the output), *efficiency* (cost-effective use of resource input for desired output) and *effectiveness* (measure of longer term output). The first two performance indicators are associated with ‘goal’ and ‘objective’ levels of planning and so prompt questions regarding measures of effectiveness; i.e., what ‘ideals’ of improvement

are implied by such measures (Ulrich, 1988)? The question is raised by Ackoff and Pourdehnad (2001) in their suggestion that systems are often “misguided” in being driven by performance indicators of efficiency (e.g., generation of profits by corporate industry) rather than wider societal measures of improvement (e.g., wealth distribution and employment).

Social auditing might be seen as an antidote to the false guarantor of managerialism associated with complementarity. No matter how inclusive the design of expert support is intended, there can be no room for complacency, since there will always be those affected by intervention whose interests are not included. In short, social auditing makes some amends to Kant’s critical idea of reason which acknowledges that there can be no *absolute* guarantee provided by expert support. Failures in intervention more often arise from an ignorance, and/or dismissal, of interests associated with those affected by, but not involved with, the intervention. The failure can itself be a source of learning for systems practice (Fortune and Peters, 1995) rather than, as Miser (1999) observed, an issue that OR practitioners are seemingly reluctant to reflect upon. The notion of social auditing also addresses Romm’s (1995) concern over the accountability of researchers in their decisions as to who represents the disadvantaged and powerless. Social audits provide those affected by intervention the opportunity of voicing grievances through independent mediators (e.g., consultants). Audits are typically commissioned by big businesses to gauge their *actual* impact on social communities so that management and boards of directors might adjust their programmes and policies accordingly. The co-guarantor attribute of social auditing provide a measure of responsiveness to those affected by but not involved with systems design. Churchman (1979) encapsulated this principle perfectly in his suggestion that concern be given to the ‘enemies’ of the systems approach!

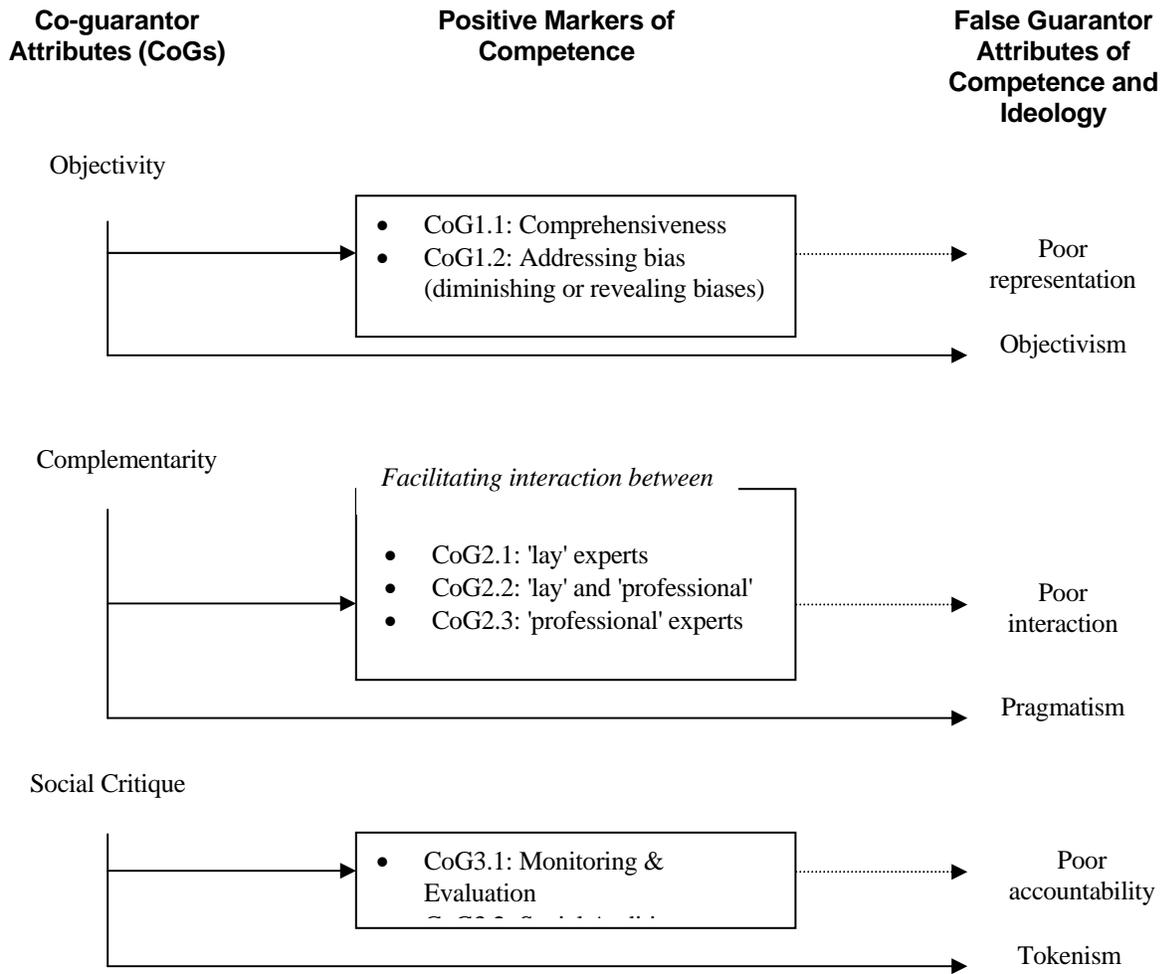
False guarantors are associated with falling short of efforts towards meaningful M&E and social auditing, as well as privileging a cosmetic social critique through token undertakings of “social accountability” in the absence of a responsive demand structure.

Notwithstanding the potentially useful currency of themes like “participation” and “community” as guarantors of social critique, they are at risk of becoming little more than

reiterated token gestures; outwardly satisfying public concern though actually serving the interests of existing dominant power structures in the maintenance of social order (cf. Sachs, 1992). Roger Cowe, for example, describes social auditing by corporate business as constituting little more than “the caring face of capitalism” (The Guardian, 9 June 1999 p.9). Others make similar reference to the posturing of a social conscience illustrating the impact of corporate PR on developing countries (see New Internationalist no. 314, “Mind Games: the rise of corporate propaganda”, July, 1999). World Bank iterations on “social capital” and “social inclusion” might likewise represent little more than a “caring face”, providing, as Ben Fine (1999) sees it, a useful tool for forging a new consensus amongst those involved with the development industry. Such assertions reflect the ease with which ideas of social critique and social accountability might succumb to *tokenism*; providing the latest elixir (all things to all people) in the management sciences lexicon.

## **9 Co-guarantor attributes: a summary**

Figure 3 summarises the dimensions of co-guarantor attributes which can be used to assess expert support.



**Fig 3** Co-guarantor Attributes and False Guarantors

The co-guarantor attributes presented in this paper provide a preliminary sketch of an evaluation framework. They are based on robust theoretical constructs based on critical systems thinking and practice, knowledge constitutive interests in the field of critical social theory, and systemic approaches to intervention. Co-guarantor attributes can be used as a benchmark for evaluation, where affirmative features of expert support can be identified as well as the incidence of false guarantor attributes which might be significant in perpetuating costly and unsuccessful intervention. The proposed model can be adapted for evaluating expertise associated with different disciplines in a wide range of circumstances. In arguing the need for demystifying expertise as a means of clarifying goals and improving performance of intervention, I hope to have signalled and reinstated the primacy of an emancipatory intent in the tradition of critical systems thinking for systemic practice and the monitoring of expert intervention.

## References

- Ackoff, R. L., & Pourdehnad, J. (2001). "On Misdirected Systems". *Systems Research and Behavioural Science*, Vol 18, pp199-205.
- Bell, S. (1994). Methods and Mindsets: "Towards an understanding of the tyranny of methodology". *Public Administration and Development*, Vol 24, No 4, pp323-338.
- Biggs, S. (1995). "Participatory Technology Development: reflections on current advocacy and past technology development". Paper prepared for PTD workshop on "The Limits of Participation" organised by Intermediate Technology at the Institute of Education, Bedford Way, London (1995).
- Burgess, R. (1984). *In the Field: an introduction to field research (4th ed.)*. London: Routledge.
- Burrell, G., & Morgan, G. (1979). *Sociological Paradigms and Organisational Analysis*. London: Heinemann.
- Checkland, P. (1978). "The Origins and Nature of 'Hard' Systems Thinking". *Journal of Applied Systems Analysis*, Vol 45, No 2.
- Checkland, P. B. (1981). *Systems Thinking Systems Practice*. Chichester: John Wiley.

- Churchman, C. W. (1971). *The Design of Inquiring Systems: basic concepts of systems and organizations*. New York: Basic Books.
- Churchman, C. W. (1979). *The Systems Approach and its Enemies*. New York: Basic Books.
- Cooke, B., & Kothari, U. (Eds.). (2001). *Participation: The new tyranny*. London: Zed Books.
- Fals-Borda, O., & Rahman, A. (Eds.). (1991). *Action and Knowledge: Breaking the Monopoly with Participatory Research*. New York: Apex.
- Fine, B. (1999). "The Developmental State is Dead - Long Live Social Capital". *Development and Change*, Vol 30, No 1, pp1-19.
- Flood, R. L. (1990). "Liberating Systems Theory: towards critical systems thinking". *Human Relations*, Vol. 43. No.1
- Fortune, J., & Peters, G. (1995). *Learning from Failure: The Systems Approach*. Chichester: Wiley & Sons.
- Habermas, J. (1972). *Knowledge and Human Interests*. London: Heinemann.
- Ison, R. (1993). "Changing Community Attitudes". *Rangeland Journal*, Vol 15, No 1, pp154-166.
- Jackson, M. (1982). "The Nature of Soft Systems Thinking: the work of Churchman, Ackoff and Checkland". *Journal of Applied Systems Analysis*, Vol. 9, pp17-28.
- Jackson, M. C. (1990). "Beyond a System of System Methodologies". *Journal of the Operational Research Society*, Vol 41, No 8, pp657-668.
- Jackson, M. (1997). "Pluralism in Systems Thinking and Practice". In J. Mingers & A. Gill (Eds.), *Multimethodology: The Theory and Practice of Combining Management Science Methodologies* (pp. 347-378). Chichester: Wiley.
- Jackson, M. C. (1999). "Towards Coherent Pluralism in Management Science". *Journal of the Operational Research Society*, Vol 50, No 1, pp12-22.
- Jones, B. (1999). "Policy lessons from the evolution of a community-based approach to wildlife management, Kunene region, Namibia". *Journal of International Development*, Vol.11, 295-304.
- Kuhn, T. (1962). *The Structure of Scientific Revolutions*. Chicago: University of Chicago.
- Lindblom, C. (1977). *Politics and Markets*. New York: Prentice Hall.

- Lindblom, C. (1979). *The Policy Making Process*. New York: Prentice Hall.
- Meadows, D. et al. (1972). *The Limits to Growth: a Report for the Club of Rome's Project on the Predicament of Mankind*. London: Earthscan.
- Midgley, G. (1989). "Critical Systems and the Problem of Pluralism". *Cybernetics and Systems*, Vol. 20, 219-231.
- Midgley, G. (1992). "Pluralism and the Legitimation of Systems Science". *Systems Practice*, Vol 5, No 2, pp147-172.
- Midgley, G. (1996). "What is this thing called Critical Systems Thinking?" In R. L. Flodd & N. R. A. Romm (Eds.), *Critical Systems Thinking: Current Research and Practice* (pp. 11-24). New York and London: Plenum Press.
- Midgley, G. (1997). "Dealing with Coercion: critical systems heuristics and beyond". *Systems Practice*, Vol 10, No 1, pp37-58.
- Midgley, G. (1997). "Mixing Methods: Developing Systemic Intervention." In J. Mingers & A. Gill (Eds.), *Multimethodology: The Theory and Practice of Combining Management Science Methodologies* (pp. 249-290). London: John Wiley.
- Midgley, G. (2000). *Systemic Intervention: Philosophy, Methodology and Practice*. New York: Kluwer/Plenum.
- Mingers, J. (1997). "Towards Critical Pluralism". In J. Mingers & A. Gill (Eds.), *Multimethodology: The Theory and Practice of Combining Management Science Methodologies* (pp. 407-440). Chichester: John Wiley.
- Miser, H. J. (1999). "Viewpoint: Interdisciplinarity and how over the years the meaning of the term operational research has changed". *Journal of the Operational Research Society*, Vol 50, No 9, pp982-983.
- Romm, N. R. A. (1995). "Knowing as Intervention: Reflections on the Application of Systems Ideas". *Systems Practice*, Vol. 8, pp137-167.
- Romm, N. (1997). "Interdisciplinary Practise as Reflexivity". *Systemic Practice and Action Research*, Vol 11, No 1, pp63-77.
- Rosenhead, J. (1984). "Debating Systems Methodology: conflicting ideas about conflict and ideas". *Journal of Applied Systems Analysis*, Vol.11, pp79-84.
- Sachs, W. (Ed.). (1992). *The Development Dictionary*. London: Zed Books.

Ulrich, W. (1983). *Critical Heuristics of Social Planning: a new approach to practical philosophy*. Stuttgart (Chichester): Haupt (John Wiley - paperback version).

Ulrich, W. (1988). "Churchman's "Process of Unfolding" - Its Significance for Policy Analysis and Evaluation". *Systems Practice*, Vol 1, No 4, pp415-428.

Ulrich, W. (1993). "Some Difficulties With Holistic Thinking". *Systems Practice*, Vol 6, No 6, pp583-608.

Ulrich, W. (1996). *A Primer to Critical Systems Heuristics for Action Researchers*. Hull: University of Hull.

Webber, L., & Ison, R. (1995). "Participatory Rural Appraisal Design: Conceptual and process issues". *Agricultural Systems*, Vol 47, No 1, pp107-131.

White, L., & Taket, A. (1994). "The Death of the Expert". *Journal of the Operational Research Society*, Vol 45, No.7, pp733-748.