# PENSAMIENTO CRÍTICO DE SISTEMAS: SU USO EN LA GERENCIA

Systemic Evaluation: Three Flexible and Inclusive Approaches

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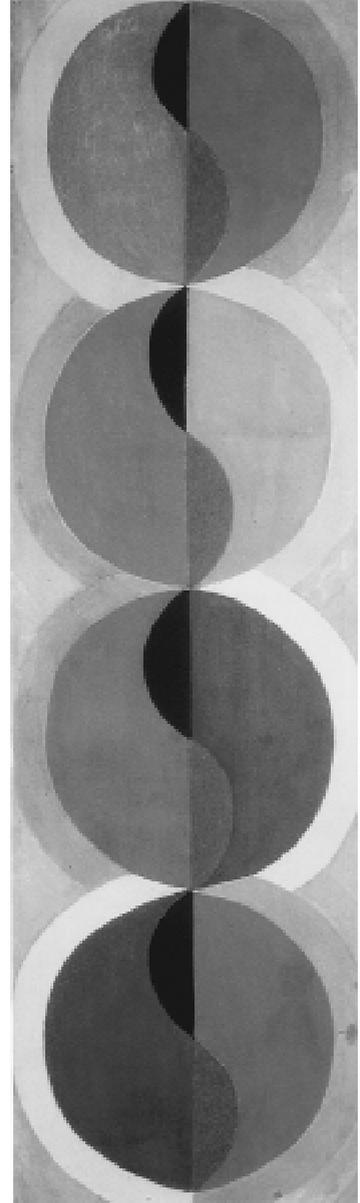
Systemic evaluation:

THREE FLEXIBLE AND INCLUSIVE APPROACHES

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Resumen

Este artículo presenta tres diferentes enfoques para la evaluación, útiles para diversos propósitos, que pueden combinarse para producir un conjunto de instrumentos flexibles en respuesta a una amplia variedad de situaciones. Ofrece los argumentos que justifican la realización de evaluaciones sistémicas (holísticas) que son a la vez inclusivas y participativas.

Palabras clave: Pensamiento sistémico, evaluación, metodologías sistémicas, participación, evaluación de servicios de salud, pensamiento crítico de sistemas, intervención sistémica.

Abstract

This paper outlines three very different approaches to evaluation that are useful for different purposes. These can be combined to produce a flexible and responsive tool kit for use in a wide variety of situations. The paper also introduces the reasons for conducting *systemic* (holistic) evaluations that are both inclusive and participative.

Key words: Systems thinking, evaluation, systems methodology, participation, health service evaluation, critical systems thinking, systemic intervention.

Introduction

Approximately 5 years ago, the Government launched an initiative in the UK to improve the health of the most disadvantaged communities. They set up a number of Health Action Zones (HAZs): organisations designed to support existing health, welfare, and local government agencies (plus voluntary organisations and community groups) to co-ordinate their health improvement work. The main focus was on helping to minimise the 'big killers', such as coronary heart disease and smoking, through targeted work in the community. However, the HAZs also assumed a community development role, based on the idea that no progress could be made in changing lifestyles without community involvement and ownership. A contradiction was therefore built into the concept of a HAZ right from the start: there was an emphasis on community ownership, but the expected health outcomes and measures of improvement were defined in advance by Government[1].

In 2000 and 2001, we were commissioned by the Manchester, Salford and Trafford Health Action Zone (HAZ) to support capacity building for evaluation in the Greater Manchester region. The idea was to support local organisations (statutory agencies, voluntary organisations and community groups with an interest in health issues) in exploring how they could use evaluation to improve their work. The HAZ was explicitly aware of the contradiction between community ownership and centrally determined measures for success, and were clear that we should put community participation first. Therefore, the remit was to find out what the various organisations and groups wanted in terms of evaluation support, and then provide this in a series of 'learning events'. The whole of the project has been written up in the form of a final report[2]. This includes details of our methodology, and evaluations of our work by the participants. There is also a project web site, and the report can be downloaded from this: www.nwpho.org.uk/haze

The paper you are now reading is an edited version of a hand-out prepared for people attending one of our learning events. It was clear from our initial work with agencies and community groups that participation was highly valued, and yet most people had no knowledge of participative evaluation approaches. Also, most people made the assumption that evaluation must involve setting goals and then measuring (usually in quantitative terms) whether these have been achieved. This certainly is the most common form of evaluation, and can be useful. However, it is often problematic when there is disagreement between stakeholders on what the goals should be; when the situation is messy and it is unclear what the group or organisation should be doing; or when the goals of the organisation keep changing. These are the kinds of situations that many people said that they faced, and they were therefore sceptical (justifiably so, in our opinion) about the appropriateness of traditional evaluation methods. Our learning event therefore focused on introducing people to three very different participative approaches to evaluation. After a short presentation based on the contents of this paper, people worked in teams on a series of exercises designed to support them in looking at the relevance and applicability of

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1   See Vega (1999) for a penetrating analysis of this contradiction. It is apparent in many health improvement initiatives throughout the world.

2   The report is authored by Boyd *et al* (2001). There is also a follow-up report (Boyd, 2002) making recommendations for future capacity building activities.

the approaches in their own local situations. Anonymous feedback suggests that both the evaluation approaches and the learning event in which they were introduced were highly valued by participants[3].

1. The Three Approaches

Our starting point is that no single method of evaluation so far devised can provide the necessary flexibility and responsiveness to meet everybody's needs. However, by bringing a set of quite different methods together, flexibility and responsiveness can be enhanced. We have identified three broad types of evaluation, and we call these 'goal based', 'stakeholder' and 'organisational'[4]. These are general frameworks, and any number of specific methods can be used at different stages during their implementation.

Goal-based evaluation is where organisational goals are set; measures are devised; data is collected; and then an analysis is conducted to find out whether the goals are being achieved. The findings may indicate the need to continue as planned, or to revise the goals and enter into a new cycle of devising measures and collecting data. Specific methods used under the banner of goal-based evaluation include surveys employing structured questionnaires, and scientific (controlled) studies[5].

Stakeholder evaluation does not ask you to pre-set organisational goals. Rather, the views of stakeholders are sought in order to find out about their expectations and experiences. Evaluation of this kind may be integrated into a participatory planning process. Alternatively, the results from evaluations may be fed into a separate planning forum. Stakeholder evaluation may be conducted for its own sake, or to inform goal-setting, thereby ensuring that the goals of an organisation (and the measures used to evaluate achievement) are sensitive to the views of key people and organisations in the community. Methods used under the heading of stakeholder evaluation include whole system events[6], focus groups, critical systems heuristics[7], strategic assumption surfacing and testing[8], soft systems methodology[9], strategic choice[10], interactive plan-

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Qualitative data may be collected too, but to set targets and see whether they have been achieved often requires qualitative information to be translated into quantitative. If the severity of complaints is more important than the number of them (which is often the case), then a way to make the data quantitative is to rate severity on a scale of 1-7. In some circumstances this translation of qualitative into quantitative will be perfectly acceptable, but in others it will not be. Chances are, if it is not acceptable for any reason, you need another form of evaluation. It is not advisable to 'force' qualitative information into an inadequate quantitative framework.

6   Whole system events bring a wide range of stakeholders (sometimes thousands) into a single space to explore issues. See, for example, Owen (1997) and Pratt *et al* (1999).

7   This is a method which asks generic questions about what currently *is* the case and what *ought* to happen. See Ulrich (1993).

8   A method for evaluating polarised positions and moving towards a consensus (Mason and Mitroff, 1981).

9   An approach that enables dialogue and learning in messy, unclear situations (Checkland and Scholes, 1990).

10 Strategic choice (Friend and Hickling, 1987) embraces a whole host of methods for planning and evaluating under conditions of uncertainty.

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3   See our final report (Boyd *et al*, 2001) for details.

4   These have been distilled from research conducted by Gregory and Jackson (1992a,b). They were developed and applied in the early 1990s in a self-evaluation project run by the National (and a number of local) Councils for Voluntary Service (in partnership with the Centre for Systems Studies at the University of Hull). Since then, the HAZE Team has further elaborated them.

5   Mostly these are quantitative methods. For example, in looking at complaints from service users, you might focus on reducing the number of complaints received.

ning[11], value clarification and participatory appraisal[12].

Organisational evaluation asks you to assess organisational structures and communication patterns against a model of good practice. This model may be another, similar service organisation viewed as particularly successful, or it may be drawn from the management literature. The purpose of organisational evaluation is to enhance the efficient and effective pursuit of whatever goals the organisation has set for itself. Methods used under the banner of organisational evaluation include benchmarking and viable system diagnosis[13].

Of course, there are many different competing approaches to evaluation within the three types, and a plethora of methods have been developed. However, it is useful to identify these general frameworks because it allows us to ensure that elements from all three are included in our evaluation tool kit.

For more details of how to implement these three approaches, see the flow diagrams in Figures 1, 2 and 3. In these Figures, the rectangular boxes contain actions to be taken; the arrows indicate where one action should lead onto another; and the small diamonds represent decision points where a direction needs to be chosen from two or more alternatives. Below, narratives taking you through the flow diagrams are provided.

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11 Interactive planning (Ackoff, 1981) is focused on freeing people's minds from unnecessary constraints so they can think more creatively about what ought to happen.

12 Participatory appraisal generates speedy evaluation results by engaging people where they are living and working, using methods that are not dependent on literacy (Chambers, 1997).

13 Viable system diagnosis offers a systems model of high-quality organisational communication and control. For the original literature on this, see Beer (1985).

2. Goal-Based Evaluation

Figure 1 presents a flow diagram showing typical stages to go through to conduct a goal-based evaluation. Start by defining a general goal. An example might be "ensuring equal access to services for all sectors of the community". The next step is to translate the goal statement into a set of objectives. For instance, the goal of equal access could be translated into objectives like ensuring a gender balance, increasing the proportion of disabled people who use a service, etc. Indicators (measures) then have to be chosen. For example, whether or not a gender balance has been achieved might be measured by looking at the proportion of men to women accessing a service over a period of a year. You might stipulate that there should be a 50:50 balance, give or take 10% either way. Similarly, if your objective is to increase access by disabled people, a target for this (in terms of a proportion of the total clients) might be set.

Then you pursue your objectives (e.g., take action to improve equal access to services). To see whether you have been successful, or are at least moving in the right direction, data should be collected and actual performance assessed against the targets that have already been set. Sometimes you will find that your objectives are being met, and there is no problem. However, in many instances there will be discrepancies. In our view, at this point it is vital to consult stakeholders on the reasons for these. This consultation should feed into a review of the whole process. Questions that can be asked in the review might include, were we pursuing the right goal? Were we pursuing the right objectives? Were we using the right measures? Have any new issues cropped up suggesting the need for new goals and objectives? Etc. Finally, when you have either revised your goals, objectives and measures, or have

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FIGURE 1: GOAL-BASED EVALUATION
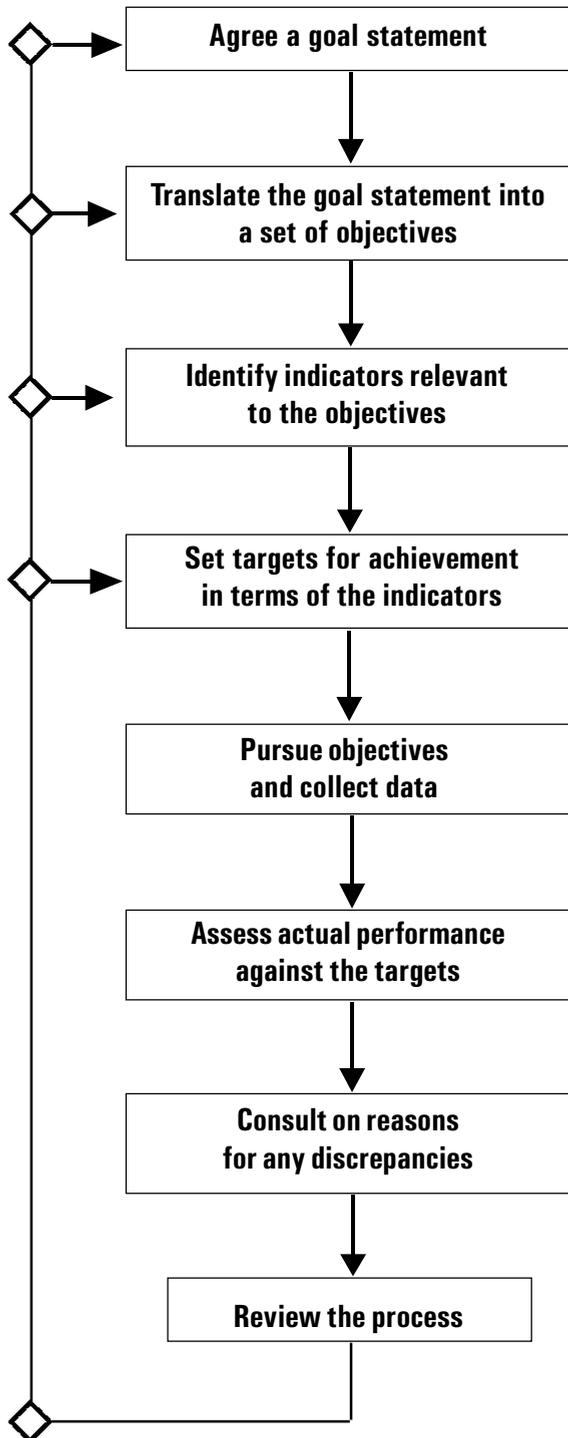
defined new ones, go back to the beginning and start again.

3. Stakeholder Evaluation

Figure 2 offers a flow diagram to help you implement stakeholder evaluation. There are actually two 'paths' through this, one flowing down the left-hand side of the page and the other down the right. We'll take the left-hand path first.

The starting point is to identify key stakeholders.[14] Remember that you do not want to pre-judge what the relevant issues are, so you need to surface stories about services, or people's experiences, by asking very general questions. Provide as little initial direction as possible: for example, asking a specific question like "what is your experience of nurses on this ward?" might make you miss the fact that the catering service is giving rise to problems. Once you have a set of stories, it is the analysis of these that will tell you what should be changed. There are a number of things to look for. Examples might be recurrent expressions of the same views (if these are negative, it might signal a persistent or recurring problem); ideas for change (learn from your stakeholders); and instances of outstandingly good or bad practice which might signal the need for action.

Once the key issues become clear, design and then implement appropriate changes in policies and practices. After this, the process can be reviewed (preferably in partnership with other stakeholders), new stakeholders can be identified, and more stories can be collected. It is important to note that, at any time during the above process, one can cycle back—for instance, to identify fresh stakeholders if the stories suggest that key people have been missed.

Now let us follow the right-hand path. Again, start by identifying key stakeholders. Depending on whether or not open communication seems possible, you might want to bring all the stakeholders together in a single workshop, or it might be best to work with different categories of people separately (e.g., a user group, a staff group, a volunteers group, etc.).

When you have people in their groups, you need to explore their views about what *is* happening and what *ought* to happen. It is useful to try to encourage learning between people and move towards agreement, but don't try to *force* an agreement if one is not forthcoming: doing this invariably results in some stakeholders (usually those in less powerful positions) becoming marginalised. When you have surfaced views about the 'is' and the 'ought', compare them. This will tell you what the key issues are in the eyes of your stakeholders. You can then design and implement activity plans[15] before reviewing the whole process. Again, you might need to cycle back at some points to identify new stakeholders, revise the 'is' or the 'ought', etc.

4. Organisational Evaluation

Figure 3 describes organisational evaluation. Again there are two 'paths' through this, and we'll start with the left-hand one.

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14 Conventionally, a stakeholder is someone involved in, or affected by, an organisation's activities. However, Midgley (2000) suggests that only consulting those already involved or affected can lead to overly-conservative evaluation results. Rather, the definition of a stakeholder needs to be expanded to encompass those who one thinks *ought* to be involved or affected. Consulting these extra stakeholders can surface some very different perspectives.

15 'Conceptual modelling' from Soft Systems Methodology (Checkland and Scholes, 1990) is a good method for this.

FIGURE 2: STAKEHOLDER EVALUATION
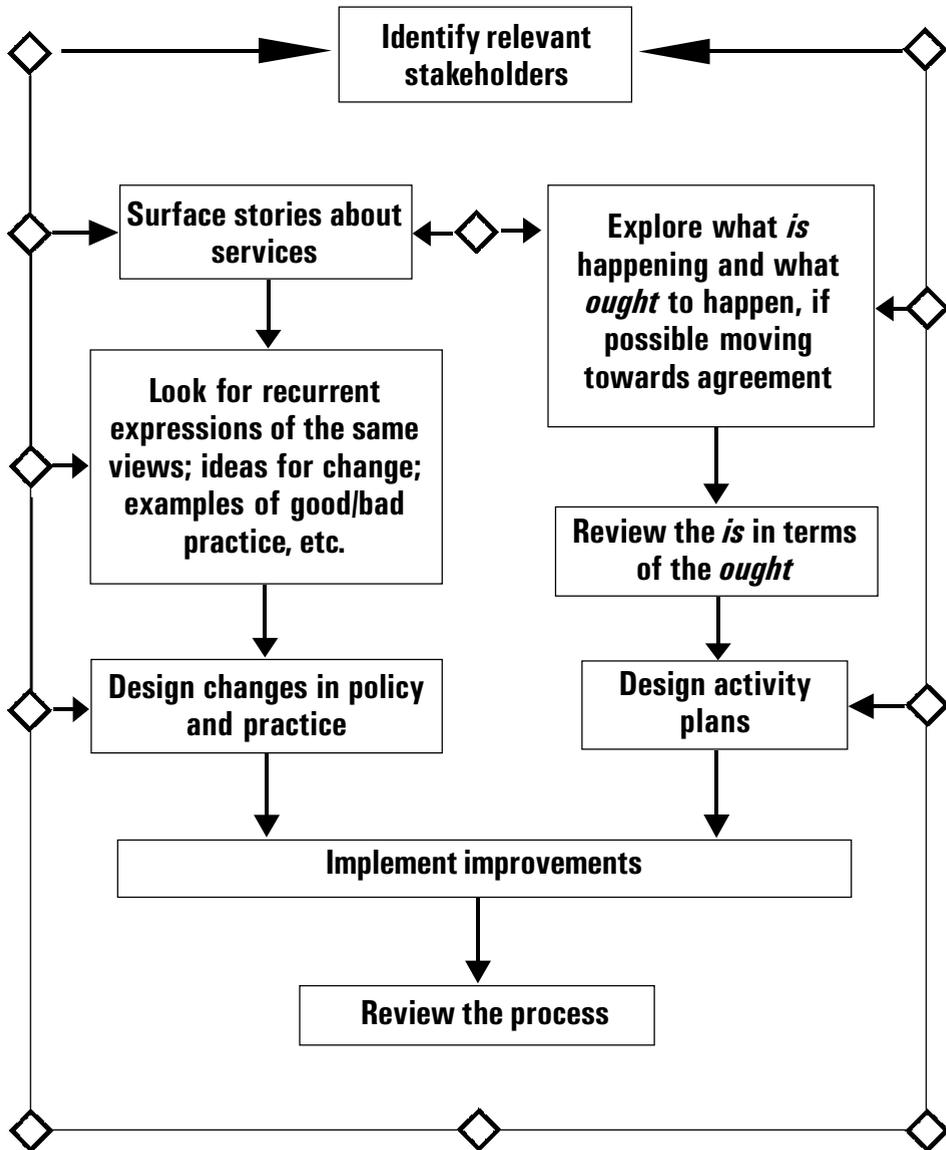
You start by appointing an evaluation team with relevant expertise. This is because, while some organisational evaluation methods can be implemented by people with very little training, others require some specialist knowledge of good practice in organisational design.

The left-hand path is basically about *benchmarking* your organisation's activities against those of another organisation. Here you need to select an existing model of good practice to use as a comparator—it could be a service you want to emulate, or an organisation that you know functions very well and you believe you can learn from. Importantly, however, you need to review this comparator in relation to your own local needs: it is a common mistake to think that good practice can simply be replicated mechanically in a new context. Contexts are invariably different from one another, and therefore the model of good practice needs to be *adapted*. Note that benchmarking rarely works in highly competitive scenarios: if your competitor knows that you are using him/her as a benchmark, this is likely to provoke him/her into further improving his/her own performance, so you will never catch up! However, benchmarking is useful in more co-operative scenarios.

Once you have a model that you think will work for you, which after adaptation should be different in some measure from the original comparator, systematically review your own organisation against it. Then report back. You may find that the systematic review raises previously unanticipated issues: for instance, while you might like one feature of the model of good practice (say, the communications between front-line workers and clients), you may dislike another aspect (perhaps the management structure). Thinking about these issues will enable you to cycle back and further modify the model in relation to your own local needs.

Now let us look at the right-hand path. This is basically the same as the above, but instead of selecting a real comparator, you take a model of good practice from the management literature. One particular model of effective organisation that we have successfully used ourselves on several occasions is the viable system model (see footnote 13).

5. Creating a Flexible and Responsive Evaluation Practice

It is possible to synthesise all three types into a larger method: a *stakeholder* evaluation can lead to the setting of community-sensitive goals, the achievement of which can be measured through *goal-based* evaluation, and pursuit of the goals can be enhanced by *organisational* evaluation. There is a logical sequence to this ordering which ensures a primary focus on the community of stakeholders whom the organisation serves and interacts with, and then everything else flows from this. However, it is also possible to draw upon goal-based and organisational forms of evaluation without conducting a prior stakeholder evaluation if pressures of time and resources demand this, or it is obviously the case that the organisation's goals are uncontroversial.

6. Systemic Evaluation

We talk in terms of a *systems* approach because we believe it is vital, when conducting any kind of evaluation, to consider the 'whole system' in which the service is embedded, and the consequences of this embeddedness for both the organisation and the community it serves. For instance, if an organisation's relentless pursuit of a controversial goal causes problems for others, there will inevitably be a negative reaction within the community or from other

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FIGURE 3: ORGANISATIONAL EVALUATION

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                    ┌──────────────────────────┐
        ┌──────────▶│  Appoint an evaluation    │◀──────────┐
        │           │  team with relevant       │           │
        │           │  expertise                │           │
        │           └──────────────────────────┘           │
        │                        │                          │
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        │ Select an existing │       │ Select an ideal    │
        │ model of good      │       │ model of good      │
        │ practice           │       │ practice           │
        └────────────────────┘       └────────────────────┘
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        │ Modify in relation │       │ Translate in terms │
        │ to local needs     │       │ of local needs     │
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        ┌──────────────────────────────────────┐
        │ Review the organization against       │
        │ the model of good practice            │
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                 │   Report back    │
                 └──────────────────┘
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                 ┌──────────────────┐
                 │ Review the process│
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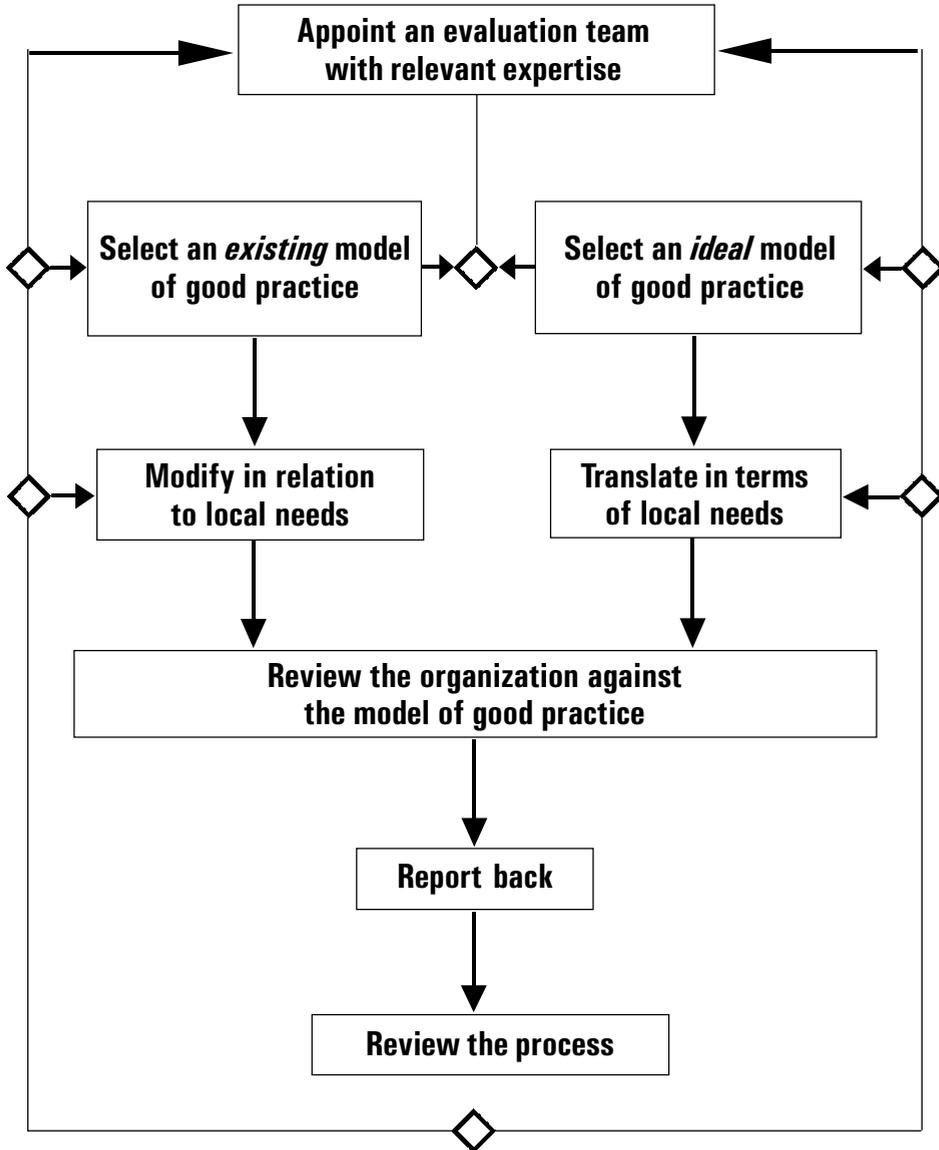
organisations. Also, it is essential to be aware that, in defining the boundaries of a 'whole system', it is possible for people and issues to be marginalised or excluded (in this sense, no system is ever truly 'whole'). Marginalisation may take many forms, including neglect of the views of service users and/or peripheral organisations; cultural bias in service delivery; inaccessibility for disabled people; the use of methods (e.g., telephone interviewing) that exclude the poorest from consultation, etc. In our view, *the essence of the systems approach is reflection on boundaries, countering marginalisation, and ensuring social inclusion*.[16]

Let us look at the implications of this for the three forms of evaluation already mentioned:

A systemic *stakeholder* evaluation will carefully consider the question, 'who are our stakeholders?' and will do whatever is necessary to ensure that marginalised sections of the community are able to contribute their views. It will also address conflict between stakeholder views in a participative manner that is respectful of the particular needs of marginalised groups.

A systemic *goal-based* evaluation will, wherever possible, base goals on stakeholder views (including views from marginalised groups) evolved through participative processes. If participation is not possible, then a second-best option is to ask managers to set goals, explicitly taking into account the concerns of marginalised stakeholders.

A systemic *organisational* evaluation will do two things. First, it will make sure that the organisation is pursuing the right goals (in the eyes of key stakeholders) before seeking to enhance efficiency and effectiveness. Second, it will make sure that whatever model of good practice is used as a comparator is actually appropriate for the local context, taking into account the needs of marginalised sectors of the community.

Conclusion

In concluding this short paper, we want to emphasise that, while many evaluation approaches have been developed for different purposes, no one approach can do everything. For this reason, it is useful to bring different types of evaluation together to create a flexible tool kit. We have identified three approaches called 'goal-based', 'stakeholder' and 'organisational' evaluation. These are essentially frameworks upon which you can hang any number of specific methods. They can be operated independently or can be related together.

However, regardless of whether these approaches are used separately or together, in our view it is important to conduct evaluations *systemically*—reflecting on boundaries, countering marginalisation, and ensuring social inclusion. In this way, when evaluations feed back to inform practice, organisations will be able to take account of the effects being experienced by others, resulting in activities that are of much greater benefit to the wider community than they might otherwise have been.

References

Ackoff, R.L., 1981. *Creating the Corporate Future*, Wiley, New York.

Beer, S., 1985. *Diagnosing the System for Organisations*, Wiley, Chichester.

Boyd, A., 2002. *Capacity-Building for Evaluation: Follow Up Report to the Haze Project*, Centre for Systems Studies, Hull.

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16 This account focuses primarily on systems *principles*, and two books that go into more detail are Ulrich (1983) and Midgley (2000). For some books which concentrate more on methods, see Rosenhead (1989), Flood and Jackson (1991) and Taket and White (2000).

Boyd, A.; Geerling, T.; Gregory, W.; Kagan, C.; Midgley, G.; Murray, P. and Walsh, M., 2001. *Capacity-Building for Evaluation: Report on the Haze Project to the Manchester, Salford and Trafford Health Action Zone*, Centre for Systems Studies, Hull.

Chambers, R., 1997. *Whose Reality Counts? Putting the Last First*, Intermediate Technology Publications, London.

Checkland, P.; Scholes, J., 1990. *Soft Systems Methodology in Action,* Wiley, Chichester.

Flood, R.L.; Jackson, M.C., 1991. *Creative Problem Solving: Total Systems Intervention*, Wiley, Chichester.

Friend, J.K.; Hickling, A., 1987. *Planning under Pressure: The Strategic Choice Approach,* Pergamon, Oxford.

Gregory, A.J.; Jackson, M.C., 1992a. Evaluating organizations: A systems and contingency approach, *Systems Practice*, 5, 37-60.

Gregory, A.J.; Jackson, M.C., 1992b. Evaluation methodologies: A system for use, *Journal of the Operational Research Society*, 43, 19-28.

Mason, R.O.; Mitroff, I.I., 1981. *Challenging Strategic Planning Assumptions*. Wiley, New York.

Midgley, G., 2000. *Systemic Intervention: Philosophy, Methodology, and Practice*, Kluwer/Plenum, New York.

Owen, H., 1997. *Open Space Technology: A User's Guide*, 2nd Edition. Berrett-Koehler, San Francisco.

Pratt, J.; Gordon, P.; Plamping, D., 1999. *Working Whole Systems*, King's Fund, London.

Rosenhead, J., (ed.) 1989. *Rational Analysis for a Problematic World*, Wiley, Chichester.

Taket, A.; White, L., 2000. *Partnership and Participation*, Wiley, Chichester.

Ulrich, W., 1993. *Critical Heuristics of Social Planning: A New Approach to Practical Philosophy*, Wiley, Chichester.

Vega, R., 1999. *Health Care and Social Justice Evaluation: A Critical and Pluralist Approach*, Ph.D. Thesis, University of Hull.