

Evaluation and stakeholding development

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Abstract

Drawing on a significantly updated version co-authored by Reynolds and the originator of Critical Systems Heuristics (CSH), Werner Ulrich, CSH is regarded as part of a 'systems thinking in practice' framework for evaluating complex situations from different stakeholder perspectives. The situation under evaluation (e.g. a purposeful activity like a report, programme or project etc.) is framed as a reference system in CSH by a toolbox comprising four sets of questions evaluating (1) built-in values, (2) power structures, (3) expert assumptions, and (4) the moral basis on which an intervention operates as considered from the perspective of both intended beneficiaries and victims. This paper describes how CSH and the underpinning methodological process of boundary critique makes a contribution to Michael Patton's ideas on developmental evaluation. The focus here is on stakeholding development. CSH addresses three evaluation questions. It maps out (i) what's at stake in relation to (ii) who the stakeholders are - including intended beneficiaries, decision makers, experts, and 'victims' (those affected by but not involved with what is being evaluated). CSH further addresses questions of (iii) stakeholding issues as key problems anticipated for each stakeholder group. The metaphor of 'conversation' is used to describe how boundary critique helps the process of stakeholding development as against stakeholding entrenchment.

Keywords: boundary critique, critical systems heuristics, developmental evaluation, stakeholding development, systems thinking in practice

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Introduction

“*Stakeholding* expresses the idea that individuals *actively construct*, promote and defend their stake” (SLIM 2004 p.1) original italics

In Drentsche Aa – a designated National Landscape area in the Netherlands – an official deliberative platform (or forum) to represent stakeholders was established with the aim to develop a management plan for the area. After many meetings, the forum appeared to make little progress:

“One of the platform members, in frustration with the official process, has set up an informal multistakeholders’ group. They call themselves ‘cake bakers’, developing new recipes together, to distinguish themselves from the ‘cutting up of the cake’ deals that seem to characterise the official platform process.”

(SLIM 2004 p.2)

Stakeholding development is about making cake. Evaluating a project, program or any other kind of purposeful activity can often appear like an external judgement on how well associated stakeholder groups preserve rather than develop their stakeholdings. This paper makes the case for evaluation as stakeholding development (‘making cake’) as distinct from stakeholding entrenchment (‘cutting up the cake’). It forms part of a rich and growing tapestry of ideas associated with developmental evaluation (Westley, 2006; Patton, 2010) which attempts to go beyond the divide between summative and formative evaluation (Scriven, 1967).

The evaluation tool introduced here for promoting stakeholding development is based upon a heuristic called systems thinking in practice – the namesake of a postgraduate programme of study devised with colleagues at the UK’s Open University. Systems thinking in practice appreciates systems as conceptual constructs – ideas or more precisely, systems of interest – devised and/or subscribed by stakeholders, but distinguished from real world situations of interest. The systems thinking in practice heuristic can be regarded as an interplay of three activities, originally described as part of a critical systems framework (Reynolds, 2008a): (i) getting the bigger picture, (ii) engaging with multiple perspectives, and (iii) reflecting on the inevitable partiality of (i) framing a big picture, and (ii) exercising bias towards particular perspectives. Each of the three activities is associated with an entity – firstly, the context of real world *situations* of interest, secondly, *stakeholders* associated with any particular situation of interest, and thirdly *systems* of interest or conceptual ideas used by stakeholders for improving the situation (Fig.1).

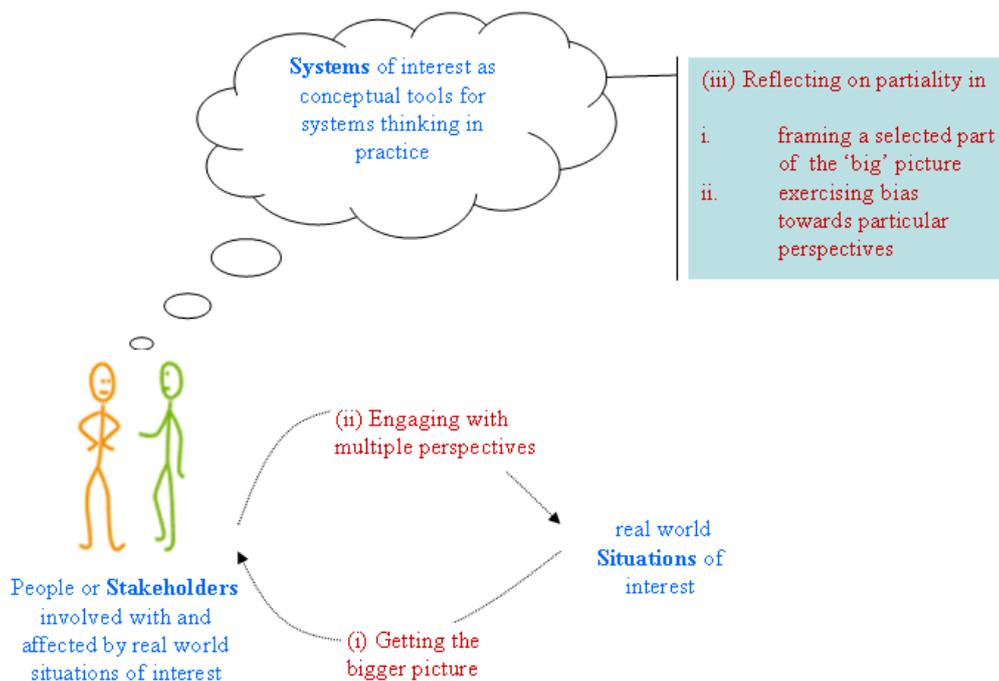


Figure 1 Systems thinking in practice heuristic
(adapted from Reynolds and Holwell, 2010a p.7)

Critical systems heuristics (CSH) as originally developed by Werner Ulrich (1983; 1996; 2000; 2002; 2003) provides a reference system of interest to facilitate stakeholding development as a constituent part of evaluation. CSH makes practical the systems ideas of Churchman (1979) in the tradition of practical philosophy drawing particularly on, and developing a critique of, discourse theory (cf. Habermas, 1972; 1984). The process of enacting CSH is described by Ulrich as a process of boundary critique (Ulrich, 2002). In this paper I describe evaluation and boundary critique in terms of the systems thinking in practice heuristic; a description that likens evaluation to a continual process of 'conversation'. Next, the twelve questions of CSH as a reference system of interest are described and three creative tensions of conversation explained. A short case study report on an developmental evaluation project is then given. The initial description of boundary critique and CSH is exemplified through a rough sketch evaluation of an international issue of concern - climate change reporting as undertaken by the United Nation's scientific body, the IPCC (Intergovernmental Panel on Climate Change). The ensuing case study briefly summarises an actual project dealing with a related theme in evaluating possibilities of improved expert support for environmental planning.

Evaluation as conversation: boundary critique

In a keynote address at the EES conference in Prague, Jennifer Greene invited delegates to consider evaluation as a form of professional 'conversation'. Evaluators were envisioned as taking a leadership role in fostering conversation amongst stakeholders in order to prompt new hope and new opportunities. She suggested that conversation between multiple stakeholders can be facilitated through multiple methods – quantitative and qualitative – and contrasting approaches – summative and

formative.² Conversation is a metaphor associated with systems thinking in practice. A systems conversation may operate on two levels: one, a reflective epistemological conversation between individuals and the situation being evaluated; two, an actual discursive conversation amongst stakeholders involved with and affected by the process of evaluation. In both cases reference ‘systems’ are used as mediators of conversation.

Any conversation associated with an evaluation invokes three questions:

- (a) What is at stake?
- (b) Who are the stakeholders?
- (c) What possibilities exist for improving stakeholdings?

These can be aligned respectively with the three entities associated with a systems thinking in practice heuristic – situations, stakeholders and systems – as depicted in Figure 1. So what might these look like in a real world example? At the time of writing the beleaguered head of IPCC, Rajendra Kumar Pachauri, the UN climate science body which had previously received the Nobel Peace Prize in 2007, was defending his position and the IPCC against claims of failure on two counts: one for inaccurate forecasting regarding the melting of Himalayan glaciers, and another for presiding over scandals in email exchanges at the East Anglia climate research unit purporting to downplay evidence challenging ideas of anthropogenic climate change. Firstly then, questions on what’s at stake with the complex IPCC reporting on climate change may focus on the realities of climate change; how much and to what degree is climate change a reality, and what are the implications? Secondly, there are questions regarding agency and the key stakeholders involved and affected; in particular who might constitute beneficiaries of climate change reporting, who might be the key decision makers associated with affecting and/or denying anthropogenic global warming, who might constitute expert advisors (sceptics and advocates), and who may be victims? Thirdly, there are questions to be asked of systems – as conceptual constructs - that appear to perpetuate existing stakeholding entrenchment (inequities amongst different stakeholders, particularly with respect to disparate energy consumption and ecological footprints) and opportunities for developing alternative systems that may challenge and change conventional ways of thinking about issues of climate change.

Evaluating a report on climate change or any situation of interest involves making value judgements regarding some aspect of reality. The value judgements made will depend upon the aspect of reality being focused upon in the situation and the different stakeholders associated with that situation. These two factors – the situation and the stakeholders - effectively circumscribe any evaluation. They inform the boundary judgements or ‘systems’ used to evaluate situations.

The relationship between systems, stakeholders, and situations is captured by Ulrich’s notion of boundary critique as an eternal triangle of interplay between judgements of ‘fact’, value judgements, and boundary judgements:

² ‘Engaging with politics, pluralism and the public good through mixed methods evaluation’ Keynote address by Dr Jennifer Greene on 6th October 2010 at 9th European Evaluation Society International Conference October 6-8, 2010, Prague, Czech Republic

“Thinking through the triangle means to consider each of its corners in the light of the other two. For example, what new facts become relevant if we expand the boundaries of the reference system or modify our value judgments? How do our valuations look if we consider new facts that refer to a modified reference system? In what way may our reference system fail to do justice to the perspective of different stakeholder groups? Any claim that does not reflect on the underpinning ‘triangle’ of boundary judgments, judgments of facts, and value judgments, risks claiming too much, by not disclosing its built-in selectivity” (Ulrich, 2003 p.334)

Disclosing the built-in selectivity corresponds to reflecting on the partiality of systems thinking in practice (see Fig.1). Figure 2 compares this triadic process of interplay - 2(b) - alongside the systems thinking in practice heuristic adapted for purposes of evaluation – 2(a).

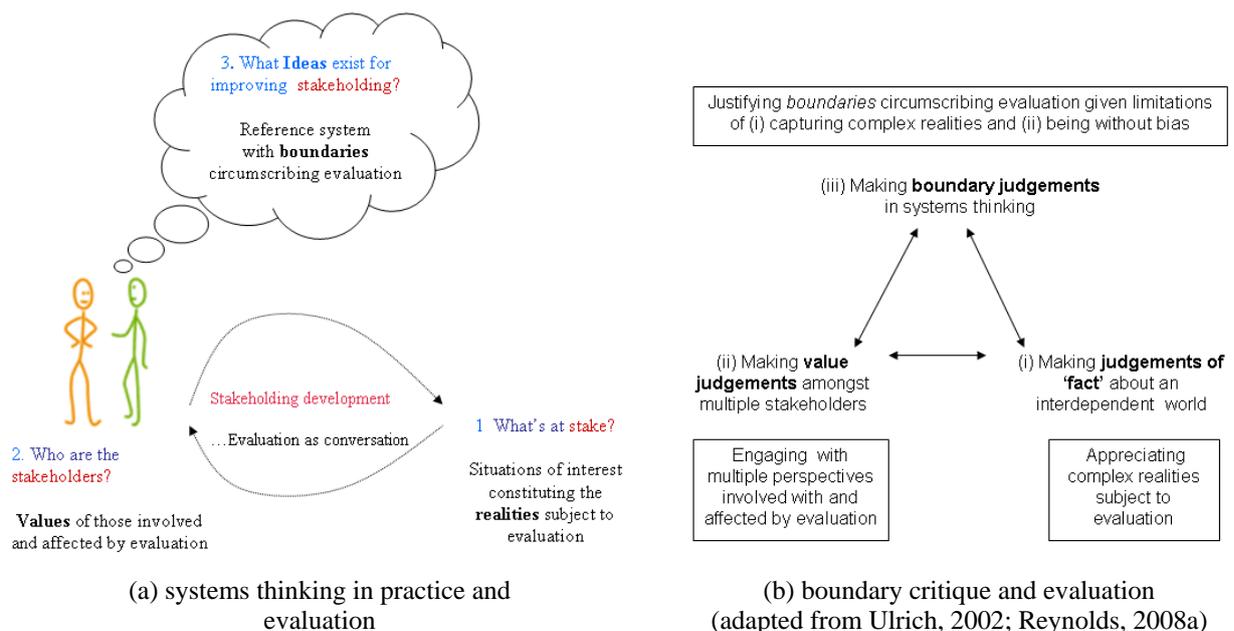


Figure 2 Evaluation, systems thinking and boundary critique

The eternal triangle of boundary critique presents a rich systemic dimension of continual interplay. The dynamic interplay between the three domains of boundary critique informs how different stakeholders perceive their stakeholding in a situation as being either something entrenched – with fixed boundaries essentially to protect, or something more opportunistic – with changing boundaries to develop. Boundary critique reminds us not to be complacent in evaluating an understanding of a situation. Instead we should be alert to changing circumstances regarding the situation (the

‘facts’) – for example, with the changing science of climate change - and our own internal changes for evaluating the situation (our ‘values’) – for example, change in juxtaposing between economic, social, and environmental values . In turn, such judgements inform and are informed by change in our framing devices (our boundary judgements) – for example, regarding climate change as a constituent part of a system for wider planetary well-being is different from regarding climate change as instrumentally effecting constituent parts of a system of environmental services. Such change in systems thinking can effect change in evaluating the situation.

In order to evaluate what’s at stake for various stakeholders and to evaluate possibilities of stakeholding development, some common reference system is required against which to make sense – *common* sense - of the situation being evaluated. CSH offers such a reference system.

Evaluation as conversation: CSH questions

The CSH reference system richly addresses aspects of value, power, knowledge and ethics. CSH enables a systematic unfolding of boundary judgements associated with any system of interest. The twelve bounded categories are grouped into four groups of three according to sources of influence – (1) motivation, (2) control, (3) expertise, and (4) legitimacy.

The CSH questions are also grouped as three category-sets of questions – social role, role-concerns, and key problems. I have rephrased these category sets in terms of (i) stakeholders, (ii) stakes, and (iii) stakeholdings respectively (Reynolds, 2008b p.773; Ulrich and Reynolds, 2010 p.244). Table 1 illustrates these categories of boundary judgement in terms of twelve questions (CSHq1-12). Each question is asked in both the normative ‘ought’ mode and the descriptive ‘is’ mode. By way of illustration some indicative responses to each question are presented in relation to evaluating climate change reporting as undertaken by the IPCC.

Table 1 Critical systems heuristic questions as stakeholders, stakes and stakeholdings and indicative responses associated with a system for reporting climate change (from Ulrich and Reynolds, 2010 p.244, adapted from Ulrich, 1996)

Boundary judgements informing a system of interest (S) e.g., a system for reporting climate change as carried out by Intergovernmental Panel on Climate Change (IPCC)				
	Stakeholders <i>Social Roles</i>	Stakes <i>Specific concerns</i>	Stakeholdings <i>Key Problems</i>	
Sources of motivation	CSHq1. <u>Beneficiary</u> who ought to be /is the client or beneficiary of the system (S) e.g., vulnerable groups affected by climate change	CSHq2. <u>Purpose</u> what ought to be /is the purpose of S e.g., to inform relevant policy making at different levels	CSHq3. <u>Measure of success</u> what ought to be/is S's measure of improvement? e.g., effective policy independent of prevailing power interests and/or technological interests	The involved
Sources of control	CSHq4. <u>Decision maker</u> who ought to be/is in command of resources necessary to enable S? e.g., publically -accountable politicians from contrasting economically positioned nations	CSHq5. <u>Resources</u> what ought to be /are necessary relevant components ('capital') to secure improvement? e.g., financial, social and human capital to ensure independent reporting	CSHq6. <u>Decision environment</u> what relevant conditions ought to be /are outside the control of the decision maker? e.g., external watchdogs including other experts and relevant pressure groups	
Sources of knowledge	CSHq7. <u>Expert</u> who ought to be/is providing relevant knowledge and skills for S? e.g., quality-assured independent scientists (natural and social) and relevant non-science based experts	CSHq8. <u>Expertise</u> what ought to be/ are relevant knowledge and skills supporting S? e.g., disciplinary (economic, social, political, biophysical...) and interdisciplinary skill-sets	CSHq9. <u>Guarantor</u> what ought to be/ are regarded as assurances (& false assurances) of successful implementation? e.g., transparency of reporting; wide ranging expert input; peer review; cross-disciplinary review	
Sources of legitimacy	CSHq10. <u>Witness</u> who ought to be /is representing the interests of those negatively affected by but not involved with S? e.g., sceptics of, and advocate activists against, anthropogenic global warming	CSHq11. <u>Emancipation</u> what ought to be/are opportunities for the interests of those negatively affected to have expression? e.g., transparent, publically-accessible findings	CSHq12. <u>Worldview</u> What space ought to be /is available for reconciling contrasting worldviews regarding S among those involved and affected? e.g., free and open press coverage and open forum for public and expert deliberation	The 'affected'

Stakes are the core interests or concerns associated with a particular *stakeholder* group relevant to a specified system. Using CSH as a reference system, the emphasis moves from one of identifying 'stakeholders' in an undefined *situation*, towards a focus on 'stakes' associated with a more clearly defined process of reflection on the *system* of interest. Any CSH reference system is defined in the first instance by 'purpose' (CSHq2).

An ideal mapping involves answering each question in the ought mode with a sequencing of questions for each stakeholder source of influence beginning with what's at stake, followed by who are the stakeholders, followed by what stakeholding

issues are associated with the stakeholder group source of influence. Figure 3 illustrates this sequencing process.

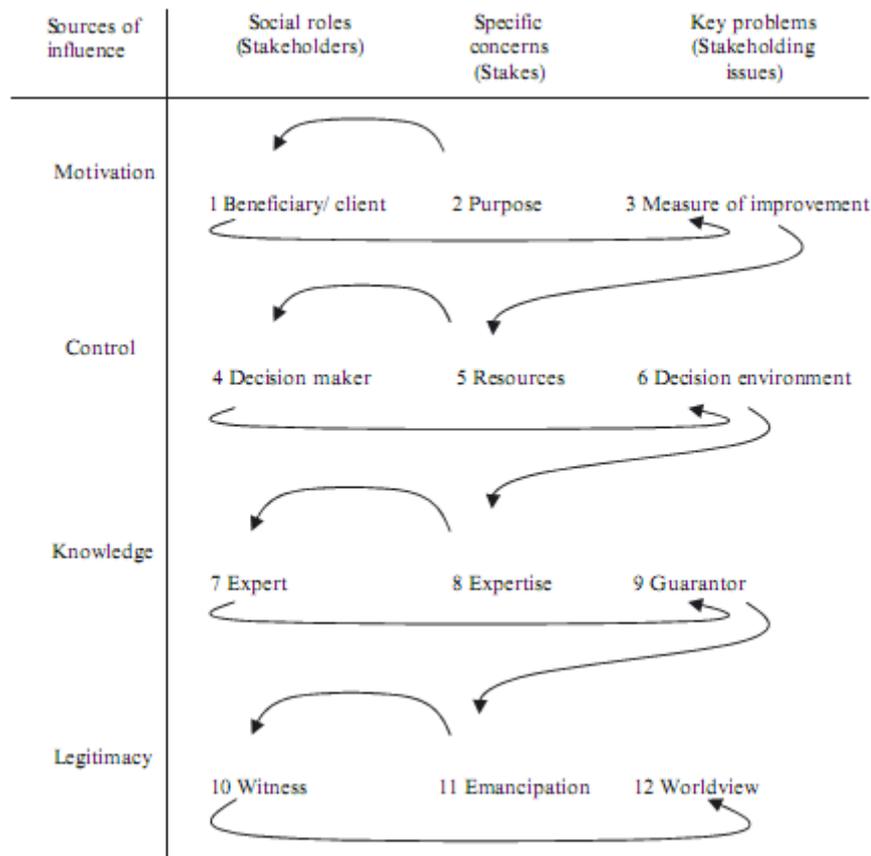


Figure 3 : Unfolding categories of a CSH reference system (from Reynolds, 2007, p. 106)

A stakeholder evaluation from a systems perspective based on boundary critique must continually question boundaries of the purposeful system being evaluated, beginning with the first boundary question regarding ‘purpose’. This properly identifies the context for evaluation. From this contextual starting point further boundary questions beckon as to ‘who’ the primary stakeholders might be (intended beneficiaries), before examining the particular stakeholding problem (identifying appropriate measures of success). This can then prompt a similar sequence of unfolding boundary questions associated with the three other stakeholder groups as illustrated in Figure 3. For each stakeholder group there is an internal dynamic beginning with questions on what is at stake, who the stakeholders are, and what stakeholding issue is manifest.

In the most recent exposition of boundary critique (Ulrich and Reynolds, 2010), two forms are delineated. Boundary reflection focuses on an understanding of the judgements made in real world situations of interest from different stakeholder perspectives. Boundary discourse focuses on the more difficult processes of making judgements amongst stakeholders associated with a situation of interest. The two forms can be aligned with processes of summative and formative evaluation

respectively as originally described by Micheal Scriven in the 1960s. Significantly the process of boundary critique described by Ulrich and Reynolds and underpinning systems thinking in practice incorporates both approaches as integral to evaluation; an example of the type of developmental evaluation promoted by Micheal Quinn Patton (2010).

Figure 4 illustrates the use of CSH as a reference system for evaluation through the process of boundary critique.

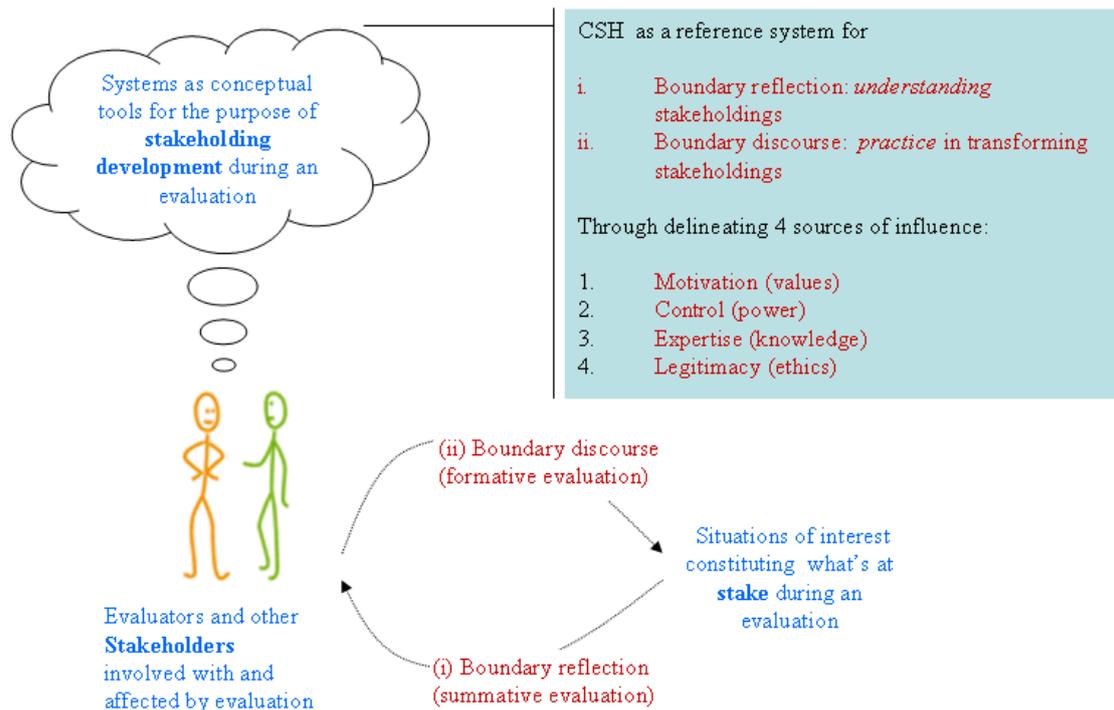


Figure 4 CSH as a reference system for evaluating stakes and stakeholdings (adapted from Reynolds, 2008a, and Reynolds and Holwell, 2010)

Evaluation as conversation: 3 creative tensions in CSH

Any good conversation comprises an element of creative tension or uncertainty. Unlike 'lecturing' where information is simply conveyed in one direction, we may never know for certain just what may emerge from a good conversation. The same is true in good 'developmental' evaluations as encapsulated in the title of a book covering similar ideas 'Getting to Maybe' (Westley et. al., 2006). Three dimensions of tension between the conceptual systems domain – the mediating language or lingua franca of conversation in systems thinking in practice - and the real world situation domain are manifest in CSH as illustrated in Table 1. Each deals with contrasting stakeholder perspectives.

1. Tensions between CSHq1-9, constituting the (systems-orientated) ‘involved’, and CSHq10-12 – the (situation-orientated) ‘affected’. This reminds evaluators that any situation being evaluated will have real world ‘victims’ (intended and unintended) as well as systems-defined intended beneficiaries. For example, *who* are the prime agents of IPCC reporting and *who* might constitute the victims – those standing to be harmed by good reporting?
2. Tensions between the normative (systems-orientated) ‘ought’ mode and the more descriptive (situation-orientated) ‘is’ mode of questioning for each of the twelve questions. This reminds evaluators of the need to check value judgements (associated with different stakeholder groups) with judgements of ‘fact’. For example, *who ought* to be beneficiaries, decision makers, official experts and witnesses associated with IPCC reporting bodies, and *what ought* to be their role-specific concerns?

Together these two tensions provide a rich understanding of what’s at stake and who the stakeholders are. It also reveals what stakeholding issues exist for each stakeholder group associated with a specified system of interest. A third set of tensions between systems and situations exist for each stakeholder group relating to the dynamic of the stakeholding dimension. *Stakeholding* is a useful expression as it conveys a problematic tension which holds promise of development as well as the risk of intransigence for particular stakeholder groups. Responses to these questions in particular provide some enlightenment on the possibilities for stakeholding development.

3. Reconciling stakeholdings with stakes can be considered for each of the four stakeholder types:
 - (i) *Beneficiaries*: reconciling (systems) measures of success given the plurality of related interests/ purposes (associated with the situation). For example, what particular metrics of climate change - such as greenhouse gas emissions - might be particularly relevant to IPCC for informing better policy and making agencies accountable to targets arising from such measures?
 - (ii) *Decision makers*: reconciling dominant (systems) control with non-controllable elements in environment (of the situation). For example, who or what might act as appropriate watchdogs for ensuring proper accountability of IPCC sponsored reporting of climate change? How might incidences such as the East Anglia ‘climategate’, where sceptics were able to exploit leaked email exchanges amongst scientists, be avoided?
 - (iii) *Experts*: reconciling experts’ (systems) assurances with inevitable fallibility in systems implementation (in the situation). For example, given the inherent high levels of uncertainty in climate science, how might experts commissioned by IPCC foster healthy levels of humility in devising models in order to, say, forecast melting glaciers?
 - (iv) *Witnesses*: reconciling dominant (system) worldview on what counts as improvement with radically different worldviews (in the situation). For example, what political space might be orchestrated for ensuring that IPCC findings contribute towards public understanding and purposeful action on climate change?

The three sets of creative tension are continually at play in both aspects of boundary critique – reflection and discourse. In boundary reflection, providing more summative evaluation, the emphasis is on what's at stake (particularly revealing through contrasting the 'involved' with the 'affected' as judgements of 'fact'), and who the stakeholders are (particularly revealing in what constitutes 'ought' from 'is' in association with value judgements). In boundary discourse, prompting a more formative evaluation, the emphasis is more on exploring the tensions in stakeholding questions and associated possibilities for stakeholding development.

Case study

Drawing on an actual project associated with IPCC concerns on climate change and environmental planning we can explore what stakeholding development might look like through the reflective lens of CSH and boundary critique. The example comes from a retrospective look at an action research project sponsored by the UK Operational Research (OR) Society (Midgley and Reynolds, 2001; 2004). Our system of interest was to evaluate and enhance OR/ systems practice support for environmental planning. Whilst acting as evaluators for the project we were also acting as stakeholders with particular expertise in OR and systems practice in the field. So the evaluation was both summative and formative, involving boundary reflection and boundary discourse respectively.

Boundary reflection

Beginning with an ideal purpose of wanting to support environmental planning without harm to the environment, we were interested in identifying and working with groups that best expressed the concerns of beneficiaries, decision makers, relevant experts, and witnesses associated with environmental planning in the UK. Four stakeholder groups associated with environmental planning were identified, roughly correlating with four sources of influence: (i) public ('first') sector agencies played proxy to beneficiaries of environmental planning; (ii) private ('second') sector business agencies played proxy to concerns of decision makers in control of key resources; (iii) academic and other consultant agencies played proxy to concerns of expert support; and (iv) activist ('third') sector agencies or non-governmental organisations (NGOs) played proxy to the concerns of witnesses representing conventionally marginalised concerns regarding the environment.

The key issues arising from a preliminary literature review and an initial round of interviews conform with stakeholding issues associated with CSH. Table 2 illustrates the outcomes in terms of a stakeholder analysis template.

Insert Table 2 Evaluating stakeholdings associated with support for environmental planning

Components to a system of operational research (OR)/ systems support for environmental planning				
	stakeholders <i>Social Roles</i>	Stakes <i>specific concerns</i>	stakeholdings <i>Key Problems</i>	
Sources of motivation	1. Public/government sector agencies as proxy to the interests of intended beneficiaries	2. Improving natural resource use without harm to the natural environment in the context of complexity and uncertainty	3. <i>Complexity and uncertainty</i> –measuring success given the unpredictability of natural and social phenomena	The ‘involved’
Sources of control	4. Private/ business sector users of natural resources	5. Access to and control over limited natural resources using monetary value in the midst of other values	6. <i>Multiple</i> and often <i>conflicting values</i> , outside conventional market control	
Sources of knowledge	7. OR/ systems practitioners	8. Existing expertise in OR and systems research and practise supporting concerns of those in other stakeholder groups	9. Inadequate and sometimes pretentious (false) guarantor support for environmental planning	
Sources of legitimacy	10. NGO/ environmental-activist sector groups	11. Making representation of natural world and marginalised users of natural resources amidst political power to alienate such representation	12. <i>Political effects</i> on those not involved in planning processes (including non-human nature)	The ‘affected’

As part of the summative evaluation constituent a pattern emerged of particular stakeholder concerns amongst the three stakeholder-types - beneficiaries, decision makers and witnesses - in relation to a system for expert support for environmental planning. The three stakeholding issues arising in association with each group were:

- complexity/ uncertainty, associated mainly with public sector
- multiple/ conflicting values, associated mainly with private sector
- political effects, associated mainly with the NGO sector

These issues were not exclusive to particular sectors. Each sector expressed concerns with the other two generic issues, but mostly in relation to their primary orientation. The stakeholding issues for each group can be drawn out more.

- (i) *Public sector*: a concern for appropriate indexes, indices, and indicators belie a persistent public sector demand for evermore appropriate measures of (and related targets for) sustainability by which to gauge progress. Issues of

complexity and uncertainty, with a focus on developing appropriate indices of success in an unpredictable changing world of values, were dominant. Stakeholding development for issues of *motivation* might be identified in terms of translating actual complexity and uncertainty of a *situation* into performance indicators, or systems of measurable outcomes. In short, generating tidy systems from messy situations.

- (ii) *Private/business sector*: primary concern was with existence of multiple, often conflicting, values. This might be viewed as a need to be more responsive to the changing and divergent values in the market. Stakeholding development for issues of *control* might be identified in terms of cultivating *systems* based environmental values favourable to business interests whilst ensuring awareness and adaptation to variable and changing *situations* of external values.
- (iii) *OR expertise*: the principle concern here was of weaknesses in provision of support in *systems* of OR robustness and systems practice in the context of continual and growing *situational* change in dealing with planning endeavours. Such change involves (i) complexity and uncertainty particularly with issues of climate change, (ii) multiple and often conflicting perspectives amongst stakeholder groups on environmental issues, and (iii) political alienation of groups not conventionally involved with planning.
- (iv) *Activist sector*: concerned with political effects, in particular the prospect of environmental management generating further marginalisation of alternative worldviews. Stakeholding development associated with *legitimacy* might be identified in terms of processes that break through ritualistic business-as-usual patterns of mutual isolation between those involved in (*systems* of) decision making and those (in *situations*) affected by decision making, and to enable instead the development of alternative understanding and practice.

Boundary discourse

During the course of the one year project we organised three workshops with experts in the field of OR and systems practice and with an interest in environmental planning. This provided the action research and formative evaluation component in order to help generate reflective practice. In the workshops the three tensions of systems-situations dynamic were played out in different ways:

1. ('involved' and 'affected') As part of the visioning exercise, an awareness was generated of our own role in providing expertise as part of those involved with interventions, and the existence of 'victims' of OR and environmental planning. This surfaced in a soft systems methodology - directed workshop in our transforming the CATWOE mnemonic (clients, actors, transformation, worldview, owners, environment) to BATWOVE – delineating 'clients' into two groups 'beneficiaries' and 'victims' (Midgley & Reynolds, 2001 p.94). This prompted some very helpful discussion on ways in which OR and systems practise might helpfully counter alienating effects in providing expert support.

2. ('ought' and 'is') The two initial workshops began with a visioning exercise on what is required of methods associated with OR and systems practice, whilst reflecting on the limitations of current practices.
3. (Stakeholding development). Stakeholding development associated with *expertise* provided the crux of the final report. In recommending improvements to guarantor support we provided 3 case study exemplars of the type of OR/ systems practice that appear to address stakeholding problems specific to (i) uncertain/ complex interrelationships (motivation), (ii) multiple/ conflicting values (control), and (iii) political effects of marginalisation (legitimacy). In addition to a glossary describing a further 94 tools, techniques and methodologies associated with OR/ systems and environmental planning, 3 agendas generated from workshops involving OR/ systems practitioners for further developing guarantor support to environmental planning were outlined. These recommendations are documented in more detail elsewhere (Midgley and Reynolds, 2001; 2004). What is of more interest here though is the potential afforded by a more explicit use of CSH and boundary critique to identify opportunities for stakeholding development.

Whilst the use of CSH for boundary reflection is helpful in delineating issues of stakeholding development – the ‘what’ questions of systems and situations – questions of ‘how’ stakeholding development might be enacted – through appropriate boundary discourse - become important. CSH and boundary critique has its limitations here. They can only provide indicators to the kind of stakeholding threats and opportunities that might be anticipated. Boundary discourse requires attention to individual emotions as much as to stakeholder group judgements on ‘facts’, values and boundaries.

Summary

In complex, messy situations stakeholders often resort to some notion of insoluble rights in order to gain or strengthen existing stakeholdings. The political philosopher, Michael Freeden, debunks this notion of ‘natural’ rights as products of some objective moral principles. In language conversant with systems thinking in practice, he describes rights as conceptual devices, constantly being revised in order to protect fundamental human attributes. Rights are models “incorporating the equal weighting and indivisibility of fundamental human attributes, the communal nature of human beings and their inherent developmentalism” (Freeden, 1991 p.101). The three dimensions invoked by Freeden correspond with three interrelated endeavours of systems thinking in practice – understanding complex realities regarding stakes, stakeholders and stakeholdings, practice in nurturing mutual understanding amongst stakeholders, and reflecting and building upon inevitable partialities associated with stakeholdings. It in turn speaks to Ulrich’s notion of boundary critique – the methodological principle underpinning CSH - an eternal triangle consisting of a continual interplay between ‘facts’, ‘values’ and ‘boundary’ judgements.

A purposeful developmental evaluation from a systems thinking in practice perspective based on boundary critique must continually question boundaries, beginning with the first boundary question regarding ‘purpose’. The questioning can be regarded as an ongoing conversation. This paper suggests a lingua franca based on systems, or more precisely, the CSH reference system, for such conversation. In systems thinking in practice the conversation is used as a metaphor for the dynamic

interplay between conceptual notions of bounded systems and the essentially unbounded contexts or situations of interest to which they speak. It is an epistemological conversation that might be referred to as boundary reflection. The CSH reference system may also be used on an interpersonal level for boundary discourse. In either case, the challenge for developmental evaluation is to shift stakeholders' ideas from one of stakeholding entrenchment to stakeholding development.

References

Churchman, C. W. (1979). *The Systems Approach and its Enemies*. New York, Basic Books.

Freeden, M. (1991). *Rights*. Milton Keynes: Open University Press.

Habermas, J. (1972). *Knowledge and Human Interests*. London: Heinemann.

Habermas, J. (1984). *The Theory of Communicative Action Volumes 1 and 2*. Cambridge: Polity Press.

Midgley, G. and M. Reynolds (2001). *Operational Research and Environmental Management: A New Agenda*. Birmingham, Operational Research Society.

Midgley, G. and M. Reynolds (2004a). 'Systems/ Operational Research and Sustainable Development: Towards a New Agenda.' *Sustainable Development* **12**: 56-64.

Midgley, G. and M. Reynolds. (2004b). 'Community & Environmental OR: Towards a New Agenda.' in G. Midgley and A. E. Ochoa-Arias (eds) *Community Operational Research: OR and Systems Thinking for Community Development*, pp. 297-316. York: Kluwer.

Patton, M.Q. (2010). *Developmental evaluation: Applying complexity concepts to enhance innovation and use*. New York: Guilford Press.

Reynolds, M. (2007). 'Evaluation based on critical systems heuristics' in B. Williams and I. Imam (eds) *Using Systems Concepts in Evaluation: An Expert Anthology* pp.101-122. Point Reyes CA, USA EdgePress:

Reynolds, M. (2008a). 'Getting a grip: A Critical Systems Framework for Corporate Responsibility' *Systems Research and Behavioural Science* **25**:383-395.

Reynolds, M. (2008b). 'Reframing expert support for development management.' *Journal of International Development* **20**:768-782.

Reynolds, M, and S Holwell. (2010a). 'Introducing Systems Approaches.' in M. Reynolds and S. Holwell (eds.) *Systems Approaches to Managing Change*, pp. 1-23. London: Springer.

Reynolds, M, and S Holwell. (2010b). 'Systems Approaches and Systems Practice (Epilogue).' in M. Reynolds and S. Holwell (eds.) *Systems Approaches to Managing Change*, pp. 293-306 London: Springer.

Scriven, M (1967). 'The methodology of evaluation.' in R. M. Gagne R. W. Tyler, & M. Scriven (eds.) *Perspectives of curriculum evaluation* pp. 39-83 Chicago, IL: Rand McNally.

Sidaway, R. (2005). *Resolving Environmental Disputes: from Conflict to Consensus*. London: Earthscan.

SLIM (2004). 'Policy Briefing: Stakeholders and Stakeholding in Integrated Catchment Management and Sustainable Use of Water'. *SLIM Policy Briefings (No. 2, May 2004)*. Part of the research project: Social Learning for the Integrated Management and Sustainable Use of Water at Catchment Scale (SLIM) supported by the European Commission under the 5th Framework Programme (available at <http://slim.open.ac.uk>).

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

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

Ulrich, W. (2000). 'Reflective Practice in the Civil Society: the contribution of critically systemic thinking.' *Reflective Practice* 1(2): 247-268.

Ulrich, W. (2002). 'Boundary Critique' in H. G. Daellenbach and R. L. Flood (eds.). *The Informed Student Guide to Management Science* p.41f. London: Thomson Learning

Ulrich, W. (2003). 'Beyond Methodology Choice: critical systems thinking as critically systemic discourse.' *Journal of the Operational Research Society* 54(4): 325-342.

Ulrich, W., and M. Reynolds. (2010). 'Critical Systems Heuristics' in *Systems Approaches to Managing Change*, in M. Reynolds and S. Holwell (eds.) *Systems Approaches to Managing Change*, pp. 243-292 London: Springer.

Westley, F., B. Zimmerman, and M.Q. Patton. (2006). *Getting to Maybe*: Random House Canada.