



Open Research Online

The Open University's repository of research publications and other research outputs

Towards reframing professional expert support

Conference or Workshop Item

How to cite:

Reynolds, Martin (2007). Towards reframing professional expert support. In: Development Studies Association Annual Conference 2007: Connecting Science, Society and Development, 18-20 Sep 2007, Institute of Development Studies, University of Sussex, UK.

For guidance on citations see [FAQs](#).

© [\[not recorded\]](#)

Version: [\[not recorded\]](#)

Link(s) to article on publisher's website:

<http://www.devstud.org.uk/conference-07/Programme4-8.pdf>

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

Towards reframing professional expert support

Paper submitted **Development Studies Association ANNUAL CONFERENCE 2007**

"Connecting Science, Society and Development"

Institute of Development Studies, University of Sussex

18th-20th September 2007

Martin Reynolds

Open Systems Research Group, Systems Department, The Open University, Milton Keynes, UK. MK7 6AA

Contact: Telephone +44 (0) 1908 654894, email: m.d.reynolds@open.ac.uk

Abstract

The paper addresses practical ways of reconfiguring professional expertise in development practice in moving away from the expert as a technocrat. Two projects associated with managing natural resource dilemmas suggest an alternative way of framing intervention involving professional experts providing a more appropriate collaborative learning space for development practice. The paper describes the heuristic devices generated by each project as helpful in bringing out dialectic tensions between *practice* and *understanding*, and between *systems* of interest and *situations* of interest (or situated problems). Firstly, **SLIM** (social learning for the integrated management and sustainable use of water at catchment scale) - a European Framework Programme 5 project - exemplifies social learning as a measure of sustainable development. The heuristic illustrates the dependence of sustainability on changes in practice and understanding amongst professionals and other stakeholders as part of concerted - rather than merely individual or even collective - action. Secondly, **ECOSSENSUS** (Electronic/Ecological Collaborative Sensemaking Support System) - a Guyana focused intervention involving several UK universities in collaboration with the University of Guyana and Amerindian community representatives from the North Rupununi wetlands - builds on the SLIM heuristic in supporting the development of practice. Additionally, the ECOSSENSUS heuristic provides conceptual space for the interaction between conceptual constructs of distributed stakeholders (that is, systems thinking) including those with professional expertise, and the actual context of intervention (the situated problem). Both SLIM and ECOSSENSUS provide heuristics for process-orientated management enabling more meaningful and purposeful interaction between professional/ technical experts and other stakeholders, as an alternative to conventional project-orientated management intervention. An alternative framing may help to steer practice away from the apoliticised comforting linearity of professionalised systematic project management towards more constructive systemic endeavours involving multiple stakeholders.

Key words: social learning, learning spaces, development practice, systems thinking

Introduction

“... (T)he engagement of citizens and professional experts potentially opens a learning space... (A)ny human engagement both occupies and creates space where outcomes cannot be pre-determined. In particular, the assumption that everyone will discover the same universal truths requires challenge. The literature that investigates ‘beyond the truth’, drawn principally from participation and development studies, and public engagement with science...is, however, limited in that the focus in both literatures is largely the potential for active citizenship... There is much less about the potential of others who inhabit these spaces. Prominent among these is the professional expert who, characterised as a technocrat and accorded only circumscribed agency, is seen too often solely as part of the problem” (Wilson 2006) p.511)

In his paper *Beyond the Technocrat*, Wilson acknowledges the demise of the classic positivist epistemology exemplified by critiques of (i) the elitism of professional expert ‘learners’ (e.g., through promotion of rapid and participatory rural appraisal methods), and more recently (ii) elevating citizen ‘learners’ through encouraging the practice of self-discovery (e.g., through promotion of in-country Poverty Reduction Strategy Papers (PRSPs)). A more practical exploration of a social constructivist epistemology is advocated through (iii) enabling space for interaction between experts and citizens. Wilson also counsels against denigrating both positivist knowledge and the value of practice through recourse to oppositional dichotomies (ibid, p. 521).

Advocating an alternative role for professional expert support resonates with a plethora of issues in development studies, not least issues around participatory development (PD). In this paper I focus on two questions relating to PD. Whilst appearing to be quite particular in focus, the two questions illustrate wider issues of development to which professional expert support might be addressed; namely issues of practice and understanding, and issues of systems thinking and reality. First, how might the depoliticizing practice of using buzzwords - ‘participation’, ‘empowerment’, ‘poverty reduction’ - in development policy initiatives like PRSPs and the Millenium Development Goals (MDGs) (Cornwell and Brock 2005) be avoided in an alternative learning space? Cornwell and Brock signal the importance of language as a practical tool in development practice. In mainstream development discourse particular meanings or understandings associated with ownership, accountability, governance and partnership are attached to words like participation, empowerment and poverty reduction in what the authors (after Laclau) call a ‘chain of equivalence’, rendering such words as less meaningful (hence ‘buzzwords’). The alternative strategy argued for is to rework chains of equivalence that reassert a configuration with meanings associated with social justice, redistribution and solidarity.

In their critique, Cornwall and Brock allude to the importance of appreciating reference frames (citing (Goodman 1978) and (Apthorpe and Gasper 1996)) as a means of distinguishing perspectives in the use of development language. This relates directly to the second question on PD that I wish to focus upon: how might an alternative space provide for PD’s radicalisation through confronting Western-centric “complicities and desires” (Kapoor 2005)? According to Kapoor, PD is an ideology. Drawing particularly on the psychoanalytical work of Slavoj Žižek, and citing her

definition of ideology as a 'lie which pretends to be taken seriously' (ibid: 1207), PD is characterised as professing benevolent ideals for the Third World which effectively covers up the complicities and desires of those with interests in sustaining rather than transforming existing relations of power. An alternative strategy offered by Kapoor is to make visible these ideological (complicities and desires) 'realities' as constructs - 'the Real' serving particular interests.

The two questions suggest the need for space to enact respectively two wider dimensions of tension: firstly, between *practice* and *understanding*; and secondly between *systems* of interest and *situations* of interest (or situated problems).

Taking my cue from Wilson, this paper endeavours to suggest heuristic space for professional expert support to work more constructively with citizens as an exercise in promoting (i) concerted practice with understanding through social learning, and (ii) systems thinking for shaping improved reality. Both endeavours embrace tensions explicitly, thereby addressing concerns expressed widely in critiques of PD to counter the 'tyranny of safety' (Kelly 2004). Two heuristics are presented that might be cultivated further to address these questions. They derive from my experience with two interventions:

1. (2001-04) **SLIM** (social learning for the integrated management and sustainable use of water at catchment scale): European Commission supported intervention investigating the socio-economic aspects of the sustainable use of water. The project involved about 30 researchers from France, Italy, the Netherlands, Sweden and the UK (Ison, Steyaert et al. 2004; SLIM 2004)
2. (2004-06) **ECOSENSUS** (Electronic/Ecological Collaborative Sensemaking Support System): Guyana focused intervention exploring distributed process-orientated environmental management as an alternative to conventional project-orientated management types of intervention (Berardi A. 2006).

This paper does not detail the empirical output from these interventions. Such information can be sought through references and the associated websites, each with downloadable material protected by creative commons licences (<http://slim.open.ac.uk> which includes a set of seven policy briefings along with twelve case study monographs, and <http://kmi.open.ac.uk/projects/ecosensus>). My focus here is on the respective heuristic devices associated with each intervention. Each heuristic, I suggest, provides clues towards developing learning space for enabling professional expert support to counter (i) 'business as usual' practice and (ii) proclivity towards 'hidden agendas'.

Addressing each heuristic in turn, I describe features that succour a post-technocratic approach to development practice, and cultivates trust between professionals and other stakeholders (cf. Wilson, 2006: 520). I also describe the significance of each heuristic respectively in terms of (i) reclaiming chains of equivalence and (ii) surfacing complicity and desires.

SLIM: resolving practice with understanding

SLIM deals with the socio-economic aspects of the sustainable management and use of water. The main focus of interest lies in the application of *social learning* as a

conceptual framework, as an operational principle, as a policy instrument, and as a process of systemic change.

Social learning has attracted interest as another way of conducting public business in managing natural resources, alongside the use of conventional top-down regulatory and fiscal devices (Röling 2002). It is recognised as a key process in adaptive management and has been promoted particularly in the context of complex natural resource dilemmas where multiple stakeholder interests and conflicts are evident (Röling & Wagemakers, eds. 1998). The introduction of the European Water Framework Directive in 2000, and the requirement for *public participation* in its implementation, added practical relevance to the SLIM research.

As stated in the final SLIM report (Ison, Steyaert et al. 2004) social learning practices help to:

- Recognize and reframe our mental models.
- See issues through fresh eyes.
- Resolve social dilemmas.
- Define and articulate what we value.
- Discover a shared purpose.
- See through conflicting views to a shared vision for the common good.

Figure 1 illustrates the SLIM heuristic generated from the four year research programme.

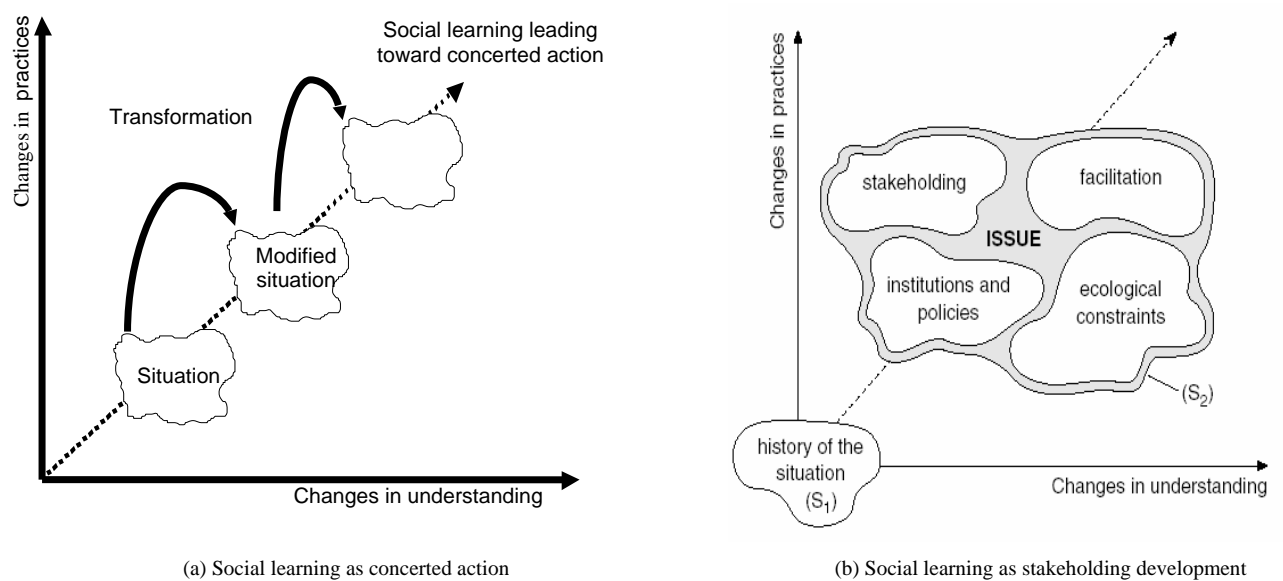


Figure 1 SLIM heuristic (adapted from Ison et.al., 2004)

Beyond the technocrat...social learning

The heuristic depicts social learning as an emergent property of the process to transform a situation. It is modelled on a constructivist - as against a positivist - view of knowledge, suggesting further that more effective learning is enhanced by the interplay between *understanding* and *practice*. The learning here though is collaborative (hence 'social') involving multiple stakeholders including professional experts. Such co-creation of knowledge can provide insight into the causes of, and means to transform, a situation. Significantly, evidence from all the SLIM field-based case studies suggest that learning through practice amongst multiple stakeholders can lead to concerted action.

Building trust through concerted action

Concerted action is itself evidence of the trust developed between different stakeholders as a result of social learning. So how does the dynamic between practice and understanding work in bringing about such trust? How might different perspectives reconcile and mutually develop rather than remaining as a fixed aggregation of individual preferences?

Niels Röling, one of our colleagues on the SLIM project, asks this question in exploring the meaning of social learning (Röling 2002). Using the Santiago theory of cognition (Maturana and Varela 1992) as an explanatory device, Röling describes social learning as “moving from multiple to distributive cognition”. Cognition here is described as the structural coupling between a perceiving agent and its environment.

As Röling describes it, the starting point is perception – but perception driven by some notion of a purposeful activity - as exemplified by the example from Maturana and Varela of a frog looking at a fly:

“There is no way that the fly can be “objectively” projected. But the presence of a fly can trigger change in the central nervous system of the frog. The frog ‘does not bring forth *the* fly, but *a* fly... [but not just] *any* fly (as pure relativists would have us believe). It brings forth a fly the frog can catch and eat”(Röling 2003).p.32

The frog brings forth a fly for the *purpose* of nutrition. Cognition therefore is driven by internal devices of ‘purpose’. Development intervention might similarly be described; the difference being that during intervention there will be different, possibly contesting, perspectives on purpose in operation. The challenge for social learning is to cultivate a shift from multiple cognition to distributed cognition (nicely captured in the title of the book in honour of Röling and to which Röling (2002) contributes *Wheelbarrows Full of Frogs: social learning in rural resource management*). In short, how is it possible to cultivate a set of shared values around a particular issue. In SLIM the transformation was assisted by identifying focus on objects of concern associated with water catchment dilemmas to which stakeholders might relate and engage, in the same way that a fly is the object of concern for the frog.

But the shared practice and cultivation of trust was further assisted by nurturing of other factors associated with a situation of managing water catchment areas. These are depicted in Fig.1b, and include the history of the situation (including cultural factors), stakeholders and stakeholding, institutions and policy, facilitation skills, and ecological constraints and practices. The factors were selected as a result of earlier research in related fields of inquiry. They proved to be important areas of influence for enabling concerted action between professional experts and other stakeholders. But how might these factors translate in the wider arena of international development - for example, in helping to reclaim the more radical meaning of present buzzwords associated with participatory development policy?

Reclaiming chains of equivalence

“Our argument here has been that the terms we use are never neutral. They acquire meaning as they are put to use in policies. And these policies, in turn, influence how those who work in development think about what they are doing. The way words are combined allows certain meanings to flourish, and others to become barely possible to think with.” (Cornwall & Brock, 2005: 1056)

Words are tools. They provide a medium for a particular type of practice. In this instance, the practice is policy design. Using the SLIM heuristic, the terms practice, understanding and concerted action can be substituted by ‘words for policy design’, ‘meaning’, and ‘policy’.

In normative terms, the heuristic (Fig.1b) suggests attention to:

1. developing (as against simply protecting and entrenching) stakeholdings;
2. nurturing institutions and policy conducive to cooperation (power with) and collaboration (power to) rather than competition (power over) (cf. (Heron 1989);
3. promoting skills in facilitation (e.g., communicative skills) as against merely focusing on technical skills, and
4. exploring different worldviews regarding what might be legitimising factors, as against searching for some absolute truth as a legitimising factor.

The heuristic might thus be used normatively, emphasising the terms ‘changing’ practice and understanding, and ‘transformation’ of policy. It provides space for nurturing an improved chain of equivalence for each buzzword, based, as the authors propose, on the more radical meanings embedded in the Millenium Declaration associated with social and ecological justice.

The SLIM heuristic can also be used as an analytical tool for appreciating the historic cultural practice in which terms like participation, empowerment and poverty reduction have acquired buzzword status. The word chains of equivalence and the attachment to particular meanings (understandings) might thus be traced through the medium of (1) stakeholding entrenchment, reifying the existing status quo, (2) continued institutional control from dominant development agencies like the World Bank, (3) a technocratic impetus in removing more political value-laden connotations, and (4) a singular worldview of development associated with neo-liberal economic growth. Many of these features are indeed addressed in the critique from Cornwell and Brock (2005). But might the heuristic guide further inquiry into such issues? Also might the heuristic be used for normative and analytic purposes in all circumstances of development intervention?

Traps and challenges

There are two possible traps in using the SLIM heuristic; each prompting associated challenges for improved expert support in development intervention. First, let us not forget that a heuristic is merely a model or tool – a particular way of viewing the world and therefore an example of *one* way of appreciating ‘worldmaking’ (cf. Goodman, 1978). The trap of course is in using this heuristic as a one-size-fits-all development recipe warned against in Cornwell and Brock (2005: 1058). In its defence, the SLIM heuristic is promoted as a *meta*-tool – a higher level conceptualisation to facilitate learning processes to guide and be critically aware of the use of other tools developed for environmental decision making. Of course, assigning ‘meta’ status correctly invites accusations of imperialism. The challenge is to continually assess the heuristic as a *critical* device for improving our existing practices and understandings and to monitor its effectiveness with respect to *actual* improvement in social and ecological well-being (cf. (Reynolds and Team 2006).

A second possible trap in the heuristic is the lack of visible human agency (except for the mention of ‘stakeholding’ in 1b). The heuristic is a tool; a human abstraction which perhaps inevitably masks actual human presence. As a tool, even a heuristic tool, human agency is inferred rather than made concrete. For the domain of environmental decision making, the invisibility of humans might serve a peculiar anti-anthropocentric/ ecocentric interest. In the wider domain of development intervention, the absence might be construed as a device for perpetuating hidden agendas, masking human interests, or in Kapoor’s terms of reference, “disavowing complicity and desire” (Kapoor, 2005:1203). The challenge is to make visible such interests. An alternative way of representing the human presence in SLIM is illustrated in Fig.2 below.

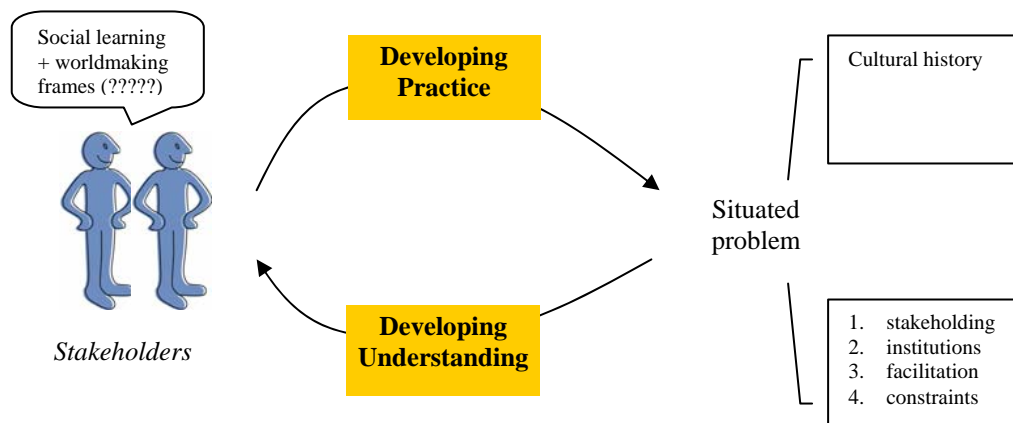


Figure 2 SLIM intervention

The two challenges speak to a need for more transparency with our ‘ways of worldmaking’. The frames of worldmaking can also be referred to as systems thinking (cf. (Senge 1990; Flood 1999)). Whilst systems thinking informed the development of the SLIM heuristic, my own interest was to make systems more explicit from a *critical* systems perspective (Reynolds 1998; Reynolds 2003); an interest that was served through my involvement in ECOSENSUS.

ECOSSENSUS: resolving ‘systems’ with ‘situations’

The pilot project explored development of work practices for collaborative spatially distributed work in environmental planning involving professional experts with other immediate stakeholders. The participants included a European-based team lead by the Open Systems Research Group at the Open University, and colleagues from Guyana including environmental scientists, land-use planners, and indigenous Makushi Amerindians and their representatives associated with the protection and development of the North Rupununi wetlands of Guyana.

Whilst ‘the project’ finished at the end of 2006, ECOSENSUS is now part of a multi-million pound open content initiative at the Open University supported by the Hewlett

Foundation called OpenLearn (www.open.ac.uk/openlearn). The initiative allows access to existing selected parts of OU courses – LearningSpace - and an experimental LabSpace. The ECOSENSUS project has become one of the first content providers on the LabSpace part of OpenLearn.

The project had three objectives:

1. To help develop open-source software tools for enabling marginalized communities with (albeit limited) access to the internet to engage with environmental decision making. This integrate two key software tools: Compendium (an open source concept/dialogue/argument mapping tool <http://CompendiumInstitute.org>) and UDIG (User-friendly Desktop Internet GIS—an open source geographical information tool <http://uDig.refractions.net/confluence/display/UDIG/Home>). Compendium had been developed over a 20 year time span into a powerful tool for mapping ideas with an advanced user interface and hypermedia database. The primary purpose of such mapping is to develop a shared understanding among a diverse group of people using a simple visual language.
2. To develop the capacity for distributed, spatial decision-support for resolving natural resource dilemmas. This required the development of open content learning units to support the use of our tools and processes, thereby enabling development of collaborative skills in managing natural resource dilemmas.
3. To measure the success of objectives 1 and 2 through piloting the use of the tools embedded in an open-source virtual learning environment called Moodle (a community to which the Open University is now the largest institutional partner) administered in the specific cross-cultural context of Guyana (Rupununi Amerindians, and Coastlanders) and Europe (UK and Switzerland).

The second objective involved the development of the ECOSENSUS heuristic as illustrated in Fig. 3.

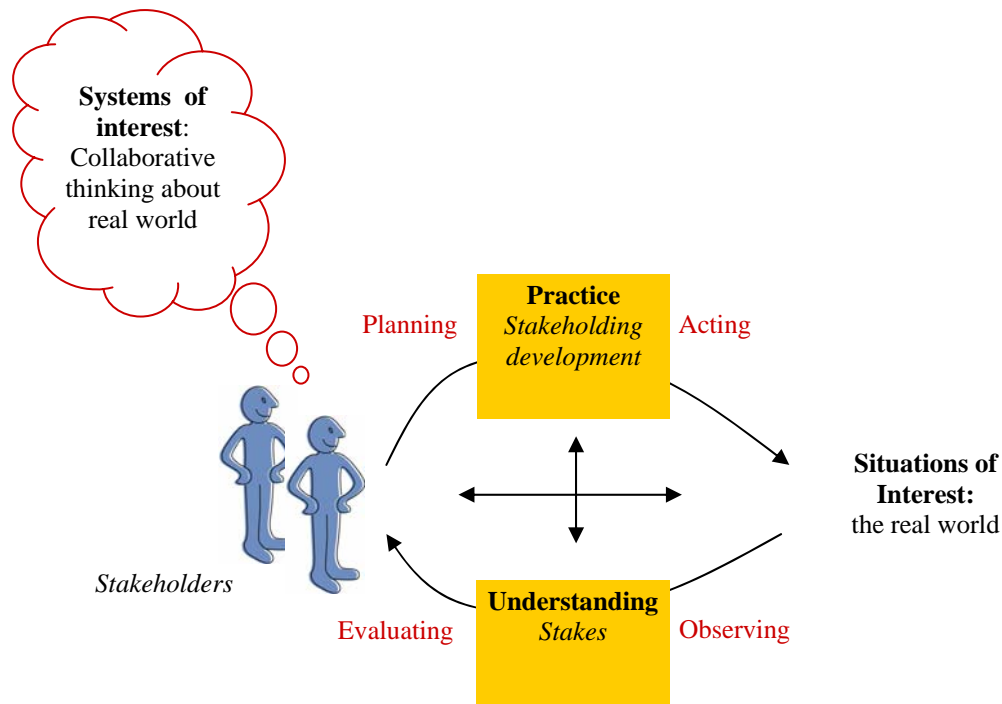


Figure 3 ECOSENSUS heuristic

Beyond the technocrat...systems thinking

Building on the SLIM dialectic between *practice* and *understanding*, the ECOSENSUS heuristic made explicit the distinction between *systems* and *situations* of interest. Dealing with natural resource dilemmas through spatially distributed collaboration required the design of a learning process that could be translated into critical pedagogy. The objective was addressed through developing a course based on critical pedagogy (Freire 1970) and a participatory action research (PAR) approach (Fals-Borda 1996), drawing in Soft Systems Methodology (SSM) (Checkland 1981) and Critical Systems Heuristics (CSH) (Ulrich 1983) from a contemporary soft systems thinking tradition. These ideas were mapped onto an experiential learning cycle (Kolb 1984) based on *observing* (the contexts), *evaluating* observations, *planning* action, and actually *acting* out the plans, though significantly emphasising tensions in the cycle (represented by double headed arrows) rather than the sequential pathway conventionally used in project management.

Both SSM and CSH represent a significant epistemological shift from conventional ('hard' systems) thinking of systems as actual real world entities towards thinking of systems as conceptual constructs ('soft' systems) to aid understanding and foster improvement in situations. Whilst SSM is widely recognised as supporting an action research programme, CSH has more recently come into prominence in systems thinking tackling issues of divergent interests and unequal distribution of information and power. CSH provides a discursive tool for structuring stakeholder dialogue and, in particular, for dealing with controversial issues of evaluation and emancipation (Reynolds 2006). CSH provides for reflective practice based on practical philosophy

and systems thinking, and is particularly helpful for supporting professional reflective practice in civil society (Ulrich 2000; Ulrich 2001).

Both SSM and CSH informed the design of course material used to support team building. CSH more precisely informed the design of Compendium templates, enabling more precise fleshing out of the stakes and stakeholdings associated with a particular situation thus, as discussed shortly, surfacing and critically engaging with interests of professional experts as with other stakeholders.

Building trust through systems practice

Trust was supported by engagement with the open-source community in the use of common tools freely available online. Participants actually using the tools together and sharing their experiences online provided a measure of mutual understanding. The software tools provided the equivalent 'objects' of activity around which social learning takes place. But in ECOSSENSUS, trust was also nurtured through attempts to cultivate a sharing of values through the explicit use of systems thinking in the course material.

The heuristic provided a template for developing the course outline for supporting team building, with a unique focus on keeping alive the tensions between practice and understanding, and between systems and situated problems. The learning material was organised on the virtual learning environment (VLE) in three parts. Part 1 addresses issues of stakeholding development (practice and understanding) with a focus on developing Compendium skills and understanding and using CSH as a means for developing templates of inquiry. Part 2 addresses the idea of using systems thinking as a means of appreciating and communicating about the specifically situated natural resource dilemmas. This focused more on developing the potential of uDig with a focus on using SSM for exploring systems of spatial 'representations' in conjunction with systems of the dilemmas being represented. The third Part of the pedagogic material was intended to facilitate team working amongst participants in developing action research initiatives using role-play so as to simulate involvement of the full range of stakeholder groups associated with any situated problem.

But how can systems make explicit the interests of dominating stakeholders associated with wider participatory development intervention? How might systems confront PD as ideology?

Making visible complicity and desire

"The propagation of PD depends fundamentally on a propagator or convenor, who in the current geopolitical conjuncture tends to be *us* as members of elites and institutions in both the North and South. It is because of such inescapable complicity that personal and institutional benevolence in PD, while outwardly other-regarding, is deeply invested in self-interest (geopolitical, cultural, organisational, economic) and desire (narcissism, pleasurability, self-aggrandisement, purity, voyeurism, manageability, control)... PD's propagation is premised on overlooking these contaminations (ie. the Real), and to this extent it is an ideology... (T)he disavowal of complicity and desire (ie the construction of PD as ideology) is a technology of power" (Kapoor, 2005:1214 original italics).

Kapoor's insight dovetails with the endeavour to which CSH serves in promoting reflective practice. The 'Real' to which Kapoor refers is a dysfunctional system or 'ideology' (using Žižek's meaning of the term). The aim in using CSH as Compendium templates for mapping conversations between stakeholders is to surface the kind of complicities and desires to which Kapoor refers. So what do these templates look like? Here I can only provide a very brief introduction and encourage reference to Ulrich's own work (some of which is available on the ECOSENSUS website) which provides depth to the philosophical traditions of Kant and Habermas.

CSH consists basically of twelve questions which Ulrich categorises in terms of roles, role-concerns and key problems, and which I have interpreted in terms of stakeholder groups, stakes and stakeholdings. It identifies four stakeholder groups that are important sources of influence for any system of interest – those who benefit, those who control resources, those who provide relevant knowledge, and those who are adversely affected by the system. Fig.4 summarises the CSH questions.

Constituents to a system of interest				
	stakeholders <i>Social Roles</i>	Stakes <i>specific concerns</i>	stakeholdings <i>Key Problems</i>	
Sources of motivation	1. <u>Beneficiary</u> who ought to be /is the client or beneficiary of the system (S)	2. <u>Purpose</u> what ought to be /is the purpose of S	3. <u>Measure of success</u> what ought to be/is S's measure of improvement?	The involved
Sources of control	4. <u>Decision maker</u> who ought to be/is in command of resources necessary to enable S?	5. <u>Resources</u> what ought to be /are necessary relevant components ('capital') to secure improvement?	6. <u>Decision environment</u> what relevant conditions ought to be /are outside the control of the decision maker?	
Sources of knowledge	7. <u>Expert</u> who ought to be/is providing expert support for S?	8. <u>Expertise</u> what ought to be/ are relevant skills supporting S?	9. <u>Guarantor</u> what ought to be/ are regarded as <i>false</i> assurances of successful implementation?	
Sources of legitimacy	10. <u>Witness</u> who ought to be /is representing the interests of those negatively affected by but not involved with S?	11. <u>Emancipation</u> what ought to be/are opportunities for the interests of those negatively affected to have expression?	12. <u>Worldview</u> what ought to be /are the contrasting visions giving meaning to improvement in S?	The 'affected'

Figure 4 Critical systems heuristic questions as stakeholders, stakes and stakeholdings (*adapted from (Ulrich 1996)*)

Stakes are the core interests associated with a particular *stakeholder* group relevant to a specified system. The prime stake of any system (and hence first question to be addressed) is category 2, purpose. When addressing a set of CSH questions, all

responses must be consistent with fulfilling the stated purpose. *Stakeholding* is a useful expression as it conveys a problematic sense of intransigence associated with stakes. Stakeholding represents a tension which holds promise of development as well as the risk of intransigence for particular stakeholder groups. The ECOSSENSUS heuristic represents this as an essential tension between *practice* and *understanding* (vertical double headed arrow in Fig. 3). But how does the CSH generalised template in Fig.4 inform the tension between *systems* and *situations* (in Fig.3) and what is the significance of this latter tension for a radicalisation of PD?

Firstly, the template is itself a system; a map of a situation or territory, not to be confused with the territory being mapped. It is of the same stuff as the ideology of 'the Real' – a conceptual construct with a particular (though deceptive) take on reality. The point of departure for *soft* systems thinking is in explicitly keeping alive the distinction and continual dialogue between conceptual maps as systems and the actual reality to which they address. A further point of departure for *critical* systems thinking lies with explicitly endeavouring to reveal the ethical and value-laden underpinnings of the constructs that we devise. (In this respect, many of the authors cited in this paper, including Kapoor, might be termed critical systems thinkers though of course not using systems language).

CSH reinforces the dialectic between systems and situations by prompting two further points of tension (both illustrated in Fig.4):

1. Tensions between the normative (systems-orientated) 'ought' mode and the more descriptive/ analytical (situation-orientated) 'is' mode.
2. Tensions between CSH question 1-9, constituting what Ulrich terms the 'involved', and 10-12 - the 'affected'.

Contrasting 'ought' with 'is' and 'involved' with 'affected' provides the crux of learning for users of CSH. For example, if you were to map out purposes (e.g., social justice) associated with the Millenium Development Declaration first through an ideal 'ought' system beginning with an associated purpose followed with a critique using for each of the twelve categories mapped an impression of the actual 'is', a picture of complicity and desires might be forthcoming.

Before ending this brief introduction to CSH, two chains of equivalence come to mind. Firstly, the four categories of CSH questions used for interrogating situations correspond to the four factors affecting social learning raised in SLIM (listed as situated problems in Fig.2). CSH may provide useful ideas for extending the SLIM heuristic to contexts outside of natural resource dilemmas. A second correspondence lies with Kapoor's four ('ought') possibilities for confronting our complicities and desires in relation to PD:

1. *Publicizing complicity and desire* – Whilst CSH generally does this, the sources of *motivation* in particular provides the trigger for such publicizing such concerns.
2. *Extending participation to the economy and development decision making* – This clearly speaks to sources of *control* in the system, and specifically what ought to be part of 'relevant components'.

3. *Linking up with democratic politics* - Conventional technocentric ideas about facilitating participation as enhancing sources of *knowledge* need extending towards incorporating political dimensions of knowledge generation.
4. *Hijacking participatory development* - Sources of *legitimacy* prompt questions regarding opportunities for alternative viewpoints to take hold.

This last possibility is given further space – at least virtually – with respect to the ECOSENSUS heuristic being accommodated for open source development on the LabSpace of the OpenLearn Moodle platform (www.open.ac.uk/openlearn). In the spirit of open source communities we explicitly invite hijacking.

Traps and challenges

Several traps arise with respect to ECOSENSUS that might inadvertently reinforce ‘the Real’ rather than confront it! Firstly, the language of CSH can be very obscure and inaccessible. This is not surprising given its derivation from European eighteenth century Enlightenment philosophy, and provides a major challenge of translation to (i) contemporary Western culture (ii) non-Western cultures particularly of the global South, and (iii) non-literate and/or non-academic sub-cultures in both North and South.

A related second trap is in the values embedded as a result of its philosophical tradition. Specifically, users need to be alert to possible anthropocentric, ethnocentric and even androcentric biases. In development practice sensitive to ecological and social justice any such biases need surfacing rather than further buried in quasi-emancipatory heuristics. Finally, despite our stated aim to produce tools and capacity building materials that enabled individuals on the other side of the digital divide to benefit from e-science developments there is the trap associated with transferring an essentially discursive approach of PAR onto a technologically mediated platform. This can itself prompt further forms of alienation as well as intended liberation, particularly amongst cultures and sub-cultures not familiar with, or indeed having access to, internet technology.

Summary

The critique of development practice and PD in particular can generate persuasive arguments about what is wrong. Notwithstanding the risk of succumbing to paralysis from a “pessimism of the intellect” (Saul 2003) p.190) I have chosen three critiques illustrative of wider dimensions of what is wrong and which offer insight to ways forward. Firstly, a critique of buzzwords illustrating what is wrong in correspondence between practice and understanding. Secondly, a critique of discursive constructions as ideologies illustrating what is wrong in correspondence between the systems we construct and the real-world situations we inhabit. Thirdly, I draw on a critique of professional expertise in illustrating what is wrong in the type of space occupied for effective expert support to development practice.

Two themes recur in these critiques of PD. Firstly, issues of ‘politics’. This particularly relates to the role of experts and their depoliticised role in participatory intervention. Secondly, of related importance, there are issues of ‘space’. A common theme used in surfacing what’s wrong with participatory methods and PD more generally is ‘tyranny’ (cf. (Bell 1994; Cooke and Kothari 2001; Hickey and Mohan

2004; Kelly 2004; Williams 2004). Tyranny implies quashing opposition; effectively depriving space for resistance and struggle.

My own efforts focus on how expertise might be reframed in an alternative learning space to address issues relating to buzzwords as a form of practice, and discursive constructions as systems constructs. In examining the heuristic framing associated with two interventions, SLIM and ECOSENSUS, I address issues of politics and space. Both interventions invite a more overt political engagement on the part of professional experts. In dismissing claims of positivism – in which knowledge generation is regarded as value-neutral and hence apolitical – and adopting an explicit constructivist epistemology, both SLIM and ECOSENSUS enable the role of experts and expert support to be more properly politicised; to be more engaged with value judgements and boundary judgements in relation to judgements of fact. To be properly engaged politically, new challenges arise regarding issues of trust between stakeholders. Both SLIM and ECOSENSUS provide features enabling the development of trust: SLIM emphasises the importance in generating opportunities for experts and citizens to practice together around commonly identified issues or dilemmas; ECOSENSUS emphasises the importance in generating shared systems of interest.

In this paper, I have focused on ‘space’ as an arena in which conflicts can be deliberated. Two dimensions of conflict are emphasised. The SLIM heuristic emphasises the tension between practice and understanding; a tension that leads to social learning and concerted action. The ECOSENSUS heuristic also acknowledges the tension between practice and understanding in terms of forging stakeholding development amongst professional experts and other stakeholders, but ECOSENSUS also significantly brings out the tension between systems and situations.

Heuristic constructs such as those proposed in SLIM and ECOSENSUS are though simply constructs – systems proposed as useful for envisioning alternative ways of doing practice. Their value in providing politicised space for professional expert support to participatory development can only be gauged through their own use and inevitable transformation in different contexts.

Acknowledgements

I am indebted to colleagues working on both SLIM and ECOSENSUS projects for the ideas expressed in this paper. The views and interpretations expressed are mine and do not necessarily reflect those of my colleagues on these projects.

SLIM was supported by the European Commission under the Fifth Framework Programme. Contract Number: EVKI-CT-2000-00064 SLIM.

ECOSSENSUS was supported by the Economic and Social Research Council: Project Reference Number: RES-149-25-1017

References

Apthorpe, R. and D. Gasper, Eds. (1996). Arguing Development Policy: Frames and Discourses. London, Frank Cass.

- Bell, S. (1994). "Methods and Mindsets: Towards an understanding of the tyranny of methodology." Public Administration and Development **14**(4): 323-338.
- Berardi A., B. M., Bernard C., Buckingham-Shum S., Ganapathy S., Mistry J., Reynolds, M., and Ulrich, W. (2006). The ECOSENSUS Project: Co-Evolving Tools, Practices and Open Content for Participatory Natural Resource Management. Second International Conference on e-Social Science. , Manchester, UK.
- Checkland, P. B. (1981). Systems Thinking Systems Practice. Chichester, John Wiley.
- Cooke, B. and U. Kothari (2001). Participation: The new tyranny. London, Zed Books.
- Cornwell, A. and K. Brock (2005). "What do Buzzwords do for Development Policy? A critical look at 'participation', 'empowerment' and 'poverty reduction'." Third World Quarterly **26**(7): 1043-1060.
- Fals-Borda, O. (1996). "Power/knowledge and emancipation." Systems Practice **9**(2): 177-181.
- Flood, R. L. (1999). Rethinking the Fifth Discipline: Learning within the unknowable. London/ New York, Routledge.
- Freire, P. (1970). Pedagogy of the Oppressed. London, Herder and Herder.
- Goodman, N. (1978). Ways of Worldmaking. Indianapolis, Hackett.
- Heron, J. (1989). Facilitator's Handbook. London, Kogan Page.
- Hickey, S. and G. Mohan, Eds. (2004). Participation - From Tyranny to Transformation? Exploring new Approaches to Participation in Development. London, Zed Books.
- Ison, R. L., P. Steyaert, et al. (2004). Social Learning for the Integrated Management and Sustainable Use of Water at Catchment Scale: Final Report. Milton Keynes, The Open University: 89.
- Kapoor, I. (2005). "Participatory Development, Complicity and Desire." Third World Quarterly **26**(8): 1203-1220.
- Kelly, U. (2004). Confrontations with power: moving beyond 'the tyranny of safety' in participation. Participation: from tyranny to transformation. S. Hickey and G. Mohan. London, Zed Books.
- Kolb, D. (1984). Experiential Learning: Experience as the source of learning and development. New York, Prentice-Hall.
- Maturana, H. R. and F. J. Varela (1992). The Tree of Knowledge: The Biological Roots of Human Understanding. Boston and London, Shambhala Publications.

- Reynolds, M. (1998). "'Unfolding" Natural Resource Information Systems: fieldwork in Botswana." Systemic Practice and Action Research **11**(2): 127-152.
- Reynolds, M. (2003). Social and Ecological Responsibility: A Critical Systemic Perspective. Critical Management Studies Conference (CMS3) 'Critique and Inclusively: Opening the Agenda, Lancaster University, Lancaster University.
- Reynolds, M. (2006). Evaluation based on critical systems heuristics. Using Systems Concepts in Evaluation: An Expert Anthology. B. Williams and I. Imam. Point Reyes CA, USA
- Reynolds, M. and CourseTeam (2006). Book 4: Critical appraisal in environmental decision making. Milton Keynes, The Open University.
- Röling, N.G. and M.A.E. Wagemakers. Eds. 1998. *Facilitating Sustainable Agriculture*. Cambridge. Cambridge University Press.
- Röling, N. (2002). Beyond the Aggregation of individual preferences: moving from multiple to distributed cognition in resource dilemmas. Wheelbarrows Full of Frogs: social learning in rural resource management. C. Leeuwis and R. Pyburn. Assen (The Netherlands), Koninklijke Van Gorcum.
- Röling, N. (2003). "From Causes to Reasons: The Human Dimension of Agricultural Sustainability." International Journal of Agricultural Sustainability **1**(1): 73-88.
- Saul, J. (2003). "Africa: The Next Liberation Struggle." Review of African Political Economy **30**(96): 187-202.
- Senge, P. (1990). The Fifth Discipline. New York, Currency Doubleday.
- SLIM (2004). SLIM (social learning for the integrated management and sustainable use of water at catchment scale) Framework: Social Learning as a Policy Approach for Sustainable Use of Water: 41.
- 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. (2001). "The Quest for Competence in Systemic Research and Practice." Systems Research and Behavioural Science **18**(1): 3-28.
- Williams, G. (2004). "Evaluating participatory development: tyranny, power and (re)politicisation." Third World Quarterly **25**(3): 557-578.

Wilson, G. (2006). "Beyond the Technocrat? The Professional Expert in Development Practice." Development and Change **37**(3): 501–523.