



EUROPEAN
EVALUATION
SOCIETY

Evaluation in the networked society: new concepts, new challenges, new solutions



The Open University

Equity-focused developmental evaluation

using *critical systems thinking*

Martin Reynolds

Senior Lecturer in Systems Thinking
The Open University UK



European Evaluation Society

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Session outline



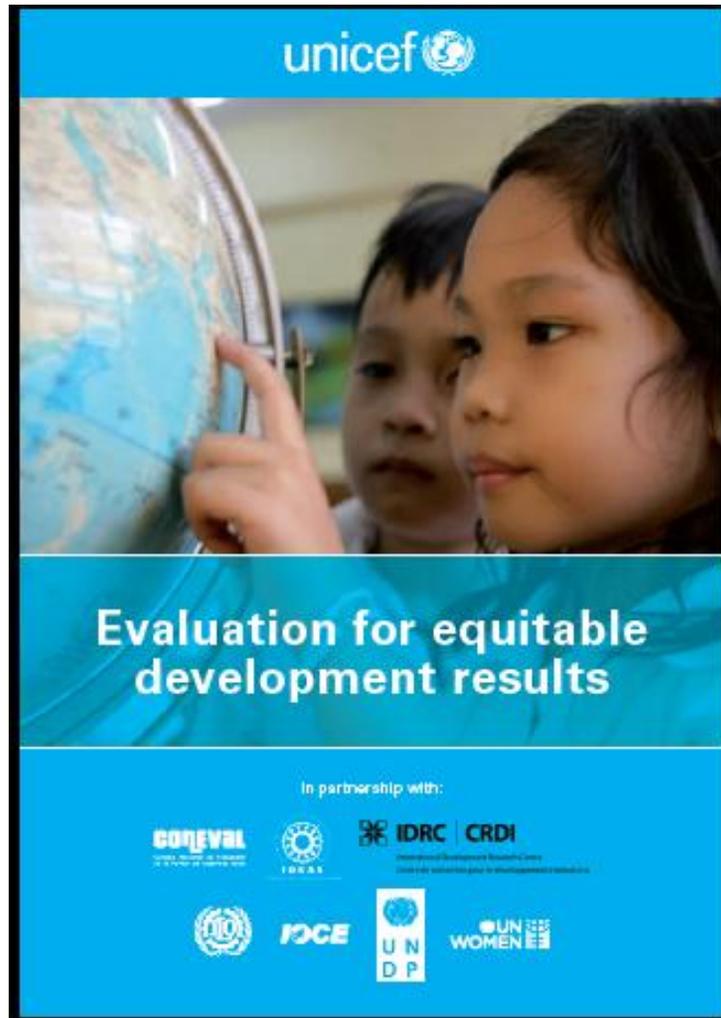
Equity-focused *developmental* evaluation and *critical* systems thinking

1. Background: UNICEF publication and Narmada Project case study
2. Ethics and evaluation: utility, rights and virtues
3. Developmental evaluation: ethics and double loop learning
4. Critical systems thinking: politics and triple loop learning

Pro-equity evaluation questions

- Who gets what?
- Who owns what?
- Who does what?
- Who gets affected by what some people get?

UNICEF publication: equity-focused evaluations



Book available as [free download](#) on web

- Editor: Marco Segone (2012)

Authors

Michael Bamberger	Karen Kirkhart
Katrina Bledsoe	Donna Martens
Thania de la Garza	Janice Muir
Soma de Silva	Maria Fernanda Paredes
Janie Eriksen	Michael Quinn Patton
Oscar Garcia	Shravanti Reddy
Jennifer Greene	Martin Reynolds
Francisco Guzman	Patricia Rogers
Katherine Hay	Jim Rugh
Gonzalo Hernández	Marco Segone
Rodney Hopson	Juha Uitto
Richard Hummelbrunner	Brenda Valdez
Savilla Kushner	Bob Williams

- 15 chapters in total
- 6 chapters on methodological implications (Bamberger, Patton, Reynolds & Williams, Rogers & Hummelbrunner, Kushner, Greene)
- Reynolds and Williams *Systems thinking and equity-focused evaluations* pp. 115-141

Chapter available as [free download](#) on web

A case study: Narmada valley development project



Narmada Valley and proposed dams Complicated! interrelationships

First conceived in the 1940s but not until 1979 that the project took form.

- **Complicated:** Construction of 30 large, 135 medium and 3000 small dams to exploit the waters of the river Narmada
- **Complex:** x4 key issues:
 1. water security
 2. energy security
 3. food security
 4. sustainability
- **Conflictual:** Sardar Sarovar is the largest and most controversial... 1990s many financial institutions withdrew support.

Satyagraha 2001

Complex! different perspectives



Submergence in the Narmada valley 2003



Conflictual! bounded interests
e.g. villages displaced

Systems thinking in practice

Point of departure from UNICEF publication



1. Conference paper does not give detailed outputs of applying critical systems thinking to the Narmada case study (see original Reynolds and Williams (2012) chapter in UNICEF publication)

2. Paper steps back to reflect more generally on:
 - o ethics and evaluation
 - o developmental evaluation, and
 - o critical systems thinking and critical systems heuristics

in supporting pro-equity evaluations with a political dimension

3. Paper explores the importance of double loop learning *and* triple loop learning for equity-focused evaluations

Ethics and evaluation



Two dimensions of ethics (Des Jardins, 2001)

Joseph Des Jardins (2001) identifies two dimensions of ethics:

1. **Normative ethics** [values-engaged evaluation] Normative judgements and evaluations prescribing behaviour .. e.g. ‘worst-off groups *ought* to be protected.’

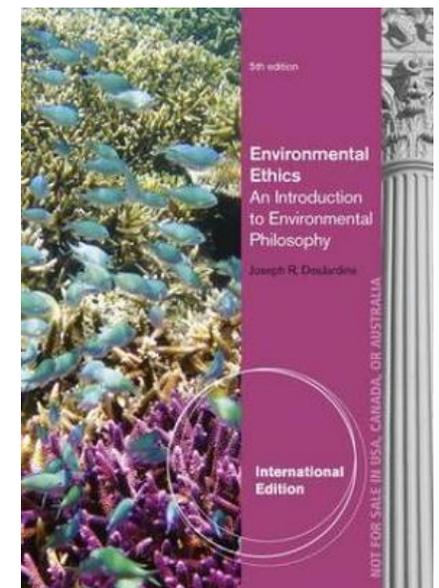
“Normative disputes can be frustrating when ethical discussions are left at this level, with disagreements and controversies abounding” (Des Jardins)....

2. **Philosophical ethics** [theory of change/ programme theory evaluation] higher level of generality and abstraction - evaluating normative judgements and their supporting reasons - the level of the general concepts, principles, and theories in defence of normative claims.

Theoretical underpinnings associated with:

- *doing what’s good* (**consequentialist ethics** e.g. utilization-focused evaluation)
- *doing what’s right* (**deontological ethics** e.g. rights-focused evaluation) and
- *being responsible* (**virtue-based ethics** e.g., justice-focused evaluation)

Des Jardins, J. R. (2001). Environmental Ethics: an introduction to environmental philosophy. Belmont, CA, Wadsworth.



Ethics and evaluation

normative value judgements in Narmada



Issues of Narmada Project	Enhanced value <i>arguments for construction of dams</i>	Diminished value <i>arguments against construction of dams</i>
1 Water security	Supply water to 30m people including drinking water facilities	Increase prospect of insect-borne diseases.
2 Energy security	Improve access to electricity in remote villages.	Dispossess large numbers of poor and underprivileged communities of their land as a source of livelihood
3 Food security	Modernise agricultural practices using irrigated farming	Lose skills in more sustainable farming practices
4 Sustainability (ecological)	Establish wildlife sanctuaries protecting rare species (e.g., Sloth Bear, Wild Ass etc)	Diminish biodiversity through monoculture irrigated farming

Needs some theoretical guidance...

Ethics and evaluation

philosophical ethics (theory) in Narmada



Issues of Narmada Project	Doing what's good (not harmful) Consequentialist ethic <i>Measures of success (impacts)</i>	Doing what's right (not wrong) Deontological ethic <i>Intentions and obligations (rights)</i>	Being responsible Virtue-based ethics <i>Virtues/Vices</i>
1 Water security	Improve quality of water and access to clean water (avoid disease and drought)	Provide universal access to clean water (not reinforcing or developing skewed access)	Justice/ Injustice
2 Energy security	Improve quality of life for citizens (avoid poverty and use of only economic indices)	Provide opportunity for all humans to flourish (not constraining humans from flourishing)	Moderation/ Greed
3 Food security	Improve range of productive capacities for farming (avoid loss of ecologically sustainable farming skills)	Provide expertise to support appropriate practice (not contriving a simplistic solution)	Humility/ Arrogance
4 Sustainability (ecological)	Improve quality of the natural environment (avoid ecological deterioration)	Provide protection against ecological destruction (not ignoring wider obligations to nature)	Compassion/ Recklessness

What about political space?

Ethics and evaluation

Three dimensions of ethics (Reynolds, 2009)



Des jardins (2001) = two dimensions:

1. **Normative ethics** [values-engaged evaluation] what 'ought' to happen?
2. **Philosophical ethics** [theory of change/ programme theory evaluation] – impacts, rights, behaviours

*A third dimension relates to the **political space** in which ethical disputes are contested*

3. **Politics and ethics** [democratic, participatory, feminist-based evaluations] critique of social structures and institutions which en(dis)able values and theories to be expressed

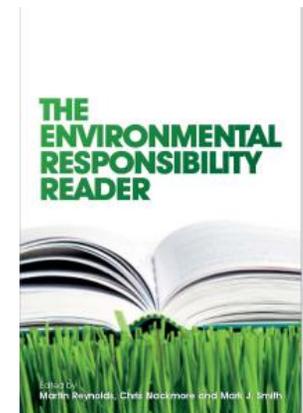


Medha Patkar and NBA activists stand in the rising water of the Narmada River to protest raising of the Sardar Sarovar Dam (2007)



Protests in Khandwa 2007

Reynolds, M. (2009) "Environmental Ethics" pp. 40-51 in *The Environmental Responsibility Reader*, edited by M. Reynolds, C. Blackmore and M.J. Smith. London, New York Zed Books.



<http://oro.open.ac.uk/18505/1/4ReynoldsEDv2.pdf>).

Developmental evaluation

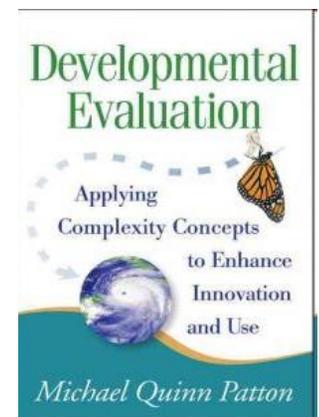
pro-equity evaluation, systems, and double loop learning (Patton, 1994)



1. 'Thinking about systems' and *Developmental* evaluation
 - i. Informed by *complexity theory* allowing for unpredictable 'emergence'
 - ii. Interventions considered as '*complex adaptive systems*' always in state of change.
2. 'Systems thinking' and double loop learning:

“Making changes to improve immediate outcomes is single-loop learning; making changes to the system to prevent the problem or embed the solution in a changed system is double-loop learning” (Patton, 2012 p.105-106).

- i. Single-loop learning = 'problem–identification–correction' linear process..e.g. Narmada 'problems' of underdevelopment/ poverty 'identified' in terms of water, energy and food security, to be 'corrected' by large-scale dams. Key evaluative measures are formative 'efficacy' and 'efficiency' – *doing it right!*
 - ii. Double-loop learning = questioning 'the problem' as expressed in current system. Requires reflection and iteration. e.g. Narmada 'problems' not just *shortages of water*, industry, and arable land, but *entitlements to such resources*. Key evaluative measure is 'effectiveness' – *doing the right thing!*
3. Politics? 'Critical systems thinking' and triple loop learning



“Triple loop learning involves learning how to learn, and is embedded in the processes of developmental evaluation” (Patton, 2012 p.106) ??

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

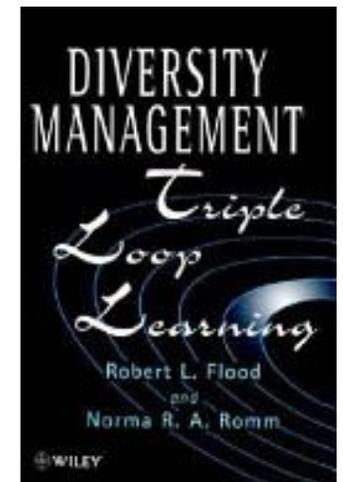
Critical systems thinking



pro-equity evaluation and triple loop learning (Flood and Romm, 1996)

“Triple loop learning involves learning how to learn, and is embedded in the processes of developmental evaluation” (Patton, 2012 p.106) ??

1. Single-loop learning questions how existing activities can be done better – relating to the normative ethical dimension in asking *how* we should do things
(**thinking about systems...** how we work the system)
2. Double-loop learning questions whether those activities are the right thing to do – relating to the philosophical dimension of asking *what* things are best to do.
(towards **systems thinking...** how we design the system)
3. Triple-loop learning questions relations of power that determine how we know what is the right thing to do. This gives rise to an examination of the relationship between ‘mightiness’ and ‘rightness’.
 - i. (“is rightness buttressed by mightiness?”) Is the ‘right thing’ determined by some source of assumed power – for example, coercion or authoritative power of government (sometimes referred to as ‘decisionism’)? Or
 - ii. (“is mightiness buttressed by rightness?”) is the ‘right thing’ determined by some power of knowledge, expertise and/or righteousness (... technocentrism)?(towards **Critical systems thinking...** how we reflect on systems work and systems design)



Flood, R. L. and N. Romm (1996). Diversity Management: Triple Loop Learning. Chichester, John Wiley & Sons.

Critical systems thinking (CST)

Triple-loop learning in Narmada



3. Triple-loop learning questions relations of power that determine how we know what is the right thing to do. This gives rise to an examination of the relationship between 'mightiness' and 'rightness'.
 - i. ("is rightness buttressed by mightiness?") Is the 'right thing' determined by some source of assumed power – for example, coercion or authoritative power of government (sometimes referred to as 'decisionism')?

Influence of large multinational companies involved with *agribusiness* in forcing decisions around dam construction using their leverage of financial power, even in the face of *expert knowledge* advising against intervention because of the ecological damage and other effects of displacement.

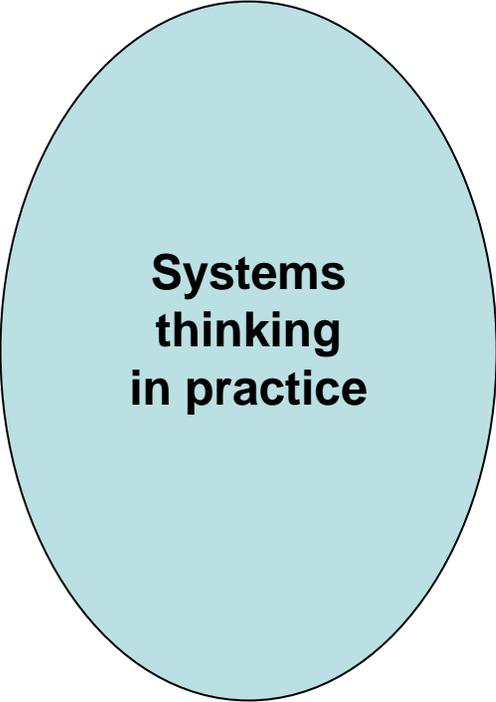
- ii. ("is mightiness buttressed by rightness?") is the 'right thing' determined by some power of knowledge, expertise and/or righteousness (... technocentrism)?

Alternatively, expertise ('rightness') itself assuming excessive power- expertise around dam construction, particularly amongst *building contractors*, as well as knowledge associated with other dam constructions and *project managers* can assume a technocentric power base of arrogant 'rightness' overriding the '*mightiness*' of *ecological interests and vast numbers of people who stand to be adversely affected* by dam construction in Valley.

Systems thinking in practice



Thinking about systems, systems thinking *and critical systems thinking*



**Systems
thinking
in practice**

Thinking about systems

1. Understanding interrelationships and interdependencies

"Only Connect" E. M. Forster

'universe' - developing the 'bigger picture': going up a level of abstraction

Systems thinking

2. Engaging with multiple perspectives

"A systems approach begins when first you see the world through the eyes of another" C.W. Churchman

'multiverse' or 'pluriverse' - developing perspectives: appreciating different viewpoints

Critical systems thinking

3. Reflecting on boundaries

"No problem can be solved from the same consciousness that created it. We have to learn to see the world anew." Albert Einstein

're-verse' - developing critical space: revising big pictures and viewpoints

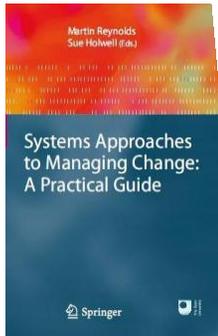
Critical systems heuristics (CSH)

A systems tool



CSH is a **reference system** used for:

- Thinking about systems: interrelationships
- Systems thinking: engaging with multiple perspectives
- Critical systems thinking: reflecting on the limitations of framing understanding of interrelationships and framing engagement with multiple perspectives



Chapter 6 Critical Systems Heuristics¹

Werner Ulrich and Martin Reynolds

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

- Who gets what? (motivation)
- Who owns what? (control)
- Who does what? (knowledge)
- Who gets affected by what some people get (legitimacy)

	Stakeholders <i>Social Roles</i>	Stakes <i>Role-specific concerns</i>	Stakeholdings <i>Key Problems</i>
Sources of motivation	1. Beneficiary/ client	2. Purpose	3. Measure of success
Sources of control	4. Decision-maker	5. Resources	6. Decision environment
Sources of knowledge	7. Expert	8. Expertise	9. Guarantor
Sources of legitimacy	10. Witness	11. Emancipation	12. Worldviews

Werner Ulrich (1983) *Critical heuristics for social planning* critical systems heuristics (CSH)

CSH and interrelationships

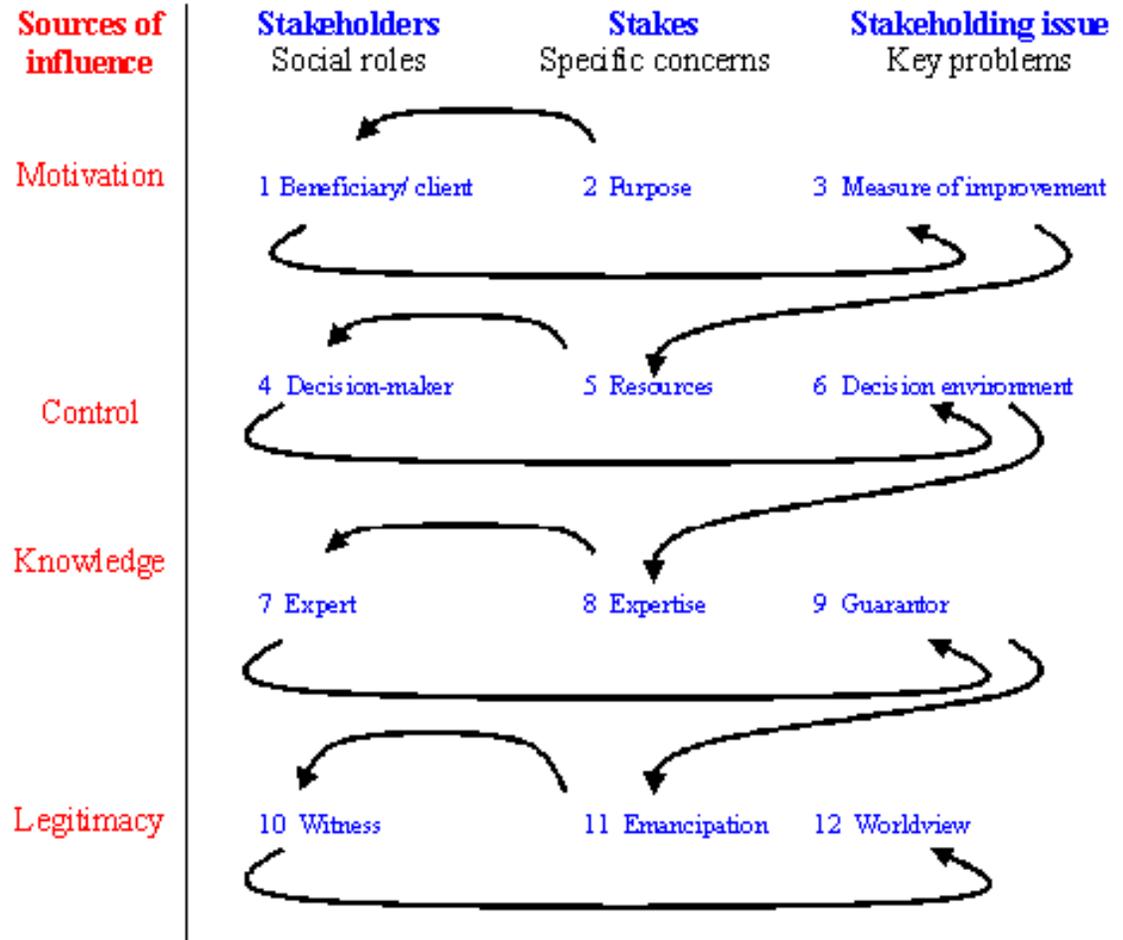


Unfolding normative values

Unfolding for each source of influence:

- i. What ought to be at **stake**?
- ii. Who ought to be the **stakeholders**?
- iii. What ought to be the opportunities for **stakeholding development**?

- Who 'ought' to get what? (**motivation**) related to questions of
- Who 'ought' to own what? (**control**) related to questions of
- Who 'ought' to do what? (**knowledge**) related to questions of
- Who 'ought' to be affected by what so people get and why? (**legitimacy**)



Worst-off groups 'ought' system

	Stakeholders <i>Social Roles</i>	Stakes <i>Role-specific concerns</i>	Stakeholdings <i>Key Problems</i>
Sources of motivation	1. Beneficiary/ client	2. Purpose	3. Measure of success
Sources of control	4. Decision-maker	5. Resources	6. Decision environment
Sources of knowledge	7. Expert	8. Expertise	9. Guarantor
Sources of legitimacy	10. Witness	11. Emancipation	12. Worldviews

CSH and perspectives-1

Different normative reference systems



Madhya Pradesh 'ought' system

	Stakeholders <i>Social Roles</i>	Stakes <i>Role-specific concerns</i>	Stakeholdings <i>Key Problems</i>
Sources of motivation	1. Beneficiary/ client	2. Purpose	3. Measure of success
Sources of control	4. Decision-maker	5. Resources	6. Decision environment
Sources of knowledge	7. Expert	8. Expertise	9. Guarantor
Sources of legitimacy	10. Witness	11. Emancipation	12. Worldviews

Gujarat 'ought' system

	Stakeholders <i>Social Roles</i>	Stakes <i>Role-specific concerns</i>	Stakeholdings <i>Key Problems</i>
Sources of motivation	1. Beneficiary/ client	2. Purpose	3. Measure of success
Sources of control	4. Decision-maker	5. Resources	6. Decision environment
Sources of knowledge	7. Expert	8. Expertise	9. Guarantor
Sources of legitimacy	10. Witness	11. Emancipation	12. Worldviews

Maharashtra 'ought' system

	Stakeholders <i>Social Roles</i>	Stakes <i>Role-specific concerns</i>	Stakeholdings <i>Key Problems</i>
Sources of motivation	1. Beneficiary/ client	2. Purpose	3. Measure of success
Sources of control	4. Decision-maker	5. Resources	6. Decision environment
Sources of knowledge	7. Expert	8. Expertise	9. Guarantor
Sources of legitimacy	10. Witness	11. Emancipation	12. Worldviews

Evaluator's 'ought' system

	Stakeholders <i>Social Roles</i>	Stakes <i>Role-specific concerns</i>	Stakeholdings <i>Key Problems</i>
Sources of motivation	1. Beneficiary/ client	2. Purpose	3. Measure of success
Sources of control	4. Decision-maker	5. Resources	6. Decision environment
Sources of knowledge	7. Expert	8. Expertise	9. Guarantor
Sources of legitimacy	10. Witness	11. Emancipation	12. Worldviews

CSH and perspectives-2



Different stakeholders in any one reference system

CSH Template on perspectives	Stakeholder (social role)	Stake (role concern)	Stakeholding issue (key problem)	
Sources of motivation	1 Beneficiary	2 Purpose	3 Measure of improvement	The involved
Sources of control	4 Decision-maker	5 Resources	6 Decision environment	
Sources of knowledge	7 Expert	8 Expertise	9 Guarantor/ assurance	
Sources of legitimacy	10 Witness	11 Emancipation	12 Worldview	The affected

Stakeholder groups

Beneficiary intended beneficiary/ client/ customer of the system <i>For example a system of pro-equity intervention such as the Narmada project</i>	The involved
Decision-maker in command of the conditions of success of the system	
Experts providing relevant knowledge and skills for the system	
Witness representing the interests of those negatively affected by but not involved with the system	The affected

CSH and perspectives-3



Critique: normative vs empirical (e.g. UNICEF case study)

Informed by theory/ values
e.g. pro-equity evaluation



Stake (role concern)
'impact' consequentialist ethics

Stakeholder (social role)
'rights' deontological ethics

Stakeholding issue (key problem)
'behaviours' virtue-based ethics

CSH Template on perspectives		Stakeholder (social role)	Stake (role concern)	Stakeholding issue (key problem)
Sources of motivation		1 Beneficiary	2 Purpose	3 Measure of improvement
	'ought'			
	'is'			
	critique 'is' against 'ought'			
Sources of control		4 Decision-maker	5 Resources	6 Decision environment
	'ought'			
	'is'			
	critique 'is' against 'ought'			
Sources of knowledge		7 Expert	8 Expertise	9 Guarantor/ assurance
	'ought'			
	'is'			
	critique 'is' against 'ought'			
Sources of legitimacy		10 Witness	11 Emancipation	12 Worldview
	'ought'			
	'is'			
	critique 'is' against 'ought'			

CSH and boundary judgements-1

involved vs affected



CSH Template on perspectives	Stakeholder (social role)	Stake (role concern)	Stakeholding issue (key problem)	
Sources of motivation	1 Beneficiary	2 Purpose	3 Measure of improvement	The involved
Sources of control	4 Decision-maker	5 Resources	6 Decision environment	
Sources of knowledge	7 Expert	8 Expertise	9 Guarantor/ assurance	
Sources of legitimacy	10 Witness	11 Emancipation	12 Worldview	The affected

CSH and boundary judgements-2



(control) mightiness vs (knowledge) rightness (triple loop learning)

CSH Template on perspectives	Stakeholder (social role)	Stake (role concern)	Stakeholding issue (key problem)	
Sources of motivation	1 Beneficiary	2 Purpose	3 Measure of improvement	The involved
Sources of control	4 Decision-maker	5 Resources	6 Decision environment	
Sources of knowledge	7 Expert	8 Expertise	9 Guarantor/ assurance	
Sources of legitimacy	10 Witness	11 Emancipation	12 Worldview	The affected

CSH and boundary judgements-3

Stakeholding development vs stakeholding entrenchment



CSH Template on perspectives	Stakeholder (social role)	Stake (role concern)	Stakeholding issue (key problem)	
Sources of motivation	1 Beneficiary	2 Purpose	3 Measure of improvement	The involved
Sources of control	4 Decision-maker	5 Resources	6 Decision environment	
Sources of knowledge	7 Expert	8 Expertise	9 Guarantor/ assurance	
Sources of legitimacy	10 Witness	11 Emancipation	12 Worldview	The affected

1. What's at **stake**?

2. Who are the **stakeholders**?

3. What possibilities exist for **stakeholding development**?

as against...



3. What threats exist for **stakeholding entrenchment**?

CSH and boundary judgements-3

stakeholdings



	Stakeholders <i>Social Roles</i>	Stakes <i>Role-specific concerns</i>	Stakeholdings <i>'Key Problems' = tensions between idealised 'system' vs realities of 'situation'</i>	
Sources of motivation	1. Beneficiary/ client	2. Purpose	3 – (measure of success) enchantment of fixed <i>measurable outcomes</i> vs managing emergence <i>Check on values (circumscribing the system)</i>	The involved
Sources of control	4. Decision-maker	5. Resources	6 – (environment) imperative towards <i>command and control</i> vs allowing autonomy <i>Check on power (controlling the system)</i>	
Sources of knowledge	7. Expert	8. Expertise	9 – (guarantor) dogma and promises of <i>professional expertise</i> vs wider humility of social/ ecological uncertainty <i>Check on complacency (informing the system)</i>	
Sources of legitimacy	10. Witness	11. Emancipation	12 – (worldview) righteousness and premises of <i>'the' system</i> vs rights of, and consequences on, those affected <i>Check on fundamental meanings (assumed within the system)</i>	The affected

Summary

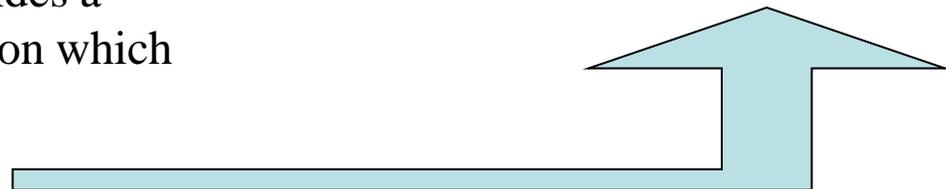


Equity-focused *developmental* evaluation and *critical* systems thinking

1. Ethics and evaluation: normative and philosophical ethics need a *political* dimension
2. Developmental evaluation: loops of learning need a *political* dimension
3. Systems thinking in practice: provides a *political* dimension to evaluation through not just:
 - i. 'Thinking about systems', and
 - ii. 'Systems thinking'but also
 - iii. Critical systems thinking (CST)
4. Critical systems heuristics (CSH) provides a political economy approach to evaluation which can address questions regarding...

Pro-equity evaluation questions

- 
- Who gets what?
 - Who owns what?
 - Who does what?
 - Who gets affected by what some people get?





Martin Reynolds

Communication and Systems Department

The Open University

Walton Hall

Milton Keynes MK7 6AA

Email: m.d.reynolds@open.ac.uk

Website: <http://sites.google.com/site/jintest1/Home/people/martin-reynolds-1>

Publications: <http://oro.open.ac.uk/view/person/mdr66.html>

Tel: +44 (0)1908 654894 (work)



Thinking strategically: systems tools for managing change
Core module of postgraduate Certificate, Diploma or Masters in
Systems Thinking in Practice



Environmental Responsibility: ethics, policy and action
(30 credits PG) code TD866. Part of postgraduate Certificate, Diploma or Masters in
Environmental Decision Making