

Critical Systems Heuristics Workshop

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“CSH offers a tool for understanding the multiple perspectives people bring into situations. By examining the different underlying **boundary judgments**, we can better understand people’s differences and handle them more constructively.”

To make boundary judgments transparent can be transformative.

CSH can be used in a variety of ways. First in what is compared:

1. Contrast the normative, ideal mode (what “ought” to be...) with the descriptive, reality-based mode (what “is”)
2. Contrast responses/decisions/judgments among the 4 stakeholder groups associated with the four sources of influence. So judgments related to intended beneficiaries (1-3) can be compared with those relating to decision makers (4-6) or experts (7-9), and/or witnesses (10-12)
3. Contrast how different stakeholders respond to these questions.
4. Contrast how those involved with the system design respond (1-9) vs. those who are affected by its consequences by not involved (10-12).

Second, in how it is used:

1. The evaluator uses questions as a reflective tool for herself in conducting the evaluation.
2. The questions are used as a template for interviewing different program participants and stakeholders
3. Program planners can use the questions to discover boundary judgments and make adjustments prior to the program implementation.
4. Evaluators could use it to interrogate they own *system* of evaluation

CSH derives from the substantive ethical and political perspective on systems thinking promoted by C. West Churchman (1968; 1979). CSH makes problematic ‘the situation perceived to be problematic’, so as to help practitioners see through their underpinning assumptions. As soon as we begin to define and structure the situation in some way, for example as a *problem* situation, or as a certain context *that matters*, or as *relevant* territory, then systems conceptions of some kind are already at play. In CSH terms these are called *reference systems*. Put simply CSH uses a set of 12 boundary questions to frame

our reference systems. The questions make explicit boundary judgments on which we rely (consciously or not) to understand situations and to design and evaluate systems for improving them. Table 1 describes the 12 questions.

The boundary categories and questions of CSH (from Ulrich and Reynolds, 2010 p.244; adapted from Ulrich, 1996, p44)

Sources of influence	Boundary judgments informing a system of interest (S)			
	<i>Social roles (stakeholders)</i>	<i>Specific concerns (stakes)</i>	<i>Key problems (stakeholding issues)</i>	
Sources of motivation	1. <u>Beneficiary</u> Who ought to be/is the intended beneficiary of the system (S)?	2. <u>Purpose</u> What ought to be/is the purpose of S?	3. <u>Measure of improvement</u> What ought to be/is S's measure of success	The involved
Sources of control	4. <u>Decision maker</u> Who ought to be/is in control of the conditions of success of S?	5. <u>Resources</u> What conditions of success ought to be/are under the control of S?	6. <u>Decision Environment</u> What conditions of success ought to be/are outside the control of the decision maker?	
Sources of knowledge	7. <u>Expert</u> Who ought to be/is providing relevant knowledge and skills for S?	8. <u>Expertise</u> What ought to be/are relevant-knowledge and skills for S?	9. <u>Guarantor</u> What ought to be/are regarded as 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 the opportunities for the interests of those negatively affected to have expression and freedom from the worldview of S?	12. <u>Worldview</u> What space ought to be/is available for reconciling differing worldviews regarding S among those involved and affected?	The affected

The twelve CSH questions are associated with four sources of influence – motivation, control, knowledge, and legitimacy – each briefly described below. For a more comprehensive narrative description see Reynolds (2007 p.107) and Ulrich and Reynolds (2010 pp. 260-261)

Motivation

The development of a system - whether it's an intervention itself (e.g., a project, programme or policy) or an evaluation of an intervention - starts with some notion of "purpose." Since a purpose reflects embedded values associated with some person or persons, it is valid to ask, "Whose purpose?" Identifying first what the *purpose* of the system should be helps identify who the intended *beneficiaries* ought to be. This in turn raises questions about what should be appropriate *measures of success* in securing some improvement to those beneficiaries. Together these boundary questions relating to purpose, beneficiaries and relevant measures make transparent the value basis of the system.

Control

The exploration of motivation leads to questions regarding the *necessary resources* or *components needed for success*. Financial capital and other forms of tangible assets like natural, physical, and human capital might be complemented with less tangible factors such as social capital (access to networks of influence). But who ought to be the *decision makers* in control of such resources? This in turn prompts questions as to what should be left *outside* the control of such decision makers in order to ensure some level of *accountability*. There are risks of having all the necessary resources under the control of the system. If the system has all the resources, then the system cannot be controlled or held accountable in any way by those outside the system. Such questions help make transparent the power basis of the system.

Knowledge

One important set of factors that need to be independent of the decision maker is knowledge or expertise. In an ideal setting, expertise ought not to be under the control of the decision maker but should have independence. So what ought to be the necessary *types and levels of knowledge and experiential know-how* to ensure that the system actually has practical applicability and works toward its purpose? Who ought to be the '*experts*'? And how might such expert support prove to be an effective *guarantor*, a provider of some assurance of success? Over-reliance of one area of expertise over the other may constitute a false guarantee – a sort of self-deception. Such issues help to make transparent the knowledge basis of the system.

Legitimacy

Any assessment of the values (motivation), power (control), and expertise (knowledge) associated with any system will always be biased in some way. So what gives this system the legitimacy to carry out its tasks? If the system is looked at from a different, opposing viewpoint, in what ways might the system's activities be considered coercive or malignant rather than *emancipatory* or benign? Who is capable of *making representations* on the victims' behalf, and on what basis would they make this claim? Finally, how might the underlying *worldview* associated with the system be reconciled with these opposing worldviews? Such questions help to make transparent the worldview or moral meaning underpinning

the system. This in turn provides the basis of legitimacy; a sense of social and legal approval to the system at any one time.

Other Versions of Heuristic

Motivation	CSHq 2:	What do you think the purpose of this reference system should be?	<i>If this is our purpose but we are targeting XX, we will not accomplish the right thing because...</i>
	CSHq1:	Who should benefit from the project?	<i>I see young people as beneficiaries but I don't see them included at present...?</i>
	CSHq3:	How will you measure this?	
Control	CSHq 5:	What resources do you need for this project (money, staff, connections...)?	
	CSHq4:	Who has control of which resources?	
	CSHq 6:	What needs to be outside the control of those in charge of this system to ensure some level of accountability?	<i>We can't really control if our clients sign up to use the services, does this help make us accountable to them or not?</i>
Knowledge	CSHq8:	What are the necessary types and levels of competent knowledge and skills for this system?	<i>What if we would redefine expertise as...?</i>
	CSHq7:	Who should provide that expertise?	
	CSHq9:	How would that expert provide an assurance of success?	
Legitimacy	CSHq11:	How might the activities be perceived as coercive or malignant?	
	CSHq10:	Who or what might be the 'victims' of the system?	<i>Who are we leaving out by structuring the program this way and how are they harmed?</i>
	CSHq12:	How might these differing worldviews be reconciled?	

	Ideal Mapping
Purpose	Vision Building or Setting the Purpose
Guiding Question	What's our vision? Where do we want to go from here?
	Evaluation
Purpose	Value Clarification
Guiding Question	Where are we standing? How satisfied are we with the state of affairs?
	Reframing
Purpose	Boundary Revision
Guiding Question	What is the relevant context? How else can we frame the picture?
	Challenge
Purpose	Emancipation
Guiding Question	How can we claim this is the right thing to do?

References and Further Reading

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