

## *Concepts, Questions, and Procedures for Boundary Critique*

### **Background**

In a world where everything ultimately connects with everything else, it is necessary to set boundaries when deciding what to do and how to act. The requirement to make such judgments also highlights a need for diverse stakeholders to engage in active *boundary critique* as they examine the various facts and values that are, and are not, included in a given intervention or inquiry.<sup>1</sup>

Best articulated by the pioneering systems scholar Werner Ulrich,<sup>2-6</sup> boundary critique is a central concept of critical systems thinking and of critical professional practice in general.<sup>7,8</sup> It is also a core methodology common to many contemporary forms of systems thinking and modeling.<sup>9</sup> The importance of boundary critique stems from the idea that both the meaning and the validity of professional propositions always depend on boundary judgments as to which “facts” (i.e., observations) and which “norms” (i.e., valuation standards) are to be considered relevant in a given situation; and by extension, which others are to be left out or considered less important.<sup>10</sup> Ulrich explains that this inevitable task of drawing boundaries cannot be justified as the domain of experts alone.

*Professional expertise does not protect against the need for making boundary judgements...nor does it provide an objective basis for defining boundary judgements. It's exactly the other way round: boundary judgements stand for the inevitable selectivity and thus partiality of our propositions. It follows that experts cannot justify their boundary judgements (as against those of ordinary citizens) by referring to an advantage of theoretical knowledge and expertise. When it comes to the problem of boundary judgements, experts have no natural advantage of competence over lay people.<sup>7</sup>*

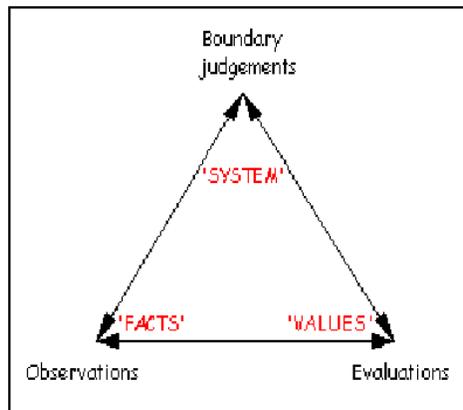
Experts and non-experts in a particular problem area must continually engage in an open dialogue about what our problems are, alternative ways of framing them, and the attendant implications for action and change.<sup>1</sup> Boundary judgements and value judgements are intimately linked: the values adopted will direct the where boundaries are drawn, which in turn, define the knowledge accepted as pertinent. Similarly, the very process of drawing boundaries constrains the values that can be pursued. Boundary critique is therefore an ethical process, requiring practical guidelines that planners and ordinary citizens can both use equally proficiently as they engage in boundary critique.<sup>11</sup>

Ulrich contends that efforts to recognize and critique boundary judgements create the conditions for authentic communication, even in circumstances where there is no agreement about facts and values.

*Once we understand the role of boundary judgements and know how to deal with them in an open and reflective way, we can grant one another the right to having different rationalities; we can begin to understand, and agree upon, the sources of dissent. Thus we can learn to understand one another even though we cannot agree, as our needs and interests are genuinely different.<sup>7</sup>*

Below are a several figures, developed by Ulrich,<sup>7</sup> which convey the essential concepts, questions, and practices involved in boundary critique.

– Summarized by Bobby Milstein ([bmilstein@cdc.gov](mailto:bmilstein@cdc.gov))



**Fig. 1. The interdependence of boundary judgements, observations, and evaluations.**

The facts we observe, and the way we evaluate them, depend on how we bound the system of concern. Different value judgements can make us change boundary judgements, which in turn makes the facts look different. Knowledge of new facts can equally make us change boundary judgements, which in turn makes previous evaluations look different, etc.

**Table I. Three kinds of boundary questioning.**

Systematic boundary critique is possible through individual reflection, through dialogical search for mutual understanding, and through controversial debate on boundary judgements.

**(1) Self-reflective boundary questioning: "What are my boundary judgements?"**

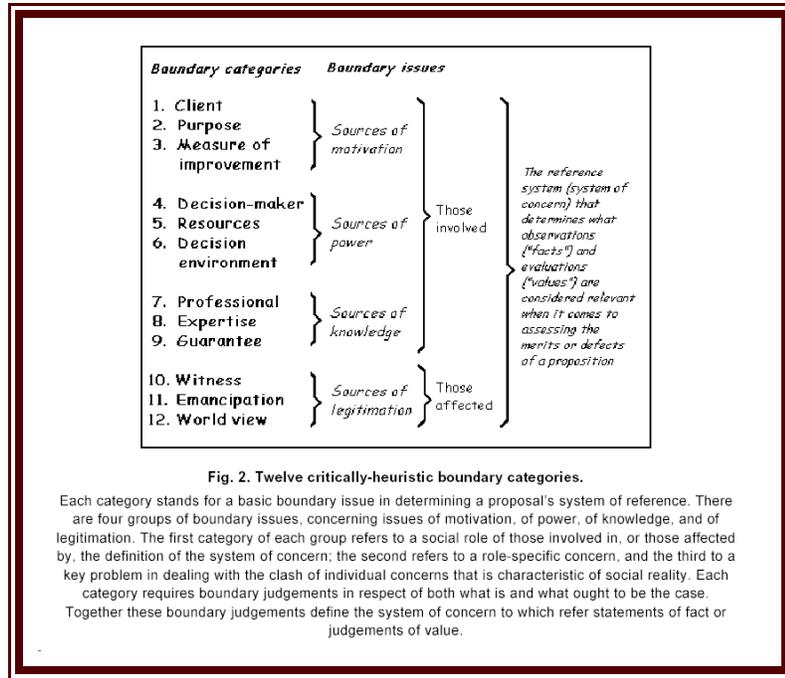
- Are they different from those of other people with whom I have to do?
- What is their normative content, that is, how selective is my reference system as compared to the whole situation concerned, and what consequences may that have for other people?
- Should I consider alternative boundary judgements, and what would be their normative content?
- What ought to be my boundary judgements so that I can justify them vis-à-vis all those concerned?

**(2) Dialogical boundary questioning: "Can we agree on our boundary judgements?"**

- Why do our opinions or claims differ?
- What different boundary judgements make us see different facts and values?
- How do you see things if you tentatively adopt my boundary judgements, and vice-versa? Can we find common boundary judgements? If not, can we at least understand and respect why we disagree?

**(3) Controversial boundary questioning: "Don't you claim too much?"**

- Can I challenge an opponent's claims by making visible to others the boundary judgements on which these claims depend?
- Can I argue against an opponent's allegation that I do not know or understand enough to challenge the claim in question? How can I make a cogent argument even though I am not an expert and indeed may not be as knowledgeable as the opponent with respect to the issue at hand?



**Fig. 2. Twelve critically-heuristic boundary categories.**

Each category stands for a basic boundary issue in determining a proposal's system of reference. There are four groups of boundary issues, concerning issues of motivation, of power, of knowledge, and of legitimation. The first category of each group refers to a social role of those involved in, or those affected by, the definition of the system of concern; the second refers to a role-specific concern, and the third to a key problem in dealing with the clash of individual concerns that is characteristic of social reality. Each category requires boundary judgements in respect of both what is and what ought to be the case. Together these boundary judgements define the system of concern to which refer statements of fact or judgements of value.

Table II. Checklist of critically heuristic boundary questions.

For systematic boundary critique, each question needs to be answered both in the "is" and in the "ought" mode. Differences between "is" and "ought" answers point to unresolved boundary issues. There are no definitive answers, in that boundary judgements may always be reconsidered. By means of systematic alteration of boundary judgements, it is possible to unfold the partiality (selectivity) of an assumed system of concern from multiple perspectives, so that both its empirical content (assumptions of fact) and its normative content (value assumptions) can be identified and can be evaluated without any illusion of objectivity.

#### **SOURCES OF MOTIVATION**

- (1) Who is (ought to be) the **client**? That is, whose interests are (should be) served?
- (2) What is (ought to be) the **purpose**? That is, what are (should be) the consequences?
- (3) What is (ought to be) the **measure of improvement**? That is, how can (should) we determine that the consequences, taken together, constitute an improvement?

#### **SOURCES OF POWER**

- (4) Who is (ought to be) the **decision-maker**? That is, who is (should be) in a position to change the measure of improvement?
- (5) What **resources** are (ought to be) controlled by the decision-maker? That is, what conditions of success can (should) those involved control?
- (6) What conditions are (ought to be) part of the **decision environment**? That is, what conditions can (should) the decision-maker *not* control (e.g. from the viewpoint of those not involved)?

#### **SOURCES OF KNOWLEDGE**

- (7) Who is (ought to be) considered a **professional**? That is, who is (should be) involved as an expert, e.g. as a researcher, planner or consultant?
- (8) What **expertise** is (ought to be) consulted? That is, what counts (should count) as relevant knowledge?
- (9) What or who is (ought to be) assumed to be the **guarantor of success**? That is, where do (should) those involved seek some guarantee that improvement will be achieved – for example, consensus among experts, the involvement of stakeholders, the experience and intuition of those involved, political support?

#### **SOURCES OF LEGITIMATION**

- (10) Who is (ought to be) **witness** to the interests of those affected but not involved? That is, who is (should be) treated as a legitimate stakeholder, and who argues (should argue) the case of those stakeholders who cannot speak for themselves, including future generations and non-human nature?
- (11) What secures (ought to secure) the **emancipation** of those affected from the premises and promises of those involved? That is, where does (should) legitimacy lie?
- (12) What **worldview** is (ought to be) determining? That is, what different visions of "improvement" are (should be) considered, and how are they (should they be) reconciled?

**Table III. Guidelines for Boundary Critique.**

Follow these guidelines in your first attempts at boundary critique.

1. *Internalise the boundary categories.* First, familiarise yourself with the organisation and intent of the twelve categories according to Figure 2 and Table II. You should be able to formulate boundary questions without a checklist – almost intuitively. Consider boundary critique to be a way of thinking rather than as a technique.
2. *Learn to hear and see boundary judgements.* To get started, listen to everyday dialogues at the workplace, on the bus or in the media. Try to hear the boundary judgements between the lines: why are these parties at cross-purposes?
3. *Appreciate the normative implications of boundary judgements.* When you manage to identify boundary judgements, make a habit of asking yourself how they (or the claims they support) may affect different groups of people in different ways.
4. *Question boundary conventions.* Once you master steps 1 to 3, start to apply the boundary categories to your professional thinking. Question what you do and say professionally by looking at the underpinning boundary judgements. Try this not only in lonely reflection but also in discussions with colleagues, clients, or students; for example, "Why do we bound problems the way we do, concerning ... (a boundary category)?" When colleagues first begin to wonder about the powerful concept behind your questions, you'll know you are on your way!
5. *Question both "is" and "ought" boundaries.* For each boundary category you consider, always ask both what *is* and what *ought* to be the corresponding boundary judgement. When the two findings differ, you have food for thought!
6. *Vary your boundary judgements.* The genuine purpose of boundary critique is not boundary setting but boundary testing, that is, unfolding the empirical ("facts") and normative ("values") implications of alternative boundary judgements. To this end, vary them systematically and check how your professional assertions then look. Keep your boundary judgements fluid – do not allow them to harden.
7. *Don't talk of boundary judgements; talk about what they mean to different parties.* You need not constantly talk of "boundary judgements" and "reference systems" in order to talk *about* them; that only makes people switch off. What matters is that everyone concerned can see what they mean for all the parties – and that there are options for defining them.
8. *Read and think about boundary critique.* If you wish to gain a deeper understanding of the principle of boundary critique, keep asking yourself what it means for your personal quest for competence.<sup>3</sup>

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