

Werner Ulrich's Home Page: **CST**

A Brief Introduction to
"Critical Systems Thinking for Professionals & Citizens"



Abstract The goal of my current research program "Critical Systems Thinking for Professionals & Citizens" (Ulrich, 1995, 1996b, 2000) is to develop and pragmatize critical systems ideas so that ordinary professionals and citizens – all of us – can apply them. The idea is not that everyone should become a systems scholar but rather, that systems thinking can help us in developing some new reflective skills which in a civil society are essential for both professional competence and effective citizenship. The major concern of this research program, then, is civil society.

Copyright © 2003

[PDF file](#)

KEY WORDS: critical systems thinking; critical systems heuristics; professionalism; reflective practice; citizenship; civil society.

Reviving the Idea of Civil Society

Our contemporary notion of citizenship is dominated by the concept of civil rights. Since T.H. Marshall's (1950) seminal study on *Citizenship and Social Class*, we have become used to associate citizenship with three basic kinds of citizen rights: civil rights strictly speaking (civil liberties), political rights (rights of political participation), and social and economic rights (the right to social security and welfare); for a thorough account of Marshall's work on the development of modern citizenship rights and theory, see Barbalet (1988).

It is questionable, though, whether this notion of citizenship is still

satisfactory. The ongoing process of "modernization" has changed the meaning and relevance of classical citizen rights. The process of the "rationalization" of society, as Max Weber (e.g., 1970) could still designate the expansion of the spheres of control of scientific and bureaucratic rationality to ever more areas of life, appears to undermine the role of citizenship. Conventional citizen rights do not enable citizens sufficiently to control this process and its repercussions upon their daily lifeworlds. Important issues such as industrial democracy or the democratic control of science and technology are not really a part of our contemporary concept of citizenship.

A different concept of citizenship is required today, one that would give a central part to civil *competencies* rather than to rights only. As far as I can see, the societal changes that are of particular importance for understanding the changing role of the citizen point to a shift of the essential "locus of control" (steering centers) of society from institutions such as science, bureaucracy, parliamentary democracy, and industrial corporations – institutions that historically have been driving, and continue to drive, the process of rationalization – to *citizens*. I think a new, increasingly differentiated and decentralized kind of political culture (or perhaps, at times, subculture) is emerging in many societies, a political culture in which an increasing number of citizens and citizen groups develop a new awareness and new skills of evaluating and influencing the activities and omissions of the old steering centers. To mention just a few such competencies that come to mind, citizens everywhere are learning to make better use of the public media, including the new possibilities of information access and exchange through world-wide communication networks; to make the most of the available means of legal action and, at times, civil disobedience; to engage themselves in participative forms of inquiry and planning such as citizens' action groups, planning cells, citizen reports,

stakeholder evaluation, and participatory action research; and, of most interest here, to increase their critical competence vis-à-vis the rationality claims raised by vested interests or by the experts in their services. It is certainly significant that the old idea of a *civil society* currently enjoys a remarkable renaissance.

This is not to deny that there also exist important counter-tendencies toward increasing political abstinence (e.g., on the part of young people), but the symptoms of a deinstitutionalization and decentralization of political processes appear more significant to me. The phenomenon of political abstinence within the old political system is probably itself a symptomatic expression of the shift of the political to new political arenas, it need not necessarily mean a general loss of political interest. Citizens turn away from the institutionalized political system (which, they feel, does not give them a sufficiently competent and meaningful role) rather than from the *res publica* as such. Take, for example, the observation that when environmental issues are at stake, citizens in many societies now increasingly dare to "think themselves" (*sapere aude!* – dare to know! was Kant's motto for the Enlightenment). Who else if not active citizens can ultimately be expected to be in charge of controlling the increasingly threatening repercussions of the rationalization process upon the social lifeworld? What at first sight may look like a late triumph of the enlightenment project of modernity has, however, paradoxical post-modern implications: the gradual awakening of citizens in environmental and other matters goes along with a manifest loss of meaning and (steering) function of the very institutions which are the hallmark of modernity – parliamentary democracy, bureaucracy, science, the private corporation.

Civil rights are an essential issue in this process of change, but they are not enough. With the rediscovery of civil society, effective participation of

citizens in the governance of collective affairs becomes a central theme of the concept of citizenship. And so does, as a consequence, the idea of an *enabling (or empowering) state*, i.e., a state that sees one of its major functions in enabling its citizens to play this active role. Active and competent citizenship is therefore a key challenge to which CST for professionals and citizens aims to contribute.

Reviving the Idea of Professionalism

Similarly to the concept of citizenship, the contemporary concept of professionalism is not usually understood in terms of the reflective skills required for effective participation in civil society. Professionalism today is more often defined rather one-sidedly in terms of expertise. However, true competence reveals itself through responsibility. In a civil society, expertise alone is not a source of sufficient legitimation for the consequences that professional intervention may impose on citizens. In view of the ever-growing scope of professional intervention, professionals need new critical skills that enable them to identify such consequences systematically and to deal with them in a self-reflective and open way. That is to say, reflective competencies as we just required them from citizens also need to become an integral part of our concept of professionalism.

There exists a deep connection between the two concepts of competent citizenship and professionalism. Just as citizenship requires not only civil rights but also some critical competencies, competence requires not only expertise but also a proper understanding of citizenship. I therefore propose that we should teach future professionals to understand and practice their professional competence not only in terms of expertise but equally in terms of competent citizenship. Thus, only that professional will be considered a competent professional who also is a competent citizen, in

the sense intended above.

But of course, strategies of promoting critical competencies in professionals and citizens must rely on an approach that is sufficiently basic and general to be accessible to a majority of ordinary people. Critical systems thinking (CST) as I understand offers us a way to develop such an approach, provided we are willing to pragmatize critical systems ideas adequately. Such an effort, then, must not depend on any special cognitive requirements that would run the risk of excluding ordinary citizens – including ordinary professionals – from the start.

Reviving the Systems Idea

The question thus poses itself: What critical systems ideas, if any, might become a source of the envisaged critical competencies for a great majority of ordinary citizens and professionals? The core concept that I have in mind is fundamental to my own approach to critical systems thinking, an approach called Critical Systems Heuristics (Ulrich, 1983). I mean the concept of *the critical employment of boundary judgments* (Ulrich, 1983, pp. 225-314; 1987; 1993) or in short, *boundary critique* (Ulrich 1995; 1996a, b; 1998; 2000; 2001a, b). It says that the practical implications of a proposition (the "difference" it makes in practice) and thus its meaning as well as its validity depend on how we bound the system of concern, i.e., that section of the real world which we take to represent the relevant context. Our judgment of the merits of a proposition (e.g., its preferability to some alternative proposition, or its "rationality") will depend heavily on this context, for the context determines what "facts" (e.g., consequences) and "values" (e.g., purposes) we will identify and how we assess them. With respect to this crucial issue of boundary judgments, experts are no less lay people than ordinary citizens. Surfacing and questioning boundary

judgments thus provides ordinary people with a means to counter unqualified rationality claims on the part of experts or decision makers – as well as other citizens – by demonstrating the way they may depend on debatable boundary judgments.

For me, this concept is important because it implies that we need not be experts in the matter at hand in order to be able to contest an expert proposition of concern to us in a compelling way. Boundary critique appears to represent a rare example of how systems ideas immediately translate into methodologically cogent forms of argumentation, i.e., can make a difference between valid and invalid claims. The concept allows us to identify invalid claims by uncovering underpinning boundary judgments other than those intended (or pretended) by the proponent. Therein resides its critical power. It explains why and how ordinary citizens are capable of contesting propositions, and of advancing counter-propositions, without risking of being immediately convicted of lacking competence.

Note that the concept is based on a genuinely *systems-theoretical* conjecture: We cannot conceive of systems without assuming some kind of systems boundaries. If we are not interested in understanding boundary judgments, i.e., in critical reflection and debate on what are, and what ought to be, the boundaries of the system of concern, systems thinking makes no sense; but if we are, systems thinking becomes a form of critique!

Systems Thinking as a Form of Critique

The previous conclusion means that neither the systems idea nor the idea of critique can be practiced independently. This is so because either idea implies some basic validity claims that cannot be redeemed, except with the help of the other. *Critique* must be grounded, otherwise it is empty; but any attempt to ground it without systems thinking, that is to say, without

overtly limiting its context of valid application, will lead into an infinite regress of grounding the underlying validity claims and thus will ultimately depend on ideal conditions of rationality, as Habermas' (1984-87) model of rational discourse illustrates well (it is significant that rational discourse in this model depends on an anticipated "ideal speech situation"). On the other hand, *systems thinking* without critique amounts to the covert use of boundary judgments, the normative implications of which are not made a subject of systematic discussion; its claims to systemic understanding and comprehensiveness merely cover its partiality. Hence, the systems idea and the idea of critique actually require each other. We need to bring them together so that systems thinking can be practiced critically, and critique can be practiced systemically.

The concept of a critical employment of boundary judgments thus provides a *crucial methodological link between the systems idea and the idea of critique*. This is an idea which the critical tradition itself has not forwarded as yet but which, I believe, provides a key to the task of pragmatizing Habermas' (1984-87) theoretically compelling, though pragmatically desperate, identification of rational discourse with an "ideal speech situation" in which undistorted communication would be possible. Instead of waiting for such conditions of perfect rationality to be realized, we better put the systems idea to work on the job of dealing critically with normal conditions of imperfect rationality (cf. Ulrich, 1988, p. 158).

For these and other reasons, the concept of a critical employment of boundary judgments – of systematic boundary critique – appears fundamental to me. If it is fundamental, it must be possible to demonstrate its relevance in everyday situations of communication, debate, and decision making, in a language that ordinary citizens can understand. The challenge is to develop the didactic means that will allow us to explain to citizens the

meaning and importance of systematic boundary critique, and to train them in identifying and using boundary judgments for the purpose of critical reflection, debate, and argumentation.

It is beyond the scope of this short introduction to explain in any detail how my work on critical systems heuristics (CSH) seeks to operationalize the basic idea of systematic boundary critique, much less to explain the underpinning philosophical framework. If this very brief introduction has aroused your interest, you may wish to consult some of the main sources on the project and the underlying framework. The subsequent references and links will lead you to some relevant materials.

References

Barbalet, J.M. (1988). *Citizenship: Rights, Struggle and Class Inequality*. Open University Press, Milton Keynes, England.

Habermas, J. (1984-87). *The Theory of Communicative Action*. 2 vols. (Vol. 1 1984, Vol. 2 1987). Beacon Press, Boston, Mass., and Polity, Cambridge, UK (German orig. 1981).

Marshall, T.H. (1950). *Citizenship and Social Class and Other Essays*. Cambridge University Press, Cambridge, UK.

Ulrich, W. (1983). *Critical Heuristics of Social Planning: A New Approach to Practical Philosophy*. Haupt, Bern, Switzerland, and Stuttgart, Germany. Paperback edition Wiley, New York, 1994.

Ulrich, W. (1987). Critical heuristics of social systems design. *Europ. J. of Operational Research*, 31, No. 3, 276-283. Reprinted in M.C. Jackson, P.A. Keys and S.A. Cropper (eds.), *Operational Research and the Social Sciences*, Plenum Press, New York, 1989, pp. 79-87, and in R.L. Flood and M.C. Jackson (eds.), *Critical Systems Thinking: Directed Readings*, Wiley, New York, 1991, pp. 103-115.

Ulrich, W. (1988). Systems thinking, systems practice, and practical philosophy: A program of research. *Systems Practice*, 1, No. 2, 137-163. Reprinted in R.L. Flood and M.C. Jackson (eds.), *Critical Systems Thinking: Directed Readings*, Wiley, New York, 1991, pp. 245-268.

Ulrich, W. (1993). Some difficulties of ecological thinking, considered from a critical systems perspective: A plea for critical holism. *Systems Practice*, 6, No. 6, 583-611.

Ulrich, W. (1995). Critical Systems Thinking for Citizens: A Research Proposal. *Research Memorandum*, 10. Centre for Systems Studies, University of Hull, Hull, England, 28 November 1995.

Ulrich, W. (1996a). *A Primer to Critical Systems Heuristics for Action Researchers*. Centre for Systems Studies, University of Hull, Hull, England, March 31, 1996.

Ulrich, W. (1996b). Critical systems thinking for citizens. In R.L. Flood and N.R.A. Romm (eds.), *Critical Systems Thinking: Current Research and Practice*, Plenum, New York, pp. 165-178 (in press).

Ulrich, W. (1998). *Systems Thinking as if People Mattered: Critical Systems Thinking for Citizens and Managers*. Working Paper No. 23, Lincoln School of Management, University of Lincolnshire & Humberside, June 1998.

Ulrich, W. (2000). Reflective practice in the civil society: the contribution of critically systemic thinking. *Reflective Practice*, 1, No. 2, 247-268.

Ulrich, W. (2001a). The quest for competence in systemic research and practice. *Systems Research and Behavioral Science*, 18, No. 1, 3-28.

Ulrich, W. (2001b). Critically systemic discourse: a discursive approach to reflective practice in ISD (Part 2). *JITTA, Journal of Information Technology Theory and Application*, 3, No. 3, 2001 (Special issue: the role of dialogue in information systems development, ed. by M. Metcalfe), pp. 85-106, <http://jitta.org/>. Also available on this web site.

Weber, Max (1970). *From Max Weber: Essays in Sociology*, edited by H.H. Gerth and C. Wright Mills. Routledge and Kegan Paul, London.

Links to related materials on CST available on this web site:

1 **Pragmatizing CST for Professionals & Citizens**

Revised, updated and expanded version of a talk given to the Centre for Systems Studies at the University of Hull, Hull, United Kingdom, on 28 November 1995 and published as *Critical Systems Thinking for Citizens: A Research Proposal*, Research Memorandum No. 10, Centre for Systems Studies, University of Hull, March 1996 [ISBN 0-85958-873-4]. An earlier, shorter revision was published as "Critical systems thinking for citizens," Chapter 9 in R.L. Flood and N.R.A. Romm (eds.), *Critical Systems Thinking: Current Research and Practice*, New York: Plenum, 1996, pp. 165-178 [ISBN 0-306-4545-3].

- [HTML version](#)
- [PDF version](#) (recommended for download and space-saving printout) [225 KB]

2 **Systems Thinking as if People Mattered: Critical Systems Thinking for Citizens and Managers**

Originally published as *Working Paper No. 23*, Lincoln School of Management, University of Lincoln (formerly University of Lincolnshire & Humberside), Lincoln, UK, June 1998, 19 pp. [ISBN 1-86050-146-X]

- [PDF version](#) (recommended for download and space-saving printout) [284 KB]

3 **Reflective Practice in the Civil Society: The Contribution of Critically Systemic Thinking**

Prepublication version of a paper published in *Reflective Practice*, 1, No. 2, 2000, pp. 247-268. [ISSN 1462-3943 print, ISSN 1470-1103 online] .

- [PDF version](#) [282 KB]

4 **Five Myths about CST**

Original research note (in preparation).

- [HTML version](#) [in prep.]
- [PDF version](#) (recommended for download and space-saving printout) [in prep.]

© 2003 by **Werner Ulrich**

An earlier version of this essay was published as

"Critical systems thinking for citizens, or systems thinking as if people mattered" in G.E. Lasker (ed.), *Advances in Sociocybernetics and Human Development, Vol. III, Proceedings of the 8th International Conference on Systems Research, Informatics and Cybernetics (InterSymp '96) in Baden-Baden, Germany, August 14-18, 1996*, Windsor, Canada: The International Institute for Advanced Studies in Systems Research and Cybernetics, 1996, pp. 28-32.

[ISBN 0-92183-647-3]

Non-commercial use, distribution and citation of this publication are permitted on the condition that proper reference is given as follows:

Ulrich, W. (2003). A brief introduction to "Critical systems thinking for professionals & citizens," *Werner Ulrich's Home Page*, http://www.geocities.com/csh_home/cst_brief.html (HTML version) or http://www.geocities.com/csh_home/ulrich_2003b.pdf (PDF version).

Content last modified 26 Oct 2003 (first published 9 Nov 2002)

Layout last modified 7 March 2004

[Home page](#)

[Top / Menu](#)

[Copyright](#)