CRITICAL SYSTEMS THINKING FOR CITIZENS:
A RESEARCH PROPOSAL

WERNER ULRICH

RESEARCH MEMORANDUM NO.10
1996

THE UNIVERSITY OF HULL
THE CENTRE FOR SYSTEMS STUDIES
THE UNIVERSITY OF HULL
HULL HU6 7RX • UNITED KINGDOM

RESEARCH MEMORANDUM NO. 10

CRITICAL SYSTEMS THINKING
FOR CITIZENS
A Research Proposal*

WERNER ULRICH

Titular Professor of Social Planning, Department of Philosophy, University of Fribourg, Switzerland; currently (1 October 1995 - 31 March 1996) Visiting Research Professor at the Centre for Systems Studies

If Critical Systems Thinking is to contribute to enlightened societal practice, e.g. with respect to the pressing environmental and social issues of our time, it should be accessible not only to well-trained decision-takers and academics but also to a majority of citizens. The point is not that Critical Systems Thinking ought to take an advocacy stance but rather that it has a potential to give new meaning to the concept of citizenship; it might enable all of us to become more responsible citizens. My question is, how can we harvest this potential? I propose that the way in which we seek to answer this question might constitute an important test for the methodological viability and validity of Critical Systems Thinking.

* Talk Given to The Centre for Systems Studies on 28 November 1995
INTRODUCTION

First of all: thank you very much for inviting me to join the Centre as a Visiting researcher. Thank you for welcoming me so kindly, and thank you also for attending today’s seminar. It is very pleasant indeed for me to have an opportunity to talk to you (and with you) about some of my current ideas and hopes with respect to "Critical Systems Thinking".

I have come to Hull to pursue a long-standing project: I want to write a book that would develop and translate my earlier Critical Heuristics into a more accessible text.

There is obviously a need to do so, given the rather philosophical character of large parts of the book. Remember, when I set out to write Critical Heuristics (Ulrich, 1983) it was 1976; that was the year when I moved to the University of California at Berkeley in order to work with West Churchman. There was far and wide no such thing as "Critical Systems Thinking" (CST) - in fact not even the major contributions to soft systems thinking by Churchman (1979), Ackoff (1981) and Checkland (1981) had been published. The same holds true for the major work of contemporary Critical Theory, Habermas’ (1984) Theory of Communicative Action. It was necessary to begin from scratch and to work out some fundamental philosophical and methodological ideas for what I then envisioned to become a "critical systems approach". It was a far way to go. It was not a primary necessity at that time to think of didactic issues, so I didn’t.
But things have changed! A lot has happened since, although it took some time for *Critical Heuristics* to find its audience. An important part of the audience turned out to sit in Hull, where the stage was set. The stage, that was the famous periodic table, Hull type, with its missing element "critical systems methodology".

About ten years before I came to Hull myself, *Critical Heuristics* got a warm welcome in Hull. It was accommodated more or less comfortably in the little cell that had been vacant for so long and it has stayed there ever since.

I finally made it to Hull, too. So here I am and talk to you about my new *idée fixe*, pragmatising Critical Heuristics as

**Critical Systems Thinking for Citizens.**

Pragmatising Critical Systems Thinking has been a major concern of your work here in Hull recently. So I think Hull is not a bad place to begin my project, and I hope what I have to say about my present state of error regarding this topic is of interest to you. The first question to ask, then, is obvious: What do we mean to achieve when we seek to "pragmatise" critical system ideas?
WHAT IS "PRAGMATISATION" OF CRITICAL SYSTEMS THINKING?

Obviously, we want to get critical systems ideas used. We want practical men and women to understand and accept what we propose to them. But it seems to me that this obvious answer begs the question. It does not give us a sufficient criterion for identifying, much less for working toward, a successful pragmatisation attempt, I mean one that does justice to the core ideas of Critical Systems Thinking and, in addition, justifies these ideas by leading to some kind of improvement out there in the wild world.

I would like to link a methodologically satisfactory notion of pragmatisation to the philosophical tradition of pragmatism, particularly to the work of Charles S. Peirce (1878) and his pragmatic maxim (for an earlier account of its importance to me, see, e.g., Ulrich, 1989). A better answer, then, might be this:

**Our understanding and employment of an idea is "pragmatic" in the methodological sense of the term if it is clear to us what kind of difference the idea in question is to make in practice.**

"In practice" means: when the idea in question gets applied by someone in some real-world context. To pragmatise critical systems ideas thus requires a prior understanding of

- what is the target group;
- what kind of difference the idea in question should make for them;
- in what kind of context.
PRAGMATISING CRITICAL SYSTEMS IDEAS: FOR WHOM AND WITH WHAT PRACTICAL DIFFERENCE IN MIND?

The systems movement has not exactly excelled in translating systems ideas into tools for real-world problem solving, and critical systems thinkers have made no exception. Very recently, Bob Flood (1995), in his book *Solving Problem Solving*, has undertaken a pragmatisation of his particular version of Critical Systems Thinking, Total Systems Intervention, for the specific context of organisational problem solving.²

As far as I can see, this pragmatisation project is geared mainly toward decision takers and problem solvers in the private and (perhaps to a lesser degree) also in the public sector, that is to say, toward well-trained people who have something to say in business and government - managers, administrators, consultants, facilitators, and so on.

I have accumulated some experience in the public sector and I believe it *is* important for us to translate our ideas into tools for decision takers. To judge from my experience, we can hardly overestimate how urgently decision takers need better tools for tackling the seemingly ever increasing complexity of the problems they face.

Nonetheless, I want to aim my personal pragmatisation effort differently, for my experience in the public sector also suggests that we certainly must not overestimate what little readiness there is in the "system" - in a public administration or, for that, in any organisation - to adopt a truly systemic way of thinking. To *think systemically*
would mean for the systems managers to adopt a way of thinking that measures "success" in terms of *improvements for the "larger system"* (in the case of a public administration, the population to be served) rather than in terms of the system's own needs or simply of its representatives' individual careers. Unfortunately, however, one of the truisms of applied systems thinking is that the "system" hardly ever thinks systemically. And the corollary to this exclamation mark reads: Systems like to be their own surrogate client; but what they like even more is to serve individual careers!

Now this need not always be the case. I agree that we ought to support whatever readiness there is on the part of decision makers to think and to act more systemically, and perhaps we can even increase this readiness. There is nothing wrong with the idea of pragmatising Critical Systems Thinking for managers, *so long as we do not stop there*.

Hence I suggest we should evaluate our "success" in any specific pragmatisation of CST in terms of two criteria (or questions):

1. Do we reach target group X so that these people understand, accept, and actually *use* critical systems ideas? (= *necessary* condition)

2. Do we pragmatising these ideas in such a way that the target group uses these ideas to help *secure improvement* in a systemic sense of the word? (= *sufficient* condition).

There are many meaningful target groups of which we may think, not only managers but many other specific groups, especially professionals
such as public officials, social planners, perhaps physicians, lawyers and judges, social researchers, teachers, media people, etc. Granted that an effort to reach such a target group may actually succeed in changing their ways of seeing problems and to foster a deeper, systemic understanding (= necessary condition), it still remains to be considered that increased professional understanding alone does not secure improvement for the larger system. Increased understanding implies not a shift of rationalities but only an increased capacity for control; whether this enlarged capacity will be used for responsible action or instead to further the current dominating concepts of rationality remains open (Ulrich, 1994, p. 32). It is the critical-emancipatory dimension of our own critical systems tools that requires us to consider this issue!

There is of course always hope that good-willed people will act in accordance with their understanding, even where it implies a shift of rationalities; but should we base our effort on this hope alone? I am not inclined to do so - for methodological reasons:

First, even granted that decision takers in many instances will in fact be good-willed and will act responsibly to the best of their knowledge, we should not assume that whatever tools of reflection we offer them, such tools can determine what is good and rational for citizens. As I wrote already in Critical Heuristics,

a critical systems approach to planning must not be allowed to make itself the judge of what is 'rational' and what is 'irrational'. Rather than requiring [citizens] to submit to it’s
a priori standards of rationality, a critical systems approach ought to recognise them as representatives of alternative, though no less partial, 'rationalities'. ... Under the guise of rationality and expertise, the involved make themselves the client while treating the affected as means. (Ulrich, 1983, p. 289f)\(^3\)

Second, if we really want to help secure improvement, even where it implies a shift of rationalities, the crucial issue is how we can bring in these different rationalities - the rationalities of all those concerned.

**We cannot simply leave out the clash of different rationalities that is so symptomatic of our post-modern condition.**

Hence the appeal to the good will of those in charge begs the real challenge in pragmatising Critical Systems Thinking. What does Critical Systems Thinking have to say on this issue?

My answer is *not*, as some of you (e.g. Romm, 1994, p. 19f; Flood and Romm, 1995, p. 389) have suspected, that Critical Systems Thinking ought to take an *advocacy position* in favour of any of those other, possibly suppressed, rationalities, for instance by selecting as its key client the socially disadvantaged.

My answer is, rather, that Critical Systems Thinking as I understand it has a potential to give new content and new meaning to the concept of citizenship. Critical Systems Thinking can contribute to a much
needed *new competence of citizens* to understand the many propositions with which politicians and experts face them every day and which so often represent forms of selective information or even disinformation, quite apart from their giving conflicting messages.

I think Critical Systems Thinking has this potential, and I believe it is our responsibility as critical systems thinkers to try to harvest this potential. I think we can achieve this by pragmatising critical systems ideas in such a way that we make sure those different rationalities of which I spoke can express themselves and can get heard - *without* depending on the help of an "advocate" researcher or some intervening facilitator. The implication is that we must make critical systems ideas accessible not only to those who have *the* say yet may not be inclined to listen, but also and first of all to all those who may have *something* to say because they are concerned, be it as stakeholders or simply as responsible citizens.

**If we want to find out to what extent critical systems ideas lend themselves to pragmatisation and are apt to make a difference toward systemically understood improvement, I can think of no more valid test than Critical Systems Thinking for Citizens.**

My call is thus not for an ideological kind of commitment but for scholarship (see Checkland, 1992). It is a matter of sincere scholarship to submit ones ideas to the hardest possible test of which one knows and then to improve them dependent on the outcome of this test; any other attitude would mean that we do not *really* want to find out or that
we do not really believe our ideas can make a difference - which would mean that what we say and what we claim about Critical Systems Thinking would not be in agreement with what we do as researchers.

**SOME PRELIMINARY CONJECTURES ON THE TARGET GROUP "CITIZENS"**

The concept of the "citizen" is a highly interesting one. I propose to study its importance for Critical Systems Thinking, and I would like to do so both from the perspective of *modernity* (the "citizen" it is a key concept of the Enlightenment as well as of the French Revolution) and from a *post-modern* perspective. As for the latter, I think what is required is to develop a clear understanding of the *changing nature of the ongoing historical process of the "rationalisation" of society* (as Max Weber could still designate it) and, based on this, of the *changing role of the citizen*.

Another important consideration is that we should not rely on a concept of the citizen that runs the risk of excluding ordinary people from the start. Our pragmatisation attempt must not depend on any special cognitive requirements. Citizens are not *equally skilled*, but in democracy this fact must not make any difference to the *equality* of citizens as *citizens*, according to the principle: "one man or woman, one vote".

For this reason, too, Critical Systems Thinking for Citizens is probably a much more radical (and demanding) idea than pragmatising critical
systems ideas for any other target group. To mention just a few core difficulties:

- Citizens do not usually like nor understand abstract academic ideas but want to know the practical implications of ideas. *We must thus be very simple and be able to demonstrate compelling, concrete applications.*

- Citizens are not prepared to use "methods". *We must thus take our ideas down to a very fundamental methodological level where they are apt to make an immediate difference to the usual ways of "seeing" things.*

- Citizens are less likely than managers to accept (systems) jargon. Nor will they be inclined to dedicate any substantial amount of personal resources to familiarising themselves with complicated frameworks. *We must thus be very substantial and certainly not gimmicky.*

- Citizens, I take it, are smart. They will not accept Critical Systems Thinking for its beauty but only for its practical significance. *We must thus be pragmatic in the full philosophical sense of the word.*

The next question, then, is: Can we do it? How? What critical systems ideas, if any, lend themselves to this end?
PRAGMATISING CRITICAL SYSTEMS IDEAS FOR CITIZENS - BUT HOW? WHAT CORE IDEAS OFFER THEMSELVES FOR PRAGMATISATION?

At present, I know of only one key concept of Critical Systems Thinking that promises to meet the requirements which I have mentioned in a very preliminary form.

The core idea of which I think is of course the key concept of Critical Heuristics, I mean the idea of the *critical (or polemical) employment of boundary judgements* (Ulrich, 1983, pp. 225-314; 1987; 1988b; 1993). It says that the practical implications of a proposition (the "difference" it makes in practice) and thus its meaning depend on the context of application we consider. When it comes to bounding the context to be considered, experts are no less lay people than ordinary citizens. Surfacing and questioning such boundary judgements therefore provides citizens with a key for contesting uncritically asserted rationality claims of experts in a logically compelling way - if only they understand the importance of boundary judgements and get some help (training) in surfacing them systematically. Which is what Critical Heuristics is trying to achieve.⑤

For me, this concept is important because it appears to represent a rare example of how critical systems ideas translate into methodologically cogent forms of argumentation, i.e., make a difference between valid and invalid propositions. The concept allows us to identify invalid propositions by uncovering the *dogmatic or cynical employment of bound-
ary judgements. It explains us why and how ordinary citizens are capable of contesting propositions and of advancing counter-propositions without having to be experts about the issues in question - as long as they use the concept critically only.

Interestingly, 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 judgements, i.e., in critical reflection and debate on what are, and what ought to be, the boundaries of the system in question, systems thinking makes no sense; if we are, systems thinking becomes a form of critique.

In distinction to much of what has been written or claimed about Critical Systems Thinking, this concept of systematic boundary critique is not just "added on" to existent systems methodologies without any intrinsic methodological necessity to do so. In this respect, my understanding of Critical Systems Thinking distinguishes itself markedly from the frequent descriptions of Critical Systems Thinking in terms of so-called "commitments" that it is said to embrace, e.g., commitments to "critique", to "emancipation", and to "pluralism" (Schechter, 1991, p. 212) or to "critical awareness", to "social awareness", to "human emancipation" and to the "complementary and informed development of all different strands of systems thinking" both at the theoretical and the methodological level (Jackson, 1991, p. 184f) or to an advocacy stance in favour of "the socially disadvantaged as its
key client" (Romm, 1994, pp. 19f and 23f, and 1995a, p. 158; Flood and Romm, 1995, p. 389).⁶

Anyone can claim such things as critical awareness and dedication to emancipation, the point is to translate them methodologically.

A second reason why the concept of the critical employment of boundary judgements is so fundamental is this. It means that neither the systems idea nor the idea of critique are practicable independently. Either idea implies 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) model of rational discourse illustrates well (it is not without reason that the model depends on an anticipated "ideal speech situation"). On the other hand, systems thinking without critique amounts to the covert use of boundary judgements, the normative implications of which are not made a subject of discussion⁷; 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 marry them, so that systems thinking can be practised critically, and critique can be practised systemically.⁸
The concept of the critical employment of boundary judgements 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 for pragmatising a core concept of contemporary Critical Theory, I mean Habermas' (1984) theoretically compelling, but pragmatically desperate, identification of "rational discourse" with an "ideal speech" situation in which undistorted communication would be possible.

For the post-modernists among you who now are ready to retire from this seminar, at least mentally, because you think "Ah! Ulrich is a modernist - let's forget it", I hurry to add that I might just as well say that the critical employment of boundary judgements appears to me a fruitful and systematic possibility to pragmatise the Foucaultian notion of "problematisation" (Foucault, 1984).

Problematising (or, as I like to say, "making 'the problem' the problem", one of my preferred ways to define heuristics from a critical point of view, see Ulrich, 1983, p. 22, and 1988b, p. 416) is something very fundamental for my conception of a critical systems approach, although it is not based on Foucault. Adopting a Foucaultian perspective might indeed provide an interesting possibility to understand the concept of the critical employment of boundary judgements.
For these and other reasons, I trust that the concept of a critical employment of boundary judgements - or boundary critique - is fundamental enough to lend itself to pragmatisation: because it is fundamental, it must be possible to demonstrate its relevance in everyday situations of communication, debate and decision taking.

I also am confident that it will be possible to find didactic means for conveying this relevance to a majority of citizens and for helping them to uncover boundary judgements systematically, as well as to deliberate alternative ways to bound the context at issue.

I emphasise this one concept because to me it is the most fundamental concept of Critical Systems Thinking. But I do not mean to suggest that it alone provides a sufficient basis for turning Critical Systems Thinking into a meaningful tool for citizens, nor do I think it is the only conceivable concept that fulfils the requirements - I am confident that it is not!

Critical Heuristics already offers a few other basic concepts, e.g.

- the concept of the process of unfolding (Ulrich, 1983, Ch. 5; 1988b),
- the concept of purposeful systems assessment (Ulrich, 1983, Ch. 6),
- the concept of a symmetry of critical competence (Ulrich, 1993),
- the three-level concept of rational systems practice (Ulrich, 1988a), and
- the concept of critical systems ethics (Ulrich, 1990; 1994).
These concepts appear helpful to me; but I do not consider them to be as fundamental as the concept of the critical employment of boundary judgements - for the simple reason that in a way they all represent *applications* of the concept of boundary critique.

**One of the good things with the concept of boundary critique is indeed that it seems to be not only fundamental but also fruitful enough to develop such "applied" second-order concepts of boundary critique.**

I am confident that you and I will find more such concepts. I already mentioned an example that I want to explore more, I mean Foucault's concept of "*problemisation*": it seems very easy, almost natural for me to interpret (and perhaps pragmatise and operationalise) this Foucault-vian key concept (at least I understand it thus, although it appears to have received little attention in the literature on Foucault's work) in the terms of boundary critique. Perhaps some other systems thinkers who are interested in Foucault's work would like to discuss this idea with me (e.g., Dávila, 1993; Flood, 1990; Valero-Silva, 1995 and 1996).

As a second example, I also find Gerald Midgley's (1992) concept of "*marginalisation*" a good example of a helpful application of boundary critique and I would like to bring it to bear on my current favourite idea of developing Critical Systems Thinking for Citizens.

I hope that for some of you it just "*clicked*" right now and you find yourself thinking of some of *your* favourite ideas and how they might
be reinterpreted in terms of applied boundary critique. If it did click or whenever it will, please do not hesitate, let me know and let us see together whether these ideas have potential for popularising Critical Systems Thinking.

I say all this because I am here in Hull and I want to relate my project to your ongoing work. I want to invite your collaboration. As a vehicle for this, I suggest to install my project as a Centre Project and to form a project group in which we can discuss this whole issue.

**IN WHAT CONTEXT MIGHT "CRITICAL SYSTEMS THINKING FOR CITIZENS" MAKE A DIFFERENCE?**

I must come to an end. But before, I must briefly turn your attention to the earlier-mentioned issue of the "context" in which I expect "Critical Systems Thinking for Citizens" to make a difference. I should like to avoid three possible misunderstandings, concerning

- the importance of the public sphere,
- the importance of the emancipatory interest, and
- the importance of methodology.

1) *The Importance of the Public Sphere*

Critical Systems Thinking for Citizens aims to prepare citizens for critical participation in matters of public concern. An essential aspect
of the context to be considered is thus a clear notion of the functioning of the public sphere.

It appears to me that this requirement has rather been neglected in our discussions up to now. I include myself: although in my mind I always had a clear notion of the democratic context in terms of which I was writing, I probably was not always explicit enough in this regard. I did emphasise and explain the methodological importance of the democratic principle, and particularly of a functioning public sphere, in key places of my argument in Critical Heuristics, though (see, e.g., Ulrich, 1983, pp. 118ff, 266f, 296f, 313f; also 1993, pp. 605, 688, and now 1996b). But perhaps I did not sufficiently take into account the different cultural background of many a reader. As a Swiss citizen, I might take the assumption of a (however imperfectly) functioning public domain for more obvious than it actually may be for you or for my readers. I find this topic so important that I would like to dedicate more time to it than I have available now. Perhaps I can make it a topic of my next seminar.

Let me simply say here that for me the critical function of "discourse" is always embedded in a public sphere in which multiple processes of participation with varying degrees of publicity and various domain-specific contents interact and together shape public opinion and will formation. The emancipatory significance of Critical Systems Thinking depends on whether citizens can argue their concerns - especially those which may be suppressed in a given local discourse situation - in a variety of different discourses within a public sphere.
The search for rationality through discourse cannot dispense with the democratic idea - but the democratic idea includes as an essential ingredient the idea of a functioning public sphere.

So here we have yet another reason why pragmatising Critical Systems Thinking for citizens is important: ultimately, the emancipatory significance of Critical Systems Thinking depends on it.

2) Does Critical Systems Thinking for Citizens Imply an Advocacy Stance? The Methodological Importance (and Ambiguity) of the Emancipatory Interest

This, too, is an issue on which I would like to say more on a future occasion. Here only this much.

Personally, I do not privilege the idea of an advocacy role of CST, though I do not mean to exclude it under all circumstances. My reason is that I consider it to be our primary task as systems theorists to meet the methodological challenge that is contained in our quest for improvement through critical systems thinking. The task is to show what possibilities there are to deal systematically with the ever-present situation of distorted discourse.

Assuming the need for an advocacy position of Critical Systems Thinking for me begs this issue. Instead of finding a critical solution to this issue, it resorts to an act of faith. This means deriving the wrong
conclusion from Habermas' theory of cognitive interests. The "emanci-
patory interest" which according to that theory is constitutive of critical
science must be redeemed by methodological means, not by resorting
to an act of faith.

My methodological counter-proposal to an advocacy stance consists in
the concept of a symmetry of critical competence (Ulrich, 1993). This
concept explains us how the emancipatory interest, and with it the
ideal speech situation, can be pragmatised, at least so long as discourse
is not closed down or, when closed down, can be resumed by those
closed out at some other place in the public sphere. Through the sys-
tematic use of the earlier-mentioned concept of boundary critique, the
ideal speech situation gets pragmatised as a practicable, critical proc-
ess (the process of unfolding, see Ulrich, 1983, Ch. 5, and 1988b) in
the sense intended by the emancipatory interest, namely, of making
oneself and others aware of seemingly natural, because "objective" or
simply covert, constraints. In the spirit of an ideal speech situation, but
under everyday conditions of an asymmetry of power, knowledge, and
argumentative skills, this approach can ensure to all participants a
basic critical competence; for it does not depend in any way on theo-
retical competence, expert knowledge, or any special argumentative
skills that would not be obtainable to ordinary citizens.

In place of an act of faith (in the sense of a commitment to advocacy),
this proposal puts its faith in the liberating force of boundary critique,
within a functioning public sphere.
Perhaps this is a utopia. But then, is there any better utopia to strive for? Our efforts always are, and need to be, directed toward some ideal of improvement. The important thing is that we do not merely proclaim some meaningful ideal but develop practicable tools for getting a little closer toward it in practice. The democratic ideal is meaningful to me because it enables those who know best to decide on what constitutes "improvement": the citizens themselves. I certainly do not proclaim this ideal in an attempt to circumvent the methodological challenge: Critical Systems for Citizens is my proposal for working on the challenge.

3) The Importance and Limitation of Methodology

Finally, a short word on the limited importance of methodology. I have been emphasising the importance of methodological reasoning because our task is not to proclaim critical systems thinking for its sheer beauty but to show how it works, i.e., to translate it into methodologically compelling criteria and guidelines. This may make me look like a true believer, as if I believed "methods" could change the world.

Of course not. If anything will change the world to the better, it is the ideas and values of people. Methods may sometimes help us to find or support ideas and values, but they cannot replace the spirit that moves a person. (I think it was Kant who observed that "he who has no character needs a method.") Critical Systems Thinking for me is first of all a spirit or an attitude, a (self-)critical ethos of laying open the
conditioned nature of all justification (Ulrich, 1984), rather than a method or a basket of methods. By opening up alternative contexts for perceiving the seemingly given (be it a "problem" or a "solution"), Critical Systems Thinking as I understand it aims to change our way of "seeing" things. This has both a self-reflective/critical and a creative side, two aspects that cannot really be separated: to the extent that we learn a little bit more (however imperfectly) to see through the conditioned nature of our understanding, we also learn to uncover alternative ways to see things. Out of this effort can grow a spirit of tolerance, as well as a new competence in dealing (self-)critically with the claims and results of our methods.

Insofar as Critical Systems Thinking, too, is a method, one of its most fascinating prospects to me seems its potential to support ordinary citizens without any special expertise in gaining a new competence in citizenship. I find this prospect very important and motivating; on the one hand, as I have argued, because of the methodological validity test it implies, on the other, because in non-totalitarian societies at least - but ultimately also under dictatorial regimes, as the recent history of Eastern Europe illustrates - it is the citizens who are called upon to "see" things and to articulate as much as possible their ideas and concerns about them.

To conclude my talk, let me describe this motive of my project by means of two phrases that aptly summarise both its spirit and its systematic intent.
The first way to sum up my hopes for the pragmatic difference that Critical Systems Thinking for Citizens ought to make is this:

**Critical Systems Thinking for Citizens aims at a practice of systems thinking as if people mattered.**

If people matter, it is not the task of systems scholars and systems designers to speak for the people nor to improve the world for them but rather to enable them to speak for themselves and to become responsible citizens, i.e., citizens that take on responsibility for contributing to societal improvement through engagement in the public sphere.

Hence a second way to sum up the spirit (and systematic intent) of Critical Systems Thinking for Citizens is the following:

**Critical Systems Thinking for Citizens aims to pragmatise systems thinking so that people can own it.**

This, if you wish, is my personal "emancipatory commitment". But as I have tried to explain, the methodological importance of the emancipatory interest is independent from such a commitment; its importance must be understood, and redeemed, methodologically.

This constitutes no mean challenge to our usual ways of understanding methods, and specifically, systems methods. But as I have tried to convince you, the *quest for securing improvement through Critical Sys-*
tems Thinking - which is how I define our mission - requires us to accept the challenge.

I do not mean to say that Critical Systems Thinking in its present state is ready to meet the challenge or that I personally have all the answers. What I propose to you is a project, not an answer.

But I do think that Critical Systems Thinking has a contribution to offer. I do have hopes that if we develop and pragmatise it properly, it can make a difference.

In any case, it will be an excellent methodological test for the validity and viability of our ideas.

That's why I propose to embark on this project "Critical Systems Thinking for Citizens". I hope you will be with me.

Thank you very much.
NOTES

1) I mean of course the "Systems of Systems Methodologies" (SOSM), a grid for classifying systems methodologies that I do not by any means consider to be capable of constituting an adequate basis for Critical Systems Thinking, although it appears to have been important for the reception of Critical Heuristics. Why, for instance, should the (self-) critical employment of boundary judgements be restricted to "coercive" contexts? See, e.g., Jackson and Keys, 1984; Jackson, 1985, 1987, 1990, 1991; Flood and Jackson, 1991; and for an extensive reply, Ulrich, 1996b.

2) For a review, see Ulrich (1996a).

3) In the original text, the term "witnesses" was used instead of "citizens", as the specific critically-heuristic category (or type of boundary judgements) that refers to the citizens who represent the alternative rationalities and live practical concerns of those affected vis-à-vis the systems designers. Compare Ulrich, 1984, pp. 256-258, 264f and passim (see index to the book).

4) It might be necessary to restrict the focus on our Western societies, but in view of the global implications of the process I suspect that some basic patterns common to most societies, including developing countries, will emerge.

5) For a more complete account, the reader is referred to the original sources mentioned earlier in this paragraph.

6) In the quoted sources, the authors appear to ascribe an advocacy position to Critical Systems Heuristics. This does not conform to my intentions. Particularly in Norma Romm's (1994, 1995a, 1995b) recent accounts of Critical Heuristics, I find it difficult to recognise my writings. I will respond to this and other accounts of Critical Heuristics in a separate paper that I presently prepare (see Ulrich, 1996b).
In this regard, traditional "hard" systems thinking bears its name justly: it does not, in each application, make the boundaries of its application context a subject of systematic discussion but, as it lacks the tools to do so, assumes the context to be given. This amounts to a "hardening" (hypostatisation) of boundaries which actually depend on the subjective perceptions of systems researchers or designers and thus are rather "soft". I suggest that this is in fact a defining characteristic of all variations of hard systems thinking. An equivalent way to define hard systems thinking is by way of reference to its character as "tool design" rather than social systems design: because it does not make the boundaries of its application context a subject of systematic boundary critique, it ends up with designing "means" for supposedly given "ends". This second common feature of all variations of hard systems methodologies - its unquestioned reliance on a decisionistically misunderstood means-end schema (cf. Ulrich, 1983, p. 329, with reference to Checkland, 1978) can thus be explained through the concept of boundary judgements.

This core message of Critical Systems Heuristics has recently been recognised by Gerald Midgley (e.g., 1995, pp. 66ff, and particularly 1996). His reception of CSH comes closer to my intent than the original reception by M.C. Jackson (see note 1 above) and, following him, by a majority of commentators. In this respect, I welcome Gerald's paper indeed. I need to point out, however, that I cannot agree with some important aspects of Midgley's (1996) account. A large part of this account is inaccurate as it unquestioningly reiterates earlier accounts by some critics of CSH, apparently taking their assumptions on CSH for granted. For a reply, see again Ulrich, 1996b.
REFERENCES


