

## ■ Research Paper

# A Trusting Constructivist Approach to Systemic Inquiry: Exploring Accountability

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This paper offers an outline of, and justification for, what I call a ‘trusting constructivist’ approach to systemic inquiry. I work with the constructivist view that, as Banathy puts it: ‘what we know about the world becomes projected onto the world’. That is, our theoretical constructions and ways of thinking in relation to the world cannot be considered separately from the impacts that they might have on the unfolding of possibilities. Recognizing our involvement in the development of systems means that we can reconsider—with others—the status of our own constructions as potentially generating self-fulfilling effects. A trusting constructivist view suggests that people cannot desist from offering their own constructions (that embody particular concerns) in processes of inquiry (professional or otherwise). But they need to recognize the choices that they are making as they create constructions, so that they can account for these in relation to alternatives in social discourse, in an endeavor to earn others’ trust. Copyright © 2002 John Wiley & Sons, Ltd.

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## INTRODUCTION

This paper considers what it may mean to defend processes of inquiry in the light of ongoing debates about the accomplishments of ‘scientific’ endeavors that might be undertaken. In particular, the conflict/tension between realist and constructivist accounts of what is involved in endeavors to develop knowledge in society is revisited. I organize the discussion around these

positions by arguing for a particular manner of viewing the accountability of those involved in what can be termed systemic inquiry—where the systemic link between knowing and acting is highlighted and kept in consciousness (cf. Nelson, 2000). I show how a trusting constructivist approach conceives the way in which trust may be earned by inquirers; and conversely I consider what it may mean to award trust to people’s manner of developing knowledge constructions.

A realist-oriented approach to the practice of science suggests that theories put forward in the process of inquiry can be tested for their

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closeness to the truth, where truth is defined as representing actual relationships that exist in (natural or social) reality (cf. Weil, 1998, p. 43; Jackson, 2000, p. 3; McIntyre-Mills, 2000, p. 52; Midgley, 2000, p. 90). The credibility of propositions advanced in the process of theorizing is seen to rest on the degree to which they can be argued to have undergone tests in the face of competing claims (about operative correlations, causality or patterns in reality)—all proposed claims being regarded as (more or less) open to adjudication with respect to the relevant evidence. The status of the claims is a function of the degree to which they have undergone testing in the face of ‘the evidence’.

The central concern in this mode of approach to theory development, as Banathy (1999) notes, is to try to determine the degree of certainty with which knowledge about the world can be made. The central concern is to minimize errors that can be avoided in the process of scientific discovery, with the intention of getting closer to ‘the truth’ about the world (Banathy, 1999, p. 5).<sup>1</sup> However, authors who may be regarded as more constructivist-oriented<sup>2</sup> suggest that it is important to bear in mind (and operate in terms of the understanding) that we do not have any access to ‘the world’ independently of human mediation. To expect to earn trust by trying to determine the probability of accessing ‘the truth’ is thus not necessarily an appropriate way of organizing scientific accountability. But equally importantly, the constructivist argument is that due account should be taken of the possibility that the development of (our) knowledge constructions itself may contribute to generating self-fulfilling effects—this has implications for the way in which we view our responsibilities as

inquirers (cf. Romm, 1995, 1996a; Banathy, 1999; Midgley, 2000).

In relation to natural scientific inquiry, Davis takes the position (following Wheeler, 1982) that we can be argued to be living in an ‘observer-participatory universe’, in which ‘we are the ones who . . . first establish the iron posts of observation and then weave the brilliant tapestry of reality between them’ (Davis, 1997, p. 277). Drawing on a range of examples, he suggests that the world can manifest itself in alternative ways, depending on how we weave the tapestry. Whether or not we follow Davis’s suggestion that the natural world moves from probability (potentiality) to reality through human involvement in it, I would suggest that those practising science should not deny responsibility for the way in which they might impact on ‘the world’ through the way in which they organize their inquiries. This idea concurs with Ladd’s suggestion that ‘a new technology [for example] makes certain modes of conduct easier and others more difficult’ (Ladd, 1989, p. 666). Our knowing and know-how already contain a practical component, which needs to be accounted for as part of the knowing endeavor (see also Romm, 1996b, p. 182). Banathy argues in this context that just because science and technology are now (historically) synthesized it becomes increasingly problematical to confine our understanding of science to ‘discovery mode’ (in contrast to ‘construction mode’). As he puts it: ‘As scientific and technological synthesis was achieved, what we knew about the world became projected onto the world and we literally began to construct our reality’ (Banathy, 1999, p. 6).

While these considerations have been posed in relation to the natural sciences, posing them in relation to the realm of social inquiry might perhaps seem more readily convincing. (Some authors argue indeed that such considerations apply more aptly in this domain.) For instance, in the field of social organization, Argyris and Schön (1996) indicate that what they call ‘action science’ (as opposed to traditional ways of conceiving the practice of science) enables people to work together in exploring the dynamics of their situations, with the hope of developing insightful ways of considering the arena of

<sup>1</sup>The term ‘realism’ embraces a variety of approaches to knowing that might be labelled under this banner. Romm (2001a) offers a discussion of four kinds of position that can be considered realist in orientation. These are: positivism (a position focusing on the search through scientific inquiry to come to grips with natural and social regularities); non-foundationalism (a position that emphasizes the impossibility of obtaining indubitable proof); scientific realism (expressing a focus on excavating structures of reality); and interpretivism (expressing a focus on striving to understand meaning-making in the social world).

<sup>2</sup>As with the term realism, the term ‘constructivism’ embraces a variety of positions. Romm (2001a) suggests that critical theory, anti-foundationalist feminism and discursively oriented constructivism (for example) can be pitted against realism in terms of the focus on the manner in which ways of knowing as developed in society can be seen as related to our ways of being.

possible action. As they comment, people 'are in the situations they try to understand, and they help to form them by coming to see and act in them in new ways' (Argyris and Schön, 1996, p. 36). According to Argyris and Schön, working with a traditional notion of scientific inquiry does little to aid people in considering how they might '*make things* under conditions of complexity and uncertainty' (Argyris and Schön, 1996, p. 37, my italics).

In this paper I draw on the above arguments, as applied in various arenas, in order to concentrate on what it may mean to work with an understanding of our possible complicity in generating self-fulfilling effects through the act of becoming involved in inquiries. In considering the question of to what extent both natural and social inquiries should be taken as equally complicit in the (potential) creation of realities, my suggestion is that this is a question that cannot be answered. We do not have the means of checking to what extent, in any case in question, our constructions may be generating specific impacts through the way they are being developed. Nonetheless, I would propose that, as systemic thinkers, we should at least work with the awareness that our way of organizing inquiries and way of presenting 'results' *might* generate certain effects (as experienced and argued for in processes of social discourse).

If we focus on our (possible) complicity in creating effects through the very way in which we approach our inquiries, how, then, can we try to justify our accountability? My suggestion, briefly put, is that our accountability as knowers can be defended insofar as we are able to express an appreciation of, and sensitivity to, ongoing argumentation around ways of seeing and acting that might be brought to bear in our engagement in the world. This does not amount to having to display precise measures of concepts and to abide strictly by structured procedures for inquiry that supposedly can be assessed for their likelihood of getting us closer to 'the truth' (see also Sitkin and Stickel, 1996, p. 209). It involves rather striving to build an arena of trust by expressing an orientation to engage seriously with alternatives as may be presented by others

in relation to the issues under consideration. (This is not tantamount to trying to persuade others of the likely veracity of constructions in relation to some posited 'real reality'.)

Of course, trust can go astray in a variety of contexts—including contexts of judging processes of inquiry (cf. Baier, 1994, pp. 130–132; Provis, 2001, pp. 36–37). I concur with Provis that it is quite possible to elicit from others the responses that we anticipate; and that cycles of distrust may be as self-perpetuating as those of trust (Provis, 2001, p. 39). A trusting constructivist position focuses on ways in which systemic inquirers might try to set up cycles of (merited) trust, while recognizing that those awarding others their trust may feel vulnerable in the process. It is to cater for this vulnerability that I suggest that trust earning goes hand in hand with an orientation toward discursive accountability, as explored under 'Revisiting "reasonable" behaviour', below.

#### DEBATE ABOUT THE STATUS OF SCIENTIFIC INQUIRY

As noted in the Introduction, the constructivist suggestion is that we do not have any independent way of determining whether knowledge of (extra-linguistic) reality 'as it is' can be advanced by following some supposed professional or scientific route to knowledge production. The argument is that alternative realities may well become manifested and 'realized' through the very way in which science is practised. The constructivist suggestion, furthermore, is that self-fulfilling prophecies may become activated through the way in which constructions advanced in the process of scientific inquiry come to be presented as more or less 'corroborated' (to use Popperian terminology, 1959, 1994). The presentation of them in society in this way might itself set up intervention effects that cannot be accounted for in terms of a realist conception of the research remit. And whether or not we regard natural and social inquiry as equally complicit in the construction of reality, it is at least incumbent upon us to recognize our

responsibility as (systemic) inquirers to involve considerations of possible complicity.

Nevertheless, from a realist point of view, the fact that the language of science (and its mode of asking and answering questions) may penetrate our existence in terms of creating certain options for seeing and acting does not detract from the fact that science proceeds to advance some knowledge about the world as it exists *at the moment of comprehension*. The fact that the (subsequent) unfolding of outcomes in reality might be shaped by people's *increased knowledge* (defined in realist terms) and ensuing actions is indeed seen as one of the benefits that science affords in support of practitioners (according to this view).

In rejoinder to such realist-oriented argumentation, it can be remarked that *the belief that constructions can be assessed with reference to 'reality'—and that science affords an efficient means for doing this—itself can have consequences for the way in which we relate to such constructions*. Jackson comments in this regard that once we accept what he calls 'systemic pluralism' we also simultaneously accept that different rationalities (ways of approaching our seeing and acting in the world) may result in 'contradictory possibilities for change' (Jackson, 2000, p. 377). This means, for him (as I interpret it) that people have to accept that, as decision-makers, their decisions cannot necessarily be justified in terms of statements to the effect that they are rooted in knowledge (to date) of the realities. Ways of seeing 'the realities' are choices that still have to be accounted for.

An illustration of different approaches to regarding 'factual information' in organizational life might serve to illuminate this point. As Gergen and Thatchenkery argue, those presenting themselves as doing organization science often operate in terms of the suggestion that it is possible to 'systematically gather information, facts or data for purposes of optimizing decision-making' (Gergen and Thatchenkery, 2001, p. 153). This means in turn that people presented with 'findings' may come to believe that they can consider these as helping them to come to a realistic decision as to how to proceed (p. 153). However, this way of assigning status to findings

can occlude the choice-making that occurs at the moment of supposedly seeing 'realities' in the first place. Laurie and Cherry go so far as to speak of 'knowing hustling' as a mode of indeed encouraging others to discount the fragility of presented ways of looking at situations (Laurie and Cherry, 2001, p. 9). And this has implications for the way in which recommendations are treated. They become treated as based on an understanding (to date) of the realities—at the expense of inviting us to take a responsible attitude toward our experience (Fox and Urwick, 1973, as cited in Laurie and Cherry, 2001, p. 9).

A constructivist-oriented position suggests that would-be scientists' accountabilities are diminished to the extent that they fail to take due account of the ways in which their *framing of realities* might have an influence in directing activities in social life. The danger of appeals made to the results of scientific inquiry (presented as simply aimed at developing theories about reality) is that these can become a way of allowing people to protect their visions under the assumption that they were based—as far as possible—on a realistic assessment of 'the situation'. The choices involved in readings of 'the realities' become unaccounted for. And when people believe there are alternatives that have been left out of the terms of the inquiry, this can become a source of distrust. Ackoff, for instance, points out that there is now a 'widespread belief that quality of life is being sacrificed to increase standard of living' defined in material terms (Ackoff, 1999, p. 45). But discussion about and around this belief can easily become precluded by scientific inquiries directed at, say, discovering how organizational 'success' can be improved (see also Maclagan, 1998; Jackson and Carter, 2000). The constructivist concern is that the way in which one sets up terms of inquiry at the outset may be connected with the pursuance of potential action agendas. These, it is argued, should not be discounted as beyond the concern of 'proper' scientific inquiry. The issue therefore arises as to how we might set up a way of proceeding in which the (possible) link between knowing and acting can be better appreciated (by all concerned).

## REVISITING 'REASONABLE' BEHAVIOUR

One way of entering the concerns of constructivism into the debate about inquirers' accountabilities is by reconsidering the manner in which 'reason' is turned to as a way of defining the acceptability of scientific efforts to seek truth. Hammersley and Gomm, in upholding a realist-oriented position, argue that reasonableness in the scientific community can be defined by what is judged within the community to constitute reasonable behaviour (Hammersley and Gomm, 1997a, 1997b). According to them, the possibility of fallibility of judgment does not detract from the fact that scientists can still judge one another's behaviour (though never with complete confidence) in terms of the way in which its reasonableness is presented. They insist that it is still important that scientists are geared to offering arguments about how they are deriving conclusions based on relevant (cogent) evidence. The accountability of scientists is a function of their showing that they are proceeding in accordance with what can reasonably be expected of them within the scientific community; this implies being able to apply legitimate criticism to their own as well as others' ways of dealing with the evidence provided by reality. And due to the operation of mechanisms of self- and collegial-criticism within the scientific community, one can argue that as a whole the community makes advancements in sifting out the influence of predefined practical interests, so that results generated are more informed (than if these mechanisms were not operative) about reality (Hammersley, 1995, p. 115).

But in insisting that the proper behaviour of inquirers implies addressing the evidence in a way that is deemed reasonable (judged as likely to lead to advancing knowledge of reality as such) one is, of course, upholding a view such that, to earn trust and respect, scientists (and others) need to present themselves as indeed developing informed understandings in relation to some posited reality. Another feasible way of setting up relations of trust between people is by suggesting (and putting forward the view) that the accountability of inquirers is a function of their appreciation that they are creating

constructions that express a (contingent) way of addressing certain issues of concern (see Hacking, 1999, p. 78).<sup>3</sup>

Gregory, in similar vein, offers an indication of how what she calls 'critical appreciation' expresses an injunction for people (professional inquirers and others) to be prepared to 'become critically reflexive about issues that others hold dear' (Gregory, 2000, p. 497). This is a matter of recognizing that what one holds dear oneself, are choices that have to be accounted for in dialogue with others. She suggests that the process of critical appreciation 'should take account of emotional, intuitive and other psychological features of the actors participating in the dialogue' (p. 496). She hints that it is on these terms that we can hold people accountable in processes of human dialogue (Gregory, 1996, 2000).

The point being made here is that instead of our trying to organize an accountability system where we hold others to account for their decisions by expecting them to defend them as based on an informed understanding of 'the realities', we can organize this differently. My own view on this is that if we work with the notion of discursive accountability, we hold others to account in terms of our assessments of their *sensitivity in engaging with different understandings of possibilities for both seeing and acting* (Romm, 1996a, 1996b, 1997a, 1997b, 1998, 2001a). Assessments can be made (at points in time and subject to renewal as we continue our relationships with people) in relation to the quality of their (discursive) engagement with different visions and concerns; and accordingly people can be called to account for their manner of addressing their choices in relation to alternatives. They can earn trust in their processes of inquiry (and their accompanying decisions regarding options for action in situations) to the extent that they are able to show that they have

<sup>3</sup>As Hacking notes, strictly speaking the contingency thesis is not incompatible with the realist view that there may be one reality such that, if our theories were to correspond to it (or make advancements in this regard), they could be considered as succeeding in realist terms. But the point made by constructivism is that this is what we can never know. Hacking comments in this context that definitions of words like 'fact', 'real', 'true' and 'knowledge' are 'prone to vicious circles' (Hacking, 1999, p. 80).

indeed engaged seriously with alternatives brought forth by others in relation to their own.

Habermas has argued in this respect that our accountability in the social world is linked to our ability to judge by remaining in the world of mutual interdependence. This for him implies that one retains in one's mind many people's standpoints while pondering a given issue, so that its 'resolution' through intersubjective discussion is not ignored.<sup>4</sup> This becomes the basis for making better judgments (communicatively accountable) (Habermas, 1986, p. 92). According to him, people should, ideally, reach toward the possibility of developing consensus through their discursive encounters with others (Habermas, 1993, p. 94). He believes that judgments can thus, in principle, be made in the light of a willingness to engage in encounters reaching toward consensus. It is on this basis that people can earn trust in their judgments, whether or not an actual consensus can be reached on any occasion (cf. the discussion in Romm, 2001b, pp. 145–147).

However, certain authors who define themselves as postmodernist in orientation fear the implications of Habermas's position regarding the use of language to put forward validity claims for discursive redemption (cf. Lyotard, 1990; Denzin, 1991; Gergen, 1992, 1994). They are concerned that working with a notion of consensual accountability might detract from people having to take personal responsibility for their actions in a world of multiple truths (see Jackson, 2000, p. 351, for an account of this argument). And they have suggested that language can rather be used in society as a vehicle for communicators to become mutually involved in enriching their understanding by engaging with alternative points of view. Language can be used as a vehicle to express the valuation and

celebration of diversity. The advantage of people's deciding to celebrate the *de facto* multiple truths is that this becomes an opportunity for them to explore new ways of relating to one another as they engage with the alternatives presented.

Considering various positions regarding human rationality in practice, Ulrich offers the suggestion that claims to rationality can never be validated positively (even in the sense of being 'sufficiently justified' through what authors take to be reasoned argument). Nonetheless, claims can be subjected to 'sufficient critique' (Ulrich, 2001, p. 21).<sup>5</sup> By this he means that they should at least 'lay open their justification deficits'. That is, authors should try to recognize ways in which they have 'bounded the domain of observation', and, in view hereof, examine the implications of judgments that are being made 'in the light of alternative reference systems' (Ulrich, 2001, p. 14). This includes efforts on their part to both disclose and open to critical questioning the ways in which they have chosen to address 'facts' (in terms of possible practical implications of their inquiries) (p. 15).

Ulrich argues that we cannot ever fully justify as inquirers the practical implications (consequences) of any research efforts (Ulrich, 2001, p. 23). But we can try to display what we consider to be possible implications thereof 'to all those concerned, for critical consideration, discussion, and ultimately, choice' (p. 23). He suggests that the process of choice (on the part of all concerned, including those initiating specific research efforts) should, ideally, spring out of a 'necessary process of debate' (p. 23). I would suggest that it is precisely through a discourse which opens the opportunity for people to indicate that they have seriously considered alternative ways of developing their judgments, that trust in their ways of seeing (proffering constructions) and acting (forwarding possibilities)

<sup>4</sup>Habermas argues that the problem with Popper's view of the 'facts' that supposedly constitute the empirical basis of science is that he fails to take full account of the way in which these become accepted through intersubjective encounter (Habermas, 1976, p. 205). Likewise in considering validity claims of 'rightness' in regard to the development of social norms, Habermas argues that these too are rooted in intersubjective encounter. Facts and norms can be regarded as having similar status in this sense: the validity of both of these types of statement rests on discursive reasoning. And indeed both types of statement can be regarded as linked to the other in that in the viewing of facts we invoke certain underpinning standards (norms); and in the creation of norms we draw on certain 'factual' information.

<sup>5</sup>Ulrich draws to a large extent on Habermas's suggestions, but argues that the task of a critical theory is 'not to explain the sufficient conditions of perfectly rational discourse, but rather to guide the discourse participants toward reflection upon the inevitable lack of perfect rationality' (Ulrich, 1983, p. 162). And in relation to postmodernist thinking, Ulrich argues that critical systems thinkers should not be deterred from seeking to adopt a 'historical consciousness and "postmodern" (non-universalistic) perspective of rational design and discourse' (Ulrich, 1996, p. 172).

can become earned. Seen in these terms, the notion of 'trust' serves as a symbol for us to encapsulate the link between ways in which *we develop our inquiries* and ways in which *we develop our discursive capacities*. A trusting constructivist position highlights the suggestion that our ways of defining knowing endeavours cannot be separated from the manner in which we operate our social interconnections in efforts to become accountable.

### TRUSTING CONSTRUCTIVISM: THE STATUS OF THE CONCEPT OF TRUST

In order to consider what status I regard my deliberations around the concept of trust, I suggest that the way of conceptualizing trust within what I call a trusting constructivist perspective can be seen as having a similar status to all constructions/narratives that might be advanced by authors. The notion of trust as I am threading it through this paper itself may become part of what Gill (2000, p. 2) calls 'emergent social structures' insofar as it becomes instantiated in our relationships. I propose that this way of operating with the notion of trust should be seriously considered as affording a style of interaction that respects what Nelson calls our 'interconnectedness with others' (Nelson, 2000). *It offers a feasible (though of course not the only) way to view our interconnectedness*, that in turn might impact on the way we practise this. Or, as Gill puts it, when referring to other social constructs, 'it is a narrative of the possible' (Gill, 2000, p. 2). In this case, it generates possibilities by allowing us to reflect again upon our manner of interpreting the responsibilities of those who pose as 'professional inquirers' and others alike, as they try to defend their way of approaching 'the world'. The reflections offered here are meant to offer an input into arguments concerning the building of cultures of trust (cf. Fukuyama, 1995; Sheppard and Tuchinsky, 1996; Webb, 1996; and Sztompka, 1999). Like Sztompka, the notion of trust that I am working with is meant to encourage 'tolerance, acceptance of strangers, recognition of... differences [including differences of viewpoint

and outlook], as legitimate' (Sztompka, 1999, p. 105). I extend these deliberations by focusing specifically on implications of softening/shifting the realist focus on seeking the truth.

Laszlo suggests, in regard to what he calls the 'powerful story' of evolution, that this too can be taken as a cognitive construct 'that informs various aspects of our perception of the world' (Laszlo, 2000, p. 3). He notes that in terms of this 'story' one implication for practise is that people try to steward (bring forth) "'that which should be'" without either imposing solutions or presuming answers' (p. 4). Social systems design is consciously a 'future-creating' discipline in which those involved recognize their complicity in creating futures. This involves an expansion of consciousness in which people (ideally) reach deep levels of 'understanding, respect and collaboration' (p. 6). It offers a new way of learning and of becoming. Laszlo summarizes that 'learning how to create the conditions that foster such a consciousness—in ourselves and in others—provides a path by which we may realize the evolutionary opportunities ahead of us' (p. 11). These opportunities are, of course, only ahead of us insofar as they indeed become activated.

Yet Umbach indicates that in terms of an empiricist view of the way in which scientific theorizing should proceed, Laszlo's (and other systems thinkers') conceptualizations would be regarded as untestable. Umbach notes that this type of criticism has been made by, for example, Lilienfeld (1978), who argues that because the conceptualizations transcend the empirical domain, they are not testable with reference to it. Lilienfeld expresses concerns that although the stories forwarded by systems scientists are at root untestable, those presenting themselves as systems thinkers seem to assume that they can manage all problems of the world thanks to their systemic orientation (Lilienfeld, 1978, as cited by Umbach, 2000, p. 9).

However, in the light of my discussion above, it can be argued that it is important to reconsider the basis on which critiques concerning the untestable character of systems thinking are made. This can be done by, for instance, suggesting that insofar as systems thinkers acknowledge

that their stories are designed to open up new (unexplored) possibilities for seeing and acting, they cannot meaningfully be judged in terms of the (imperialist) adoption of realist-oriented criteria for assessing 'scientific' accountability. (See, for instance, Midgley, 1996, 2000; and Jackson, 1991, 2000, for a discussion of the importance of maintaining a more pluralistic appreciation of different rationalities that may be brought to bear when judging inquiries.)

Griffin, Shaw, and Stacey suggest that in terms of a complexity perspective, creating 'new' knowledge should indeed be judged in terms other than traditionally associated with knowledge production. They suggest that it should be conceptualized as 'the actualization of a potential, not the explicit manifestation of something pre-existing' (Griffin *et al.*, 1999, p. 306). They note, furthermore, that developing what is experienced as new knowledge involves an emotional relating to others (and their visions and concerns). It may be considered (in the process of developing forms of relationship with others) 'right in the sense of coming to know in our conversation together that this was a step that we, on the basis of our shared experience, could meaningfully take in order to discover the step after that' (p. 308). Knowing, conceived and practised along these lines, does not amount to advancing visions that are presented as being the more informed about reality (and trying to convince others of this); knowing rather becomes a matter of developing conversations around what is regarded as meaningful action.

McIntyre-Mills explores implications of this view of knowing when she suggests that 'the closest we can get to "truth" is through trying to see the point of view of all the stakeholders within specific socio-cultural, political and economic contexts' (McIntyre-Mills, 2000, p. 4). She points out that an extreme relativism is avoided when we operate in terms of a conception of justice that allows us to appreciate 'our common denominators: a similar biology and one ecosystem' (p. 4). Operating in terms of this conception of justice, however, for her, goes hand in hand with the realization that there is never just one way of seeing the issues facing us as global

citizens (p. 13). As she indicates: 'A realization that perhaps there is more than one way of seeing leads to an understanding that when doing problem-solving at any level, local, national or international, there may be more than one answer' (p. 16). At least, she contends, it is important for us to 'comprehend the implications of values and assumptions on the way in which people define social problems' (p. 21). She suggests that, as far as she sees it, 'a sense of social responsibility can be taught, if we can be made aware through reflexive thinking that our futures are interlinked and our economic models need to build in social and environmental value not merely profit value to global markets' (pp. 153–154).

McIntyre-Mills does not pretend to offer a value-free account of her way of experiencing the dominance of market-based approaches to addressing issues. She instead hopes, through involving herself with specific practitioners in addressing felt dilemmas, to aid them (and herself) to develop their repertoire of responses in the situations in which they are involved, by seeing them from multiple vantage points.

But if science/professional inquiry can no longer perform the function of foreclosing options appearing 'unrealistic' (in the quest to get closer to the truth about reality), what might it mean for 'professional inquirers' to act accountably as inquirers? And is there any point in still separating out 'scientific' from other forms of discourse in society?

#### 'PROFESSIONAL' INQUIRY: A VIEW OF ITS DISTINCTIVENESS

Scientific or professional inquiry is sometimes seen as expressing its distinctiveness from other discourses in society in terms of an explicit allegiance on the part of inquirers to both:

- render visible the conduct of the inquiry process—so that this is laid open for anyone wishing to appreciate/review the way in which the inquiries have been organized (Shipman, 1982, p. xiii; Gummesson, 1991, p. 159; Checkland and Holwell, 1998, p. 17); and

- disseminate, in appropriate ways, interpretation(s) of the results developed through the inquiry process—so that academic and other audiences (within and outside of the specific domain where the research has been set) can engage with the study (Gummesson, 1991, p. 161; Flood and Romm, 1996, p. 135; Hall, 1999, pp. 152–154).

These two points of (possible) distinction can be addressed from within a (trusting) constructivist position as follows.

### Accounting for Strategies of Inquiry

A distinguishing mark of so-called professional inquiry (in line with expectations for professional conduct) is that attempts are made to make visible the way in which inquiries are conducted; the processes by which investigations are undertaken need to be recovered for others to examine.

A trusting constructivist position would add to this requirement that in organizing, and accounting for, their manner of proceeding, some attention should be given by the inquirers to keeping alive a discussion around differing criteria that might be used to define 'acceptable' research practice (see also in this regard Gummesson, 1991, p. 159). Feyerabend's arguments concerning the history of scientific practice are instructive here. He argues that 'in the 19th century the idea of an elastic and historically informed methodology was a matter of course' (Feyerabend, 1993, p. 10). He comments that scientists are now trained to believe that 'logic' should condition their work in the scientific domain, and that they should 'inhibit intuitions that might lead to the blurring of boundaries' in relation to other forms of knowing (p. 11). They are trained so that their 'imagination is restrained' to what is considered to be scientific ways of proceeding: even their 'language ceases to be [their] own' (p. 11).

Feyerabend indicates that from his interpretation of the history of science, scientists have not remained within the boundaries of traditions

'defined in this narrow way' (Feyerabend, 1993, p. 11). He states in this respect that 'inventing theories and contemplating them in a relaxed and "artistic" fashion, scientists often make moves that are forbidden by methodological rules' (p. 148). He argues that if people are called upon to defend their way of proceeding 'against all those who will accept a view only if it is told in a certain [scientific] way and who *will trust it only if it contains certain magical phrases called "observational reports"*', then an impoverishment of the inquiry results (p. 17, my italics).

Following this line of argument toward a trusting constructivist position, a scientific approach to research would be seen as serving the function of allowing others to participate in the processes—including imaginative moves—that go to make up the research strategy (no matter how emergent this may be). The expectation that scientific inquirers make an effort to render this visible suggests that to be labelled 'professional' they do have to account for their manner of organizing their investigations (see also Sharma, 1997, pp. 764–765). But they should not feel pressurized to have to iron out the areas of their work that seem not to fit some (supposedly accepted) protocol in order to defend themselves. This goes against the grain of the systemic pluralism pleaded for by, for instance, Jackson (2000) and mentioned under 'Trusting constructivism', above.

Habermas has argued (1976, 1982) that the enterprise of natural science has hitherto been largely defined in terms of the purpose of being able to submit the (objectified) natural world to prediction and control. He clearly does not favour an unreflected-upon transference of this mode of approach to social scientific inquiry. (See, for instance, Gouldner, 1980, for a discussion of Habermas's views on developing a distinct (critical) social science.) In considering Habermas's position concerning the practice of science, I would propose that by his emphasizing the way in which so-called scientific knowing processes are rooted in underpinning purposes, he raises questions for people to consider in regard to how they address *any* science in which they may be engaged. The discourse ethic allows

people to reflect—with others—upon the way in which they work with underpinning standards guiding their approach to/in the world.<sup>6</sup> His suggestion to subject the purpose of the scientific enterprise to discursive reflection is thus welcomed from the perspective of a trusting constructivist position (insofar as it provides opportunities for trust earning and trust awarding).

Interestingly, Habermas sets his argument in the context of a discussion of the manner in which 'science' can operate as an 'ideology' in the sense of serving a legitimating function that renders a reading of the world more or less inaccessible to public consciousness (Habermas, 1970, pp. 98–99). Gouldner, expressing similar sentiments, indicates that just because of its 'world-referring claims', scientific ways of processing information should not escape from being exposed as ideological (Gouldner, 1994, p. 210). But the definition of ideology here cannot be constituted simply as the opposite of genuine truth-seeking (in realist terms). Instead, ideology becomes defined as that which mitigates against continued discursive encounter regarding the choices implied in our ways of approaching 'reality'. Put differently, it can be defined as a suppression of the propensity to invite such encounter. (For an indication of a non-realist-oriented conception of ideological thinking see Romm, 1991, p. 141, and 2001b, p. 147).<sup>7</sup>

### Creating Publicly Available Information

Scientific inquiry may be characterized also with respect to an intention to present publicly in some form—to academic and other audiences—the results, however tentative, created via the

conduct of the inquiry. (The form(s) used to discuss results need to take into account what is considered to be respondents'/participants' right to remain, if desired, anonymous in reports involving them.) Nonetheless, what a constructivist perspective emphasizes is the status of results as, indeed, *constructions*. Even if ways of seeing are taken momentarily 'as if' they could refer to some posited independent realities, the commitment to realism should still be portrayed as one that can be 'switched' (see Jackson, 2000, p. 391). Accordingly, a wholehearted assignation of status to models as (more or less accurate) representations of the world is prevented. This implies that authors need not portray their models as representations deemed to be rooted as far as possible in the evidence to date provided by reality. There are other ways of proffering representations as providing what Barry and Elmes call a 'provocative optique'—that is, as views that can 'open up new trains of thought' for interested audiences (Barry and Elmes, 1997, p. 432).

In summary, a trusting constructivist position would see the arena of scientific/professional research as one where publicly available constructions (that provide some 'optique') are created, using strategies of inquiry that are accounted for with reference to an engagement in debates about criteria for judging acceptable conduct in this arena. Rather than seeing researchers' adherence to protocol as a matter of reasoning on the basis of evidence amassed toward improving their theorizing, one can define their accountability as tied to their manner of taking into account a variety of arguments and concerns pertaining to their work. And one can consider placing trust in them and their work accordingly. It should be noted here that the gist of my discussion is not meant to imply that when one operates processes of, say, journal refereeing as a forum for review of people's work, one is encouraging distrust in the integrity of 'professional' inquirers. On the contrary, this can be seen as providing a further arena for people to display their orientation to discursive accountability and therefore to cater for the development of a trusting climate (in constructivist terms).

<sup>6</sup>Habermas points to the possibility of a transformation of our consciousness of nature—for example, toward a 'cosmically expanded solidarity' in which we see the natural world through an attitude of reverence. But he cautions us that attempting to gain moral access to 'nature-in-itself' is as illusory as attempting to gain 'theoretical access to nature-in-itself'. We should not try to escape from recognizing that it is we who define a way of engaging with 'the world' (Habermas, 1982, pp. 247–249).

<sup>7</sup>I have not tried in this paper to examine what Van Dijk calls 'the perennial debate about the relations between knowledge and ideology' (Van Dijk, 1998, p. 8). Romm (1991, 2001b) provides a concentrated discussion around these issues.

## CONCLUSION

In this paper I put forward a 'trusting constructivist' view of systemic inquiry. I suggested that in terms of trusting constructivist argumentation, it is required that 'professional' researchers (and others in society) operate beyond the remit of (simply) trying to justify their inquiries as rooted in the evidence provided by 'reality'. By examining ongoing debates about the way in which processes of knowing might be treated in society, I put forward the suggestion that the basis for comparison between competing theories involves life choices as well as reasonable invocation of empirical data. This concurs with Midgley's remark that, when put together (in some intervention), 'several theories [can] make contradictory assumptions' (Midgley, 2000, p. 262); and it also concurs with Jackson's point that a decision between possibilities may need to be made on ethical grounds (Jackson, 2000, p. 377). My suggestion is that processes of knowing can still be assessed through social discourse: assessments can be made in terms of the expectation that people express a propensity to engage seriously with competing visions and concerns, and that they bring these to bear in their thinking. I suggest that such a conception of responsible knowing can become merited in society, through people's exploring different bases for trust earning and awarding.

It remains to consider whether my development of the trusting constructivist argument/position that I have forwarded here (as well as in Romm, 2001a) should be regarded as *operating as a kind of 'paradigm'* (way of approaching our being-in-the-world) or whether it should be regarded as simply expressing a preference for *encouraging thinking between paradigmatic options*. Jackson (2000, pp. 386–387) explores the advantages of seeing learning as a process of moving *between* alternative paradigms, as rationales provided by the different paradigms are brought into confrontation. According to him, critical systemic inquiry does not itself need to be conceived as invoking any particular rationality. My comment in this regard is that at the moment that we suggest that different positions/paradigms can legitimately develop contradictory

ways of seeing and acting, we already ourselves express *some* position. Already to plead that there is a variety of paradigms, or frameworks for thinking, or types of rationality that need to be respected, is to develop an approach toward them. It is interesting to note in this regard that realist-oriented authors such as Popper (1994) and Hammersley (1995) refuse to speak the language of paradigms. To create an argument around the need to develop thoughts/actions by moving between paradigms (which proffer alternative rationalities) is therefore *already to orient oneself in a certain way*. I propose that my trusting constructivist argument should be seen in this light. It is an argument that I put forward for consideration; and I recognize that it includes certain proposals—that, however, can be discursively engaged—for ways of practising responsible inquiry (and intervention), in recognition of a link between ways of knowing and ways of being.

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