The action turn: Toward a transformational social science

Authors: Peter Reason, William R. Torbert

Published in *Concepts and Transformation*, vol. 6, no. 1, pp. 1-37, 2001

Concepts and Transformation

OFFPRINT

International Journal of Action Research and Organizational Renewal

VOLUME 6 NUMBER 1 2001

The action turn

Toward a transformational social science

Peter Reason and William R. Torbert
University of Bath / Boston College

We offer an epistemological basis for action research, in order to increase the validity, the practical significance, and the transformational potential of social science. We start by outlining some of the paradigmatic issues which underlie action research, arguing for a "turn to action" which will complement the linguistic turn in the social sciences. Four key dimensions of an action science are discussed: the primacy of the practical, the centrality of participation, the requirement for experiential grounding, and the importance of normative, analogical theory. Three broad strategies for action research are suggested: first-person research/practice addresses the ability of a person to foster an inquiring approach to his or her own life; second-person research/practice engages a face-to-face group in collaborative inquiry; third-person research/practice asks how we can establish inquiring communities which reach beyond the immediate group to engage with whole organizations, communities and countries. The article argues that a transformational science needs to integrate first- second- and third-person voices in ways that increase the validity of the knowledge we use in our moment-to-moment living, that increase the effectiveness of our actions in real-time, and that remain open to unexpected transformation when our taken-for-granted assumptions, strategies, and habits are appropriately challenged. Illustrative references to studies that begin to speak to these questions are offered.

The action turn: Toward a transformational social science

In an important article published in *Administrative Science Quarterly* in 1978 Susman and Evered reviewed the scientific merits of action research. Given the emergence of constructivist thinking and the significant developments in both

Concepts and Transformation 6:1 (2001), 1–37. ISSN 1384–6639

participatory philosophy of science and action research practice that have occurred globally during the past twenty years, it seems timely to offer a further look at the merits of action research from a wider and more radical view of the nature of scientific inquiry.

In this article we adopt the perspective that discussions of research methodology in organizational and social science are trapped in a tension between the 'empirical positivist' view which dominates the academy and a counter-movement which we will call 'postmodern interpretism'. The empirical positive perspective adopts a realist ontology and draws on methods based on operationalization, measurement, and the generation and testing of hypotheses, ideally through rigorous experiment. Postmodern interpretism, drawing on what is often referred to as the 'linguistic turn', views reality as a human construction based in language; and draws on a variety of qualitative methodologies which attempt to portray these constructions, and often to 'see through' or 'deconstruct' taken-for-granted realities.

In making this distinction we are adopting a convenient fiction which obscures important distinctions and arguments. But our purpose here is not to engage in these debates, but to make the wider point that neither of these broad approaches form a satisfactory epistemological basis for action research. We argue that this can only be reached by taking an 'action turn' toward studying ourselves in action in relation to others. The action turn, which complements the linguistic turn, places primacy on practical knowledge as the consummation of the research endeavor.

We use the terms *research/practice* and *transformational action research* to differentiate these emergent forms of inquiry from notions of action research based on empirical positivism. We argue in detail the importance of practical knowing, and identify other key features of a transformational action research — participative relationships, experiential grounding and normative theory. Finally, we explore and exemplify three strategies for transformational action research — the first-person, primarily subjective research of individuals inquiring in the midst of everyday practice; the second-person, intersubjective inquiries of groups and communities of co-researchers engaged together critical research/practice; and more distant, and in some senses more 'objective', the third-person research/practice of a wider community or organization engaged critical self-exploration.[1]

Positivism, the linguistic turn and the action turn

In their 1978 ASQ article, Susman and Evered pointed to a crisis in organizational science in that 'the findings in our scholarly management journals are only remotely related to the real world of practicing managers' (p. 582). They pointed out that the positivist approaches to science which have dominated our perspective on research 'are deficient in their capacity to generate knowledge for use by members of organizations' (p. 585). They point out that action research is future oriented, collaborative, implies system development, generates theory grounded in action, and is agnostic and situational and as such is clearly *not* supported by a positivist view of science. Susman and Evered argued that the conditions in which all of us try to learn in everyday life are better explored through a range of alternative philosophical viewpoints; Aristotelian praxis, hermeneutics, existentialism, pragmatism, process philosophies and phenomenology all point toward methods for improving validity under action conditions. Susman and Evered concluded:

> We hope that this article will enable others to assess the scientific merits of action research. We believe that action research is both ascientific in terms of the criteria of positivist science and relevant in terms of generating good organizational science. As a procedure for generating knowledge, we believe it has a far greater potential than positivist science for understanding and managing the affairs of organizations. (p. 601)

Despite such arguments, positivist, realist science still holds sway in the core quantitative methods, Ph.D. courses and the practices of most academically-based management researchers, at least in the USA. Pfeffer has recently argued strongly that the field of management needs to adopt a unifying paradigm for inquiry if it is to achieve the stature and influence of fields like economics and political science, which have achieved increasing consensus on the positivist 'rational choice' approach (Pfeffer 1993). However, empirical positivist assumptions are increasingly called into question and their place as the dominant paradigm of our times increasingly challenged (Gergen 1994; Van Maanen 1995a). Indeed, some well-regarded champions of qualitative research strategies have gone so far as to assert that 'positivism is passé' (Lincoln and Guba 1985: 24).

From our point of view, while the research strategies associated with positivism have their place, it must be a limited place, primarily because *as a point of view* empirical positivism eschews by far the greatest part of the variance in life, and by viewing life from the outside and under strictly controlled conditions, seriously limits the utility of the knowledge produced, as Susman

and Evered so clearly explain. This is not to say that there are not many research institutes based in a positivist model that engage in 'applied' or 'policy' research: it is to say that the positivist paradigm as a whole is misleading when applied to practice. Its focus is entirely on truths in the 'out-there' world, rather than on awareness and inquiry into the present relationships among the 'in-here', subjective world, the 'among-us', interactional world, and the 'out-there' world we take as our reality. Therefore, however unequivocal or certain a fact or theory may be as determined from an empirical positivist perspective, it is only indirectly related to the worlds each of us also inhabits and through which we each act. Indeed, by overlooking these worlds and their primary demands (e.g. for effective practice with dignity, passion, and timeliness), or by attempting to subordinate the subjective and the intersubjective moments of life to the objective, the empirical positivist approach becomes actively misleading. Put simply, it does not even address, much less provide guidance for the question each of us can potentially ask at any time we are acting, namely: 'How can *I act* in a timely fashion now?'

The 'linguistic turn' which has swept the social sciences and humanities since the 1960s places the experiencing subjects as more centrally constructing their world. As Reason and Bradbury put it, it brings into mainstream scholarship the Kantian differentiation between the world itself (*das Ding an sich*) and the phenomenon, or our interpreted experience of the world.

> The cognitive turn focused on the cognitive structures (schemata or mental models) which allow us make sense of the world. The linguistic turn, rediscovering Nietzsche's sense of language as an 'army of metaphors', looked at the hitherto underestimated role of language in our construction of our world in which we are always seeking to make (or give) sense. It is now difficult to sustain a position of 'naïve realism.' In scholarly circles it is difficult to suggest that the world exists outside our construction of it. (Reason and Bradbury 2001a:5)

The language turn shakes the foundations of empirical positivism when the individual recognizes that there is an infinite territory of first-person research that positivism ignores. As Van Maanen has it

> Language is auditioning for an *a priori* role in the social and material world. Moreover, it is a role that carries constitutional force, bringing facts into consciousness and therefore being. No longer then is something like an organization or, for that matter, an atom or quark thought to come first while our understandings, models or representations of an organization, atom or quark come second. Rather, our representations may well come first, allowing us to see selectively what we have described. (1995a: 134)

In the terms we develop in this article, the language turn invites us to consider what kind of first-person 'critical subjectivity' can help each of us become aware of, 'deconstruct', and 'transgress' beyond our taken-for-granted assumptions, strategies, and habits (Bourdieu 1991; Macey 1993; Van Maanen 1995a). More generally, constructivist approaches (Gadamer 1981; Gergen 1985, 1994; Schwandt 1994; Morgan 1983; Shotter 1993) emphasize the important principle that *all* ways of framing and interpreting the world are human constructions framed by language in social interaction. And this is hugely important.

However, while there are 'engaging sympathies' between constructionist approaches and action research (Lincoln 2001), to the extent that the former remain reflective they do not address the action dimension raised by Susman and Evered. They do not address how we inquire in those moments of action when our own subjective framing of situations is unclear, ambivalent, falsely clear, or in conflict with others' framings. They do not address those moments when we are uncertainly in action rather than reflectively 'at rest' analyzing a data set. These are times when the question is how to act, not (or not only) in a universalizable fashion, but rather (or also) in a timely, idiosyncratic, ecologically sensitive fashion that catalyzes self or other transformation when appropriate. And when is this *not* the question?

With the advent of paradigmatic pluralism, several authors have attempted to trace the recent history of our changing view of social scientific knowledge. Denzin and Lincoln, in their *Handbook of Qualitative Inquiry* (1994) identify a series of 'moments' or 'successive sets of new sensibilities' in the story of qualitative research. In the same Handbook, Guba and Lincoln (1994) offer a very useful discussion of positivism, post-positivism, critical theory, and constructivism as competing paradigms that frame research, describing each in terms of its ontology, epistemology, and methodology. Overall, these give an account of a move from the clarity and unity of a positivist perspective rooted in a clear sense of Northern World superiority, to current times of relativism, pluralism and constructivism.

But still another transformation, this time toward the *action turn*, is necessary to reach a full understanding of the action research that Susman and Evered called for so long ago. In making the action turn we re-vision our view of the *nature and purpose* of social science. Drawing on a participatory paradigm for research (Heron and Reason 1997; Reason and Bradbury 2001b), we argue that since all human persons are participating actors in their world, the purpose of inquiry is not simply or even primarily to contribute to the fund of knowledge in a field, to deconstruct taken-for-granted realities, or even to develop

emancipatory theory, but rather to forge a more direct link between intellectual knowledge and moment-to-moment personal and social action, so that inquiry contributes *directly* to the flourishing of human persons, their communities, and the ecosystems of which they are part (including the question of when foregrounding or backgrounding inquiry contributes best).

To highlight the radical shift between the basic aims of empirical positivism and participatory action inquiry, we can say that whereas empirical positivism aims at *universalizable, valid certainty in reflection about particular pre-designated questions,* inquiry after the action turn aims at *timely, voluntary, mutual, validity-testing, transformative action at all moments of living.* This is a move away from a primarily reflective science about action and toward critical inquiry-in-action, in individuals, groups, organizations and the wider community. In our view, action research has for the past 50 years failed to fulfil its promise, failed to make the kinds of contributions that Susman and Evered advocated, because it has remained caught in an empirical positivist view of academic knowledge as being of value for its own sake (Guba and Lincoln 1994)

'Postmodern interpretivism' makes an important contribution in moving us beyond the objectivized work of positivism. But in our view, postmodern interpretivism owes too much to modernist, reflective science, and fails to embrace the challenge that faces each of us: how to inquire in the midst of action and to how create communities of inquiry within communities of social practice (Argyris, Putnam and Smith 1985; Torbert 1976). It will require fundamental epistemological, political, and spiritual transformations if we are to learn, through constructive, compassionate, and validity-testing actions in real-time communities, the nature and quality of inquiring action. For we would argue that the most significant question any human being faces is not how to construct and deconstruct formal research projects and texts, but rather how to act in daily life, whether or not the questions or the evidence is clear.

Transformational science as research/practice

Despite the efforts of Susman and Evered and many others to achieve greater legitimacy for action perspectives and despite the current paradigm contestation that we have referred to above, empirical positivism has remained the unquestioned criterion for what constitutes 'social science' in at least one major, implicit sense: social science continues to be regarded as a specialized activity pursued by a class of professionals in particular institutions (universities

and research institutes) — a specialized activity in which one studies almost anything *except* how one is acting in the present with others. To go beyond the language turn in social science to the action turn is to bring scholarship to life, is to bring inquiry into more and more of our moments of action — not just as scientists if that happens to be our profession, but as organizational and family members, and in our spiritual, artistic, craft, exercise, conversational, sexual, and other activities. The action turn in the social sciences is a turn toward a kind of research/practice open in principle to anyone willing to commit to integrating inquiry and practice in everyday personal and professional settings. In fact, we all inevitably integrate inquiry and practice *implicitly* in our everyday conduct. Nevertheless, the call to integrate inquiry and practice both explicitly and implicitly in our everyday conduct represents a demand that few persons in history have attempted to accept.

We want to highlight four important dimensions of inquiry which are ignored by empirical positivism, by postmodern intepretivism, and even by action research when it is practiced within paradigmatic assumptions prior to the action turn (for a slightly different slant on what follows, see Reason and Bradbury 2001a). First, whereas the primary purpose of research in the academic tradition is to contribute to an abstract 'body of knowledge' available to third-persons, the primary purpose of research/practice after the action turn is a *practical knowing* embodied in the moment-to-moment action of each research/practitioner, in the service of human flourishing and the flourishing of the ecosystems of which we are a part. Second, since human persons are fundamentally social creatures, human knowing after the action turn is essentially *participative*, growing from collaborative relations with each other as co-inquirers into our world; and in addition, since human persons and communities are a part of the larger cosmos, all knowing is grounded in participation in the wider ecology of living and non-living things. Third, all knowing is based in the sensing, feeling, thinking, attending *experiential presence* of persons in their world. Any form of inquiry that fails to honor experiential presence — through premature abstraction, conceptualization and measurement, or through a political bias which values the experience only of socially dominant or religiously like-minded groups — ignores the fundamental grounding of all knowing. And fourth, all movements of the attention, all knowing, all acting, and all gathering of evidence is based on at least implicit fragments of *normative theory of what act is timely now.* Let us explore these three characteristics of human inquiry after the action turn in greater depth.

The consummation of knowing in practice

First, we argue that the very purpose of knowledge is effective action in the world. Research and action, even though analytically distinguishable, are inextricably intertwined in practice (both the practice of professional researchers as they conduct, analyze, and communicate research and the practice of any of us as we conduct our daily lives). Knowledge is thus always gained through action and for action (Macmurray 1957a; Polanyi 1958). This has recently been argued to be true even of pure mathematics: attempts to ground mathematics in pure logic have failed (Kline 1980; Torbert 1993: Lecture 5). From this starting point, the question of validity of social knowledge is the question, not so much how to develop a *reflective* science *about* action, but also and primarily how to develop genuinely well-informed action in real-time social life — how to conduct an *action science* (Torbert 1976, 1981: 145). Argyris (1980; Argyris and Schon 1974, 1978; Argyris, Putnam and Smith 1985), Nonaka and Takeuchi (1995), and Senge (1990) all make similar moves in advocating such related notions as 'knowledge organizations' and 'organizational learning'.

The Scottish philosopher John Macmurray (1957a) argued long ago that 'I do' rather than 'I think' is the appropriate starting point for epistemology (p. 84).

> ... most of our knowledge, and all our primary knowledge, arises as an aspect of activities that have practical, not theoretical objectives; and it is this knowledge, itself an aspect of action, to which all reflective theory must refer. (p. 12)

As Macmurray also pointed out, the concept of 'action' is inclusive:

> In acting the body indeed is in action, but also the mind. Action is not blind. ... Action, then, is a full concrete activity of the self in which all our capacities are employed. (p. 86)

Similarly, John Heron (1996a,b) argues for the consummation of knowing in practice, that 'practical knowing ... is the consummation, the fulfillment, of the knowledge quest' (1996a: 34). If they are to be at all valid and effective, all other ways of knowing (see Table 1) support our skillful being-in-the-world from moment-to-moment-to-moment, our ability to act intelligently in the pursuit of worthwhile purposes:

> To say that practice consummates the prior forms of knowing on which it is grounded, is to say that it takes the knowledge quest beyond justification, beyond the concern for validity and truth-values, into the celebration of being-values, by showing them forth. It affirms what is intrinsically worthwhile, human flourishing, by manifesting it in action. (Heron 1996a: 34)

Empirical positivist research, based on a realist ontology and a correspondence view of truth, is driven by the methodological imperative of removing the bias of the human researcher through watertight methodology — ideally in a double-blind crossover experimental design (Campbell and Stanley 1966). The action turn returns the fundamental questions concerning the quality of knowing to the practice of the knowing person in community (see also Shotter 1993:52). So the instruments of inquiry and the criteria of excellence in social research after the action turn are no longer primarily methodological. No longer do we ask first 'Is this the "right" method?' Instead we ask 'What is the quality of knowing within the practice of this person and community?' And 'What qualitative and quantitative evidence — appropriate measures, narratives, and other "data" of both inquiry process and outcome — can be shown to demonstrate claims to quality?'

It is important to emphasize that this does not mean that the action turn discards the insights of the language turn, or that it ignores methodology as an aspect of inquiry. Of course, the way in which we use language to create our reality is important, but in an action science we use this to construct theories, models, worldviews which have purpose and meaning, which will inform our awareness and practice from moment-to-moment and guide us toward greater human flourishing. And the various forms of action research can be described in methodological terms: for example, in the planning, action, and evaluating cycle originally described by Lewin (see e.g. Dickens and Watkins 1999); in the rules and methods of action science (Argyris, Putnam, and Smith 1985:236–265); in the democratic dialogues and search conferences of developmental action research (Toulmin and Gustavsen 1996); in the cycles of action and reflection, integrating experiential, presentational, propositional and practical knowing of co-operative inquiry (Heron 1996a); in the integration of four territories of experience of action inquiry (Torbert 1991); in the four-dimensional cycle of appreciative inquiry (Cooperrider and Srivastva 1987; Cooperrider 1998), and so on. But these forms of research/practice are not dominated by methodology; rather they use methodology, just as they use the insights of the language turn, to enhance the inquiring capacity of persons, organizations and communities. The results can be research/practices that make profound differences in persons and organizations and, at the same time, meet rigorous positivist, interpretivist, and action research standards of validity.

Finally, we want to re-emphasize that we are using 'action' to encompass both agency and the manifestation of worthwhile qualities of being. We do not want to overemphasize the doing of 'agency' over qualities of 'being' or 'com-

munion', such as presence, relatedness, and empathy (Bakan 1966; see also Marshall 1984). We would also note at this point that the notion of what constitutes flourishing is itself an question for inquiry; one that is often neglected among action researchers (see Bradbury and Reason 2001).

The participatory imperative

Since action is always *inter*action, the action turn in research emphasizes the participatory, relational nature of research. Fundamentally, if one accepts that human persons are agents who act in the world on the basis of their own sensemaking; and that human community involves mutual sensemaking and collective action, it is no longer possible to do research *on* persons. It is only possible to do research *with* persons, including them both in the questioning and sensemaking that informs the research, *and* in the action which is the focus of the research. As we have seen, Macmurray described the self as agent, and he goes on to show how this agency necessarily arises through the interaction of persons in relation (Macmurray 1957b), which brings him close to the constructionist position of human knowing rooted in relationship expressed by Gergen as *communicamus ergo sum* (Gergen 1994: viii).

The 'reality' of groups, organizations and wider society is a social construction which is primarily established and maintained by conversation (Ford and Ford 1995). Good conversation requires attuning to hearing and responding to, influencing and being influenced by, other voices and perspectives (Evered and Tannenbaum 1992). Implicitly in everyday life and explicitly in an action science, persons need to reach beyond merely acknowledging the existence of multiple perspectives and voices to working with them. This means responding intelligently in the moment, coming to timely decisions, exploring presuppositions, inferences, or attributions, and reforming oneself or the conversation from time to time (Torbert 1999d). Hence, an action science is necessarily a participative form of inquiry (see also Skolimowski 1994). The inquiry process — which in modern science is idealized as a dispassionate process carried out in reflection (though Mitroff (1974) showed how untrue this was in practice, even of physicists) in action science is a passionate embodied and emotional process (as well as an intellectual process) carried on in the heat (or cool) of action.

And, as is already implicit in the foregoing paragraphs, participation is a political as well as an epistemological imperative which affirms the basic human right of persons to contribute to decision which affect them and to knowledge which concerns them and purports to be about them. As Heron points out, this

is a necessary extension of the doctrine of Universal Human Rights to the practice of research and the creation of knowledge (1996a: 17).

Reason (1998) goes further to argue that participation is also an ecological imperative, since human persons are a part of (rather than apart from) the planet's life processes. As Abram (1996) has so eloquently argued, human persons interact not only with other persons, but also with the 'more-than-human' world. Following the phenomenology of Merleau-Ponty, Abram shows how the very process of perception involves participation, and that there is 'underneath our literate abstractions, a deeply participatory relation to things and to the earth, a felt reciprocity...' (Abram 1996: 124). We need to see ourselves as participants in what Bateson (1972a) might call a wider ecology of mind, as is being increasingly recognized by scholars in physics, biology, ecology, economics, medicine, management and philosophy.

Experiential grounding

The third attribute of research after the action turn is that it is rooted in each participant's experiential presence in the world (Heron 1992). The ground of all knowing is the tacit, often pre-verbal, experience of our own presence in the world, and our encounter with the presence of other. Feminist scholarship and practice has taught us that to inquire into women's experience from the dominant masculine perspective is to do violence to it, so research into women's experience of organization must start from women's experience (Marshall 1995). We would extend this to argue that all research needs to be grounded in an in-depth, critical and practical experience of the situation to be understood and acted in. Sometimes, as we illustrate with Bravette's inquiry into bicultural competence below, it is not even possible to know what are the most appropriate questions to ask until after a period of in depth reflection on experience and an uncovering of what has been ignored or repressed (see also Douglas 1999).

Of course, as soon as we begin to translate this experiential knowing into words we enter the world of language. But as Heron and Reason argue

> Our work with co-operative inquiry, in mindfulness practices and ceremony, and our attempts at aware everyday living all convince us that experiential encounter with the presence of the world is the ground of our being and knowing. This encounter is prior to language and art — although it can be symbolized in language and art. Our experience is that our meeting with the elemental properties of the living world, or the I — Thou encounter with a living tree or person, *cannot* be confused with our symbolic constructs. ... Our

> warrant, therefore, for the choice and assertion of a participatory worldview is fundamentally experiential. (Heron and Reason 1997:276)

One's sense of experiential presence can vary radically. When our attention is concentrated in thought, as readers' attention now very likely is, we can 'awaken' each time we encounter the sensation of our own bodies. But for my thought and my body to meet, I cannot be *thinking* about my body, I need to awaken to my body as a sensual/sensuous presence. Can I continue reading while simultaneously sustaining an awareness of my sensual, emotional, and cognitive presence? The more one experiences this waking up phenomenon to one's body, or to the true otherness of another person, to the being of trees, rocks, and the embodied landscape, the more one experiences life as flowing both from intent outward to effects and from external phenomena inward towards a more and more inclusive awakening and inquiry. This can be a research conducted by each of us in the real time of our own lives — an awakening, where we move from an ego-encapsulated reality to being in an extended reality with a higher degree of self and other awareness — but it is a first- and second-person research/practice outside the realm of both positivist and interpretivist methodologies.

Empirical positivism treats reality as consisting of an 'out there' territory that we conceive through our 'in here' maps. In the empirical positivist version of reality, the territory is primary and the map is secondary. Indeed, in the most radical version of behaviorism (Argyris 1971; Skinner 1953, 1971), maps are so dependent on the territory that they do not deserve treatment as a distinct aspect of reality. The language turn reverses this relationship so that description is seen as constitutive of that described in some kind of reciprocal interaction between the two: our maps are treated as primary and the 'out-there' territory as secondary.

In an action science, experiential encounter — tacit, pre-verbal, inchoate — is prior to both description and the object described. 'Reality' can be seen as approached and constructed through the interplay of different qualities, types or territories of knowing 'extended epistemologies'. In our own writing about action forms of inquiry over the years, we have separately developed different ways of describing four ways of knowing (Reason 1994a, see Table 1), or four territories of experience (Torbert 1991, see Table 2). Other authors have provided different maps (Belenky 1986; Carr and Kemmis 1986; Heron 1992, 1996a; Park 1999; Reason 1994a,b; Shotter 1993; Torbert 1991; Wilber 1998).

The notion of an extended epistemology provides insight into new questions of validity that occur after the action turn. Each aspect of an extended

Table 1. Epistemology: Four ways of knowing and critical subjectivity

> A participative worldview sees reality as subjective-objective and involves an extended epistemology. As human persons we participate in and articulate our world in at least four interdependent ways: experiential, presentational, propositional and practical. These four forms of knowing can be seen as aspects of human intelligence and ways through which we dance with the primal cosmos to co-create our reality. (Heron 1992)

Experiential knowing means direct encounter, face-to-face meeting: feeling and imaging the presence of some energy, entity, person, place, process or thing. It is knowing through participative, empathic resonance with a being, so that as knower I feel both attuned with it and distinct from it. It is also the co-creative shaping of a world through mutual encounter. Experiential knowing thus articulates reality through inner resonance with what there is, and is the essential grounding of other forms of knowing.

Presentational knowing emerges from and is grounded on experiential knowing. It clothes our encounter with the world in the metaphors and analogies of aesthetic creation. Presentational knowing draws on expressive forms of imagery, using the symbols of graphic, plastic, musical, vocal and verbal art-forms, and is the way in which we first give form to our experience. These forms symbolize both our felt attunement with the world and the primary meaning which it holds for us.

Propositional knowing is knowing in conceptual terms; knowledge by description of some energy, entity, person, place, process or thing. This kind of knowing is expressed in statements, theories, and formulae that come with the mastery of concepts and classes that language and number bestows. Propositions themselves are carried by presentational forms — the etymologies, the sounds, or the visual shapes of the spoken or written word or number — and are ultimately grounded in our experiential articulation of a world.

Practical knowing is knowing how to do something, demonstrated in a skill or competence. It presupposes a conceptual grasp of principles and standards of practice, presentational elegance, and experiential grounding in the spatio-temporal situation within which the action occurs. It fulfills the three prior forms of knowing, brings them to fruition in purposive deeds, and consummates them with its autonomous celebration of excellent accomplishment.

epistemology has it own internal criteria of validity. Some of these are familiar to positivist science: the coherence of propositional argument, the evidence of practical outcomes. Others break new ground: the extent of experiential encounter (Torbert 1973), the congruence or mismatch between different dimensions of an extended epistemology, e.g. between one's 'espoused (propositional) theory' and one's 'theory-in-action' (actual pattern of practice) (Argyris and Schon 1974). These issues are further explored by Bradbury and Reason (2001); the next section revisits the issue of validity.

Table 2. Four territories of experience

Contrary to the map/territory distinction in positivism, inquiry after the action turn distinguishes among four territories of experience that our awareness, conversations, and organizational activities can attempt to attune to, embrace, and align (Torbert 1983, 1991: Fisher, Rooke and Torbert 1995). These four territories can be named:

At the *personal* scale:	In ***conversational*** moves:	*Organizationally*:
1.intentional attending	framing	visioning
2. thinking (Positivism's 'map')	advocating	strategizing
3. sensing/acting/perceiving	illustrating	performing
4. outside world(Positivism's 'territory')	inquiring	assessing

Only ongoing, real-time effort to attune to all four — through intentionally attending to single-, double-, and triple-loop feedback, in first-, second-, and third-person research/practice — reveals incongruities and develops commitment to transforming toward a more awakening, more effective alignment.

What is most important about Tables 1 and 2 is simply the acknowledgment that there are multiple ways of knowing and multiple territories to be known, and that we can each further the development of our own research/practice (be it a form of social science, of business or political leadership, or an art or craft) with a commitment to engaging, interweaving, and seeking synchrony among more than one mode of knowing across more than one territory. The second most important commonality to note about these two versions of an extended epistemology is that they both place in the foreground *awareness* (experiential knowing or attention/vision) and *practice* (practical knowing or sensing/performing) as primary, irreducible qualities of reality, along with the two primary qualities recognized by empirical positivism and postmodern interpretivism: mapping (propositional knowing or strategizing in Tables 1 and 2) and the 'out-there' territory (outside world in Table 2).

Normative theory about what act is timely in the present

In science after the action turn there is an important place for theory, but theory that is not merely descriptive, consistent, and universalizable. In science after the action turn, theory is intended to guide inquiry and action in present time. Consequently, a good theory is *normative* (as well as descriptive), *analogical* (as well as inductive and deductive), *timely* (as well as universalizable), and

implementable (as well as analytic). Good theory after the action turn also seeks surprise (as well as certainty) and conditions for mutual transformation (not conditions for unilateral control). For example, the two versions of an extended epistemology just discussed not only *describe* four types of knowing and four territories for knowing, but also *remind us that we can exercise our awareness now to improve our inquiry* into what is occurring (how to conduct this exercise and why one may wish to do so in more and more moments requires experimentation and support from elder practitioners).

Let us take a sentence or two to give the words *normative, analogical, timely, and implementable* some additional contextual meaning. We take action only in order to create a better state, so good action theory will offer a normative vision of a better state. Gergen (1994) speaks of 'generative theory': ideas that inspire and offer new perspectives, that place experience in mythic context that tease the imagination, and so on. Indeed, the very word 'action' refers not just to doing certain things to obtain specific results, but to doing things in a way that also questions assumptions and potentially reframes future activity (Arendt 1959; Pitkin 1972).

All action frames are both normative and analogical. When policy-makers in the 1960s said 'Let's not have another Munich in Vietnam', or when an organizational leader says 'That way of treating our new merger partner contradicts our vision of partnership', they are engaging in 'analogical theorizing' (Torbert 1987, 1999c), comparing this situation to another or comparing an abstract vision/principle to a specific act, as we all do implicitly when we try to make sense in the midst of action. Explicit analogical theorizing seeks to articulate a shareable frame for an action or group of actions, establishing its relationship to various short-term and long-term personal, interpersonal, social and ecological patterns or 'wholes'. Such theorizing occurs in practice and for practice.

Whereas inductive or deductive, descriptive, positivist theorizing seeks generalization, analogical theorizing seeks not only the most elegant analogies in general but also, and in particular, the most timely analogy for the moment of action. For example, Robert Quinn's work (Quinn 1981, 1988; Quinn and Cameron 1983; Quinn and Rohrbaugh 1983) offers a normative, analogical theory and measurement process for managers and organizations, based on a Jungian typology, which can both describe where the person or organization is situated currently, as well as pointing toward subsequent steps for development. Another example of a normative, analogical theory and measurement process is developmental theory, which, we would suggest, is the most widely studied, contested, and empirically validated cross-disciplinary and cross-cultural

analogical theory of personal, group, organizational, spiritual, and epistemological change. Developmental theory and the evidence supporting its propositions has recently been reformulated from the Buddhist/scientific perspective by Wilber (1980, 1995, 1998), from the Vedic/scientific perspective by Alexander (Alexander and Langer 1990; Alexander, Rainforth and Gelderloos 1991; Mason, Alexander *et al.* 1997), from the Christian/scientific perspective by Fowler (1981), from the psychological perspective by Kegan (1982, 1994) and Overton (1997), and from the organizational/political/action perspective by Torbert (1987, 1991; Fisher, Rooke and Torbert 2000). In particular, Torbert's 'developmental action inquiry' theory purports to explain (and offers qualitative and quantitative evidence in support of the claims): what time it is now in a person's, project's, or organization's 'career'; what transformations occur when; how personal and organizational transformation either support or inhibit one another (Rooke and Torbert 1998; Torbert and Fisher 1992); and what future, normative states of more encompassing awareness, greater participative mutuality, and increasing capacity to celebrate and reconcile spiritual and material differences are possible.

In Mitroff's (1998a,b) formulation, a good theory must include implementation. We go further. A good theory will begin by pointing to the relation between theory and all the other primary constituents of a good life — meaningful purposes (visioning/framing), excellence of practices (quality of action/implementation), and fruitfulness of outcomes (Torbert 1994a).

First-, second-, and third-person dimensions of inquiry

So far we have discussed the epistemological underpinnings of action research; we now turn to discuss the broad strategies of research practice that these imply. Both positivist and interpretivist research are forms of third-person research, separate from practice (even when they are conceived of as applicable to practice). The researcher is doing research on third-persons with the intent of writing a report for other third-persons. We argue that a complete vision of a transformational social science which generates quantitative, qualitative, and action research, which in turn supports full human flourishing in community and in the more-than-human world, needs to encompass and integrate first-, second- and third-person research/practice concerns. The first-, second-, third-person distinction was first explicitly introduced in this context by Torbert (1998, 1999a,b), having been foreshadowed by Marshall and Reason (1994) who wrote:

> All good research is *for me, for us,* and *for them*: it speaks to three audiences. ... It is *for them* to the extent that it produces some kind of generalizable ideas and outcomes .... It is *for us* to the extent that it responds to concerns for our praxis, is relevant and timely ... [for] those who are struggling with problems in their field of action. It is *for me* to the extent that the process and outcomes respond directly to the individual researcher's being-in-the-world. (1994: 112–113)

First-person research/practice

First-person research/practice skills and methods address the ability of the researcher to foster an inquiring approach to his or her own life, to act awarely and choicefully, and to assess effects in the outside world while acting. First-person inquiry takes us 'upstream' toward the source of our attention (showing, for example, how our particular habits of thought sometimes facilitate and other times cut us off from ongoing experiential knowing). This upstream inquiry helps us clarify both 'where we are coming from' and the purposes of our inquiry, for ourselves and for others. Reason and Marshall (1987) suggested that researchers should develop awareness of: (1) the existential, life issues they bring to research, the opportunities and challenges offered to them by their gender, class, age, race, employment status, and so on; (2) the psychodynamic issues they carry, often the residue of unresolved childhood grief, fear and anger which may color the conduct of their inquiry (Heron 1988); and (3) the archetypal patterns which manifest in their work (Hillman, 1975). Exploration of these issues contributes to what Reason has called *critical subjectivity*:

> Critical subjectivity is a state of consciousness different from either the naive subjectivity of 'primary process' awareness and the attempted objectivity of egoic 'secondary process' awareness. Critical subjectivity means that we do not suppress our primary subjective experience, that we accept our knowing is from a perspective; it also means that we are *aware of* that perspective, and of its bias, and we *articulate* it in our communications. Critical subjectivity involves a self-reflexive attention to the ground on which one is standing and thus is very close to what Bateson (1972b) describes as Learning III. (Reason 1994b: 327)

Methodologies for first-person inquiry 'upstream' include autobiographical writing, psychotherapy, meditation, martial arts and other disciplines which develop mindfulness, awareness and presence in action (Houston 1982), use of artwork (Booth 1997), sensory awareness (Brooks 1974), and many others.

First-person 'downstream' research/practice can involve critical examination of day-to-day behavior, drawing on qualities of mindfulness and self-

awareness to notice critically the impact of one's actions in the wider world and the congruence or incongruence of one's behavior with purposes or espoused theories (Argyris and Schon 1974; Torbert 1973). Attending to our actions, we can ask whether they are achieving intended outcomes (single-loop feedback); whether they are congruent with the strategy or espoused theory (double-loop feedback); and whether the outcomes are congruent with our purposes (triple-loop feedback).

This 'downstream' form of first-person research/practice, while based in personal self-observation-in-action, can be enhanced by journal writing and by careful reflection on audio- and videotapes of behavior (Argyris 1994; Harrison 1995; Raine 1998; Torbert 1976, 1991). The aim is to cultivate moment- to-moment mindfulness:

> ... an attention that spans and integrates the four territories of human experience. This attention is what sees, embraces, and correct incongruities among mission, strategy, operations, and outcomes (Torbert 1991:219).

Of course, at the outset, persons engaging in intentional research/practice are not able to do this regularly. Indeed, all of us are running our work, our days and our loves to a greater or lesser extent in habitual, culturally inherited ways. As a person increasingly adopts intentional first-person research/practices, she or he is increasingly waking up to the possibility of integrating inquiry and action in the present moment, no matter what that moment be. So while we reach for first-person inquiry 'on-line' and moment-to-moment, we can support and develop this capacity by reflecting on action afterwards, too, engaging in systematic cycles of action and reflection, often with the support of peers in co-operative inquiry (Rudoph *et al.* 2001).

Judi Marshall (1992) has written about her first-person research as *Researching Women in Management as a Way of Life.* She concludes that one of many reasons for taking biography seriously is that

> my researching is also a way of life, I and 'it' have to continue to grow and develop, otherwise my life will become stuck; and I have to be able to apply what I take from my research as learning. Intellectual knowledge is insufficient on its own; it is best mirrored in action and being. My research is also my life. At their best, knowledge-making and personal development interweave, each sustaining and feeding the other. (Marshall 1992:289; see also Marshall 1995)

She engages in systematic first-person inquiry into her conduct as one of the few women professors at the University of Bath, attending in detail to the way she presents herself; the way she raises issues in Senate and other University

Committees; continually exploring issues about managing relationally (Fletcher 1995) and drawing attention to issues which are often muted (Marshall 1999).

Gloria Bravette's Ph.D. thesis (1997; see also 2001) provides an account of one woman's personal inquiry into her 'life-world' enabling her to engage in a self-conscious process of transformation from total identification with Anglo norms to a dialectical 'bicultural competence'. In the course of her research, Bravette engages with a whole range of ways of knowing — experiential, presentational, propositional, and practical. Experientially, she gradually confronts her introjection of the white racist perspective which encourages her to deny her 'blackness' in an attempt to be 'one of us', while at the same time experiencing herself as inferior:

> (I) did not have a sound identity or sense of self, the result of not being culturally grounded .... This is despite the fact that I had been successfully recruited into white UK culture through educational socialization since the age of five. Living the contradictions of the culture as espoused, as a black person, had prevented that successful recruitment, however. What I have painfully come to realize is that culture is in fact group/race and history specific and that as an African (the correct label for me) I had been 'culturally misoriented' in that I had been educated into a western culture that was not my own ....
> (Bravette 1997:46)

Presentationally, she tells the story of this personal inquiry through autobiographical writing and by continually challenging the (presumed white) reader to participate in her struggle: '*This is not a neutral document*' she tells us on page 1. Part Four of the thesis is entitled 'Writing as Inquiry Facing up to the Bonds that Tie'. Her choice of presentational form both confronts and draws the reader toward participative, empathic response to her experience.

Bravette also integrates propositional knowing in her work, exploring extensively the literatures on race and culture, on professional practice in education, and on action inquiry methodology. This propositional knowing is intimately bound up with her experience, and leads to her experiments in practical knowing. She develops and begins to put into practice a 'vision' of a liberating pedagogy for her educational practice as a University teacher which includes being prepared to stop denying her blackness in the classroom. Her insights are also an integral part of her practice as a mother of three boys, and she provides accounts of her work to help them develop bicultural competence (e.g. they join in her study of African history, adopt African names, and study, analyze, and experiment with the difficult experience of being authentically black in [white] British schools).

The foregoing examples of first-person research/practice raise the question, how can we differentiate between better (more valid) and worse (less valid) work in this domain? And as our concern is with developing an action science, the primary questions about validity concern ways in which research/practitioners test the reach of their subjectivity in the midst of their research/practice. They can, for example, explore the degree to which they address Heron and Reason's four types of knowing in their research/practice; or the congruence between Torbert's four territories of experience at any given moment (Torbert 1991: 221–227). They can gather evidence of their first-person inquiry competence for their own and others' scrutiny. Bravette, for example, based her early inquiry on cycles of action and reflection, carefully monitoring her expectations of her own and others behavior prior to meetings and reflecting on what happened afterward. As her inquiry skills developed she was increasingly able to monitor her experience and behavior 'on-line' and use action inquiry to act with increasing purpose and choice.

Second-person research/practice

Second-person research/practice starts when we engage with others in a face-to-face group to enhance our respective first-person inquiries. One of the most clearly articulated approaches to second-person research/practice is co-operative inquiry (Heron 1971, 1996a; Reason 1999, forthcoming 2001). In a cooperative inquiry, all those involved in the research endeavour are both co-researchers, whose thinking and decision-making contributes to generating ideas, designing and managing the project, and drawing conclusions from the experience; and also co-subjects, participating in the activity which is being researched. A typical inquiry group will consist of between six and twenty people who work together as co-researchers and as co-subjects. As co-researchers they participate in the thinking that goes into the research — framing the questions to be explored, agreeing on the methods to be employed, and together making sense of their experiences. As co-subjects they participate in the action being studied. The co-researchers engage in cycles of action and reflection: in the action phases they experiment with new forms of personal or professional practice; in the reflection phase they reflect on their experience critically, learn from their successes and failures, and develop theoretical perspectives which inform their work in the next action phase. Co-operative inquiry groups thus integrate the four forms of knowing — experiential, presentational, propositional and practical — outlined above.

While co-operative inquiry is a clearly set out methodology, second-person research/practice is always present, albeit underdeveloped, in everyday life. Maybe the most fundamental form of second-person research/practice is friendship; certainly all forms of education, psychotherapy, consulting are at their best forms of second-person inquiry, albeit tacitly. Indeed, most forms of professional practice are at their best forms of mutual inquiry: for example, the doctor — patient relationship, often seen as based primarily on medical expertise (and at its worst blatantly authoritarian), can be reframed as an inquiry to which both doctor and patient bring their own different knowledge, skills, and arenas of action (Canter 1998). Thus a significant form of second-person research/practice may be to make explicit and systematic these everyday, tacit forms.

Toulmin and Gustavsen (1996) argue that democratic dialogue is the basis of the quality of work life projects in Scandinavia, appealing to the institution of democracy as a 'family of practices' which are well rooted in western tradition. Drawing on a tradition of emancipatory theory, practitioners of participatory research in communities — sometimes referred to the 'southern tradition' of participatory action research (Fals-Borda and Rahman 1991; Hall 1993; Selener 1997; Park 1999) — they base their work in part on Paulo Freire's (1970) practice of dialogue as the basis of *conscientization.* 'Participatory researchers engage in dialogue with community members to help people identify their own problems in order to solve them' (Selener 1997: 14; see also Tandon 1981).

Hilary Bradbury's (1998; see also 2001) study of the Swedish Natural Step ended up having a significant influence on the movement's core self-concept and on its strategies, as a result of second-person research/practice during a day-long meeting to test the validity of her initial findings. The Swedish Natural Step is a major movement toward environmentally sustainable strategies and performance by Swedish companies, municipalities, and households. It develops consensus documents in different industries and fields based on four simple system conditions for sustainability originally developed in a consensual process among leading Swedish scientists. Whereas the Natural Step leadership had always thought of its success as due to scientific authority of the content of the four system conditions, Bradbury hypothesized, in an extended 'learning history' of the movement, that it was the dialogic, consensus-building social process that was at the deepest core of the Natural Step's success in recruiting attention, allegiance, and personal and organizational transformations toward the practice of sustainability. During a day-long feedback and critical discussion of her findings one participant said:

> I realize that what is special about The Natural Step is the process [with which] they continually engage and transform business leaders. It's not so much the content of the teaching as I had thought; it's the process which is always ongoing. (Bradbury 1998:61)

Bradbury records that this comment struck a chord in each of those present as indicated by the degree of energy with which people began to develop the idea:

> ... and this focus defined the second half of the meeting. ... Participants agreed at the end of the meeting that it had been a powerful one, full of insights on the matter of process which had not, hitherto, received so much explicit attention (*ibid.*: 61–62).

In this new balance of understanding, the second-person, dialogic, consensus-seeking social process began to be seen as primary and the third-person systems conditions or organizational strategies that emerged from such a social process began to be seen as caused by it and therefore as secondary (though, of course, by no means unimportant or inconsequential). This new understanding in turn resulted in significant changes in future action, such as chartering international affiliates, not as for-profit consulting firms with proprietary rights to a specific technology of sustainability, but rather as not-for-profit communities of inquiry about how to build consensus about sustainability strategies in each new setting. Furthermore, Bradbury also publicized her initial 'learning history' through a website that reached third-persons not included in the original interviews and attracted a worldwide dialogue and rewriting of the learning history.

Thus, Bradbury's extensive second- and third-person, dialogic testing of her findings not only focused and validated a primary finding of her research, but transformed the movement's future strategies through the very process (dialogic testing and consensus seeking) she was describing. This is a powerful form of validity testing, which can simultaneously validate past findings, illustrate validity through concurrent practice during the validity-testing event, and show the degree to which participants commit themselves to the validity of the finding through its influence on their future actions. Validity procedures in second-person research/practice have been explored in some detail elsewhere. Heron describes a set of procedures to enhance the validity of a co-operative inquiry process, arguing that these 'seeks to free the various forms of knowing involved from some of the distortions of uncritical subjectivity' (1996a: 131–177). These include systematic research cycling, managing divergence and convergence within and between cycles; balancing reflection and action; challenging uncritical subjectivity and intersubjectivity; managing unaware projections and

displaced anxiety; attending to the dynamic interplay of chaos and order; securing authentic collaboration. Reason and Goodwin (1999), drawing on the science of complexity to establish criteria of quality research, have argued that second-person inquiry can be seen as an emergent self-organizing process in which the inquiry group is an 'excitable medium' (Goodwin, 1994) from which novel knowing can emerge.

Second-person research/practices are intimately connected with first-person research/practice. First-person inquiry is always best practiced in the company of peers 'friends prepared to act as enemies' as Torbert (1981) put it (although Marshall and Reason (1994) have argued it is also important that friends are prepared to act as friends!). In the co-operative inquiry process, the group planning and reflection stages are clearly second-person research, whereas the action phase, in which group members return to their separate lives and practices, has many of the qualities of first-person research, albeit supported by the existence of the group. For example, in two co-operative inquiries with health practitioners, one exploring the theory and practice of holistic medicine (Reason 1988), and a second with health visitors (Traylen 1988), the practitioners took their experiments in new forms of attention and new forms of practice into their everyday work settings. Clearly, the ultimate validity and efficacy of second-person forms of research/practice depend upon the degree to which the co-researchers are observant, timely, and imaginative in their self-disclosure, confrontation, and support of one another (Heron 1988, 1996a; Torbert 1973, 1999d). Such actions both reflect and generate intersubjective awareness and compassion.

Third-person research/practice

Third-person research/practice aims to create a wider community of inquiry involving persons who, because they cannot be known to each other face-to-face (say, in a large, geographically dispersed corporation), have an impersonal quality. Third-person research/practice attempts to create conditions which awaken and support the inquiring qualities of first- and second-person research/practice in a wider community, thus empowering participants to create their own knowing-in-action in collaboration with others. In addition, third-person research/practice may aim to speak out to a yet wider audience to influence and transform popular opinion, organization strategy, government policy etc., but it does so in a specific way: through mutuality-enhancing exercises of power that invite third-persons into first-, second-, and third-

person research/practice.

For example, Gustavsen has pointed out that experience of action experiments means that we know, collectively as a profession, how to go about building a small team as a learning community, for example in the form of a semi-autonomous work group. This form of small scale (in our terms, second-person) research/practice cannot be programmed, but can be described in principle. A major challenge is to extend these relatively small scale projects so that 'rather than being defined exclusively as "scientific happenings" they (are) also defined as "political events" with links to a broader debate on industrial democracy' (Toulmin and Gustavsen 1996: 11). To this end, Scandinavian researchers have turned their attention to the question of diffusion and have designed a strategy for action research that encompasses networks of organizations within a region of the country:

> The aim was ... to introduce a support programme of 'reorganizations for continuous improvement', positioned at the intermediate level of the region. In particular, the program's effect should have a broad front effect for companies and public institutions. In fact, the challenge was to apply action research to the largely unexplored level of the region.
>
> Rather than applying a strategy by which individual researchers worked on single projects, the strategy involved a research team and a common infrastructure. (Englestad 1996: 91)

The project used a variety of interventions in different organizations and linked these through 'dialogue conferences' which engaged large numbers people in participative dialogue on developmental tasks. Contrary to modernist researchers who would analyze and present the results of such conferences, in Gustavsen's approach the conferences themselves *are* the first-, second-, and third-person research/practice: the knowing resides not in written reports but in the conference dialogue itself and the subsequent discussions and actions undertaken by the participants to bring about changes in regional educational/economic/community policies and practices.

The Urban Health Partnership, located at the King's Fund in London, has similarly used 'future search' and similar conference designs (Weisbord *et al.* 1992; Weisbord and Janoff 1995) in what they call Working Whole Systems. They engage large numbers of people, drawn from different health care, social work and community organizations, in explorations to improve the care of elders in UK inner cities. These interventions require very careful planning and preparation: people from different levels and functions of different organizations need to be involved; the starting questions or 'systems issues' need to be

appropriately framed; the venue needs to be one that will hold maybe 100 people, with round tables for small group dialogue and a roving microphone for informal reporting to the whole group; and the facilitators of the event need both to take the authority necessary to manage the structure and guide the discussion *and* enable participants to share their meanings and purposes so that structure and coherence also emerges (see also Bunker and Alban 1997; New Economics Foundation 1998). This is third-person research/practice in that it involves ever-wider groups of people: the King's Fund team works to establish an inter-organization planning group, which invites a larger and more inclusive group of people to a Whole System Event, whose effect ripples out to stimulate the self-organizing potential of the wider community and create both better understanding and change (Pratt, Gordon and Pampling 1999).

There are numerous other examples of large-scale, third-person research/practice in Africa, Latin America, and Europe (e.g. Swantz 1996; De Roux 1991; Capewell 1998; see also Newbury Leukaemia Study Group 1998, and Granada Television 1996; Chiu 1998; see also Rotherham Health Authority 1998). In the United States, the Appalachian Land Ownership Task Force, composed of activists, regional academics, and community people, undertook participatory research in which local people were trained in research methods to establish the extent of absentee ownership of land and mineral rights because of the damage caused to local interests by strip mining (Horton 1993: 88).

In the course of third-person research/practice what look like traditional forms of data gathering may be used — interviews, questionnaires, quantitative methods, historical research, etc. However, they are not used unilaterally and extractively by an external researcher, but rather as part of a community endeavor. In third-person research/practice a central purpose is to feed back research results to the research participants, both as a validity test and in order to create conditions which support first- and second-person research/practice. Both the theory on which the design is based and the measuring instruments which the design supplies are meant to awaken the participants to effective first- and second-person research/practice, to empower them to produce the results they envision and to welcome inquiry that results in re-forming the original research/practice purpose, design, conduct, and results. Torbert (1991: Ch. 5) details the characteristics of organizational designs that interweave first-, second-, and third-person research/practice and calls them 'liberating disciplines'. He illustrates the use of assessment questionnaires and psychometric measures in organizational settings of 100–400 participants, with feedback to the research participants, with the outcomes of validating the instruments in

new ways while simultaneously encouraging transformation of individual participants, whole teams, or the overall organizational design, depending on the particular findings (Torbert 1987, 1991, 1994b).

In one particular case, for example, thirty twelve-person work groups rated the efficacy of fifteen facilitators (working with two groups apiece) in mid-course and again at the conclusion. At mid-course there was a strong, statistically significant difference between the three facilitators who had been ranked highest and the three who had been ranked lowest in terms of how much learning work team members rated themselves as doing. Before revealing these research results (which can be seen as one form of third-person research/practice), the lead organizer asked the facilitators, as a part of their on-going collaborative reflective practice, to describe the common characteristics of their colleagues. The three with whom students perceived themselves as learning most were described as 'warm, personal, and encouraging of identification'. The three with whom students perceived themselves as learning least were characterized as 'relatively distant, task-oriented, and encouraging of internalization'. The staff did not characterize the first three as more competent and the second three as less competent (in fact, the aim was to help work team members to be more self-directed, not more identified with staff). When the findings from the work team members were revealed, the staff group interpreted them as supporting Runkel, Harrison and Runkel's (1971) theory that students and workers expect to comply with external authority, and must go through a stage of identifying with an alternative, collaborative model of behavior before they internalize collaborative values in their own behavior. This collaborative reflection and sense-making (all aspects of second-person research/practice) invited experimental behavior from all staff members during the second half of the course (first-person research/practice). At the end of the course, work team members' ratings of their own learning rose to a statistically significant degree from the mid-course assessments, and there was no longer any significant difference between the scores of the two subgroups discussed at mid-course. We are not arguing that the third-person data at the end of the course prove that the second-person feedback and the first-person experimenting encouraged among the fifteen facilitators was the primary cause of the improved learning ratings (in fact, many different types of assessment data generated many different interventions throughout the course). Rather, we wish to illustrate how different our research/practice becomes when we seek to integrate first-, second-, and third-person forms of inquiry. This interweaving of first-, second-, and third-person research/practice shows us one of many ways that quantita-

tive, qualitative, and action research can be integrated after the action turn.

We would also argue that the growing movement among academic writers to explore how to speak to and influence a wider, third-person audience through writing, lectures, TV, wider forms of public communication, quite different from orthodox forms of 'writing up' research, can be seen as an active form of third person research/practice. How do we treat writing itself as action and ask what its effects are on the first- and second-person research/practice of third-persons (Denzin 1997; Lather 1995)? Judi Marshall's exploration of *Women Managers Moving On* (1995) is written in such a way as to continually invite the reader to ponder her or his own experiences and to create their own sensemaking of the stories told in the book. Lather's work with women with HIV/AIDS, *Troubling the Angels* (Lather, Smithies and Lather 1997), is a graphic experiment in which her voice and the voices of the women she worked with and those close to them are placed on the page in a kind of ongoing conversation.

New types of validity-testing of texts are also being suggested. For example, Lather (1993) suggests that social scientists committed to conducting, reporting, and encouraging first-person research/practice develop *situated validity, rhizomatic validity, reflexive validity*, and *ironic validity*. Situated validity is raised when a text includes not just a disembodied voice, but an embodied, emotional, reflective voice. Rhizomatic validity is raised when a text presents multiple voices defining the situation differently. Reflexive validity is raised when a text attempts to challenge its own validity claims. Ironic validity is raised by inviting further interpretation by readers. These forms of validity can all be seen as relating to the degree of validity of the written social scientific journal article or book as *an action in relation to its readership* — the degree to which the text communicates: (1) the partially self-critical first-person voice that guides it (situated and reflexive validity); (2) the variety of second-person voices that inform the text and may contest the first-person voice (rhizomatic validity); and (3) the creative work of the third-person reader/interpreters of the text (ironic validity).

For example, Torbert (1991) begins with a highly confrontational Foreword by Donald Schon (rhizomatic validity) and, after an initial section of theory and third-person data (including surveys and psychometric measures), includes a middle section in the author's first-person voice (situated validity), as well as excerpts in other first-person voices. In Fisher, Rooke and Torbert (1995), spaces are repeatedly created within the text for the reader's own version of the issues discussed (ironic validity).

Note that at present these criteria of validity are stated in nominal terms (a

text either does or does not address them). As examples of attempts to meet these criteria accumulate, we can expect ordinal criteria of better and worse ways of meeting each validity challenge. Indeed, Behar (1997), Denzin (1997), and Van Maanen (1995b) are beginning to formulate ways of judging the efficacy of the use of first-person authorial voice and experience in studies.

This article remains almost entirely in a third-person voice, but the two different versions of extended epistemologies presented earlier and compared with one another provide a taste of rhizomatic validity. The brief quotations from Bravette's dissertation offer hints of what situated validity sounds like. The notion of multiple social science paradigms (empirical positivism, postmodern interpretivism, and participative action inquiry) offers both contingent support for readers' current methodological preferences, while simultaneously inviting you to consider augmenting them through future personal experiments, thus promoting ironic validity in a mild way. And this paragraph embodies the rather limited reflexive validity of this piece.

Finally, third-person research/practice can be seen as part of an effort to create institutions and practices which, appropriately open to continuing inquiry and transformation, have *lasting* value. Can we create communities of inquiry within communities of practice which nurture and encourage a spirit of living inquiry and which have intergenerational value and endurance? We can point to age old traditions of first-, or second-, or third-person research/practice which, repeatedly re-enacted, provide disciplines, ceremonies, celebratory enactments which last from generation to generation. We can see elements of such a spirit of inquiry institutionalized in the constitutional practice of democracy, in the conduct of science to the extent that it is open to peer and public scrutiny, in Zen, Christian prayer and other wisdom traditions (Nielsen 1996; Spretnak 1991; Wilber 1998). But, until now, most practices of inquiry focus implicitly on first-, second-, or third-person inquiry, rather than focusing explicitly on interweaving all three 'persons' of inquiry, and interweaving action and inquiry as well.

Conclusion

In conclusion, we should like to emphasize what we see as the benefits that flow from transformational action research and draw out what may not have been sufficiently explicit in the examples given above. We do not necessarily agree with Feyerabend (1975) that paradigms are incommensurable, but we do accept

that since we are arguing for a complete reformulation of the practice of inquiry we are asking a lot of our readers.

We wish to place the experience and practice of human persons inquiring into their everyday lives — both individually and in relationship — at the center of inquiry. In this view, a change in the quality of our attention in real time is the primary requirement for research and ongoing experimentation with one's own actions in real time is the primary means of conducting research. Theory-building and rigorous empirical validation are important features of research as well, but become misleading when engaged in apart from a concern for encouraging increasing synchrony among first-, second-, and third-person research/practice.

The primary purpose of research/practice is to enhance human flourishing. To do this it must generate valid information within action situations so that those involved can understand them more thoroughly and act in them more effectively. Research/practice is not only about collecting empirical information but about a whole range of information based on the experience of those involved — intuitive inquiry into values and purposes, conceptual inquiry into the frames and sense-making we as actors are bringing to the situation, and practical, sensuous inquiry into our actions as individuals and members of groups and communities.

Thus first-person research/practice, as exemplified by Bravette's inquiry, enables a person to critically explore their own purposes, framings, behaviors and effects and as an outcome of this inquiry to create their own living theories and to improve the quality of their practice. In this example not only is Bravette able to change how she construes her situation in ways that make possible new ways of acting, but her inquiry speaks out to the UK African-Caribbean community by reformulating the theory of bicultural competence and demonstrating the possibility of different forms of action. Second-person research/practice, as exemplified by Bradbury's work with The Natural Step, helps the organization understand itself in a more realistic way, develops its capacity as a knowledge generating organization, and also speaks to a wider community by providing new ways of thinking about organizing for sustainability. Third-person research/practice, as exemplified by the work in Scandinavia and the work of the Urban Health Partnership shows us how we can not only theorize and research *about* large scale social change, but can begin to understand how to increase the action research capacity of whole organizations or regions. The outcomes reached for are both better social practice (e.g. how to care for elders) and an increase in the democratic involvement of citizens in making sense of

their lives and contributing to their communities.

We wish, through our own practice in specific studies and through survey articles such as this one, to influence the tradition of academic inquiry and scholarship in the West to continue to develop and interweave its own forms of first-, second-, and third-person research/practice and thus help to cultivate a greater spirit of living inquiry — of critical subjectivity, of compassionate intersubjectivity, and of constructive objectivity — both in the academy and in our wider culture. We believe that a full-fledged social science after the action turn will not just describe an external reality, but will support personal, social, and epistemological inquiry and transformation. This belief raises far more questions than this article answers, and we hope that what we have written motivates readers to join us in pursuing those questions.

Note

1. In writing of subjectivity, intersubjectivity, and objectivity, we are not referring to 'naïve', 'given', or 'received' notions of these words, but to the qualities that result from disciplined inquiry-in-action by each researcher. These qualities can initially be suggested by the phrases 'critical subjectivity', 'compassionate intersubjectivity', and 'constructive objectivity'. See later sections for further detail.

References

Abram, D. 1996. *The Spell of the Sensuous: Perception and language in a more than human world.* New York: Pantheon.

Alexander, C. and Langer, E. (eds). 1990. *Higher Stages of Human Development.* NY: Oxford University Press.

Alexander, C., Rainforth, M. and Gelderloos, P. 1991. "Transcendental Meditation, Self Actualization, and Psychological Health: A conceptual overview and statistical meta-analysis". *Journal of Social Behavior and Personality* 6: 189–247.

Arendt, H. 1959. *The Human Condition.* Garden City NY: Doubleday Anchor.

Argyris, C. 1971. "Essay Review of B. F. Skinner's 'Beyond Freedom and Dignity'". *Harvard Educational Review,* 41: 550–567.

Argyris, C. 1980. *Inner Contradictions of Rigorous Research.* New York: Academic Press.

Argyris, C. and Schon, D. 1974. *Theory in Practice: Increasing Professional Effectiveness.* San Francisco: Jossey-Bass.

Argyris, C. and Schon, D. 1978. *Organizational Learning.* Reading MA: Addison-Wesley.

Argyris, C., Putnam, R. and Smith, D. 1985. *Action Science: Concepts, Methods, and Skills for Research and Intervention.* San Francisco: Jossey-Bass.

Bakan, D. 1966. *The Duality of Human Existence — Isolation and Communion in Western Man.* Boston: Beacon Press.

Bateson, G. 1972a. *Steps to an Ecology of Mind.* San Francisco: Chandler.

Bateson, G. 1972b. "The Logical Categories of Learning and Communication". In *Steps to an Ecology of Mind.* San Francisco: Chandler.

Behar, R. 1996. *The Vulnerable Observer: Anthropology that breaks your heart.* Boston: Beacon Press.

Belenky, M., Clinchy, B., Goldberger, N., and Tarule, J. 1986. *Women's Ways of Knowing: the development of self, voice, and mind.* New York: Basic Books.

Bernstein, R. 1988. *Beyond Objectivism and Relativism.* Philadelphia PA: University of Pennsylvania Press.

Booth, E. 1997. *The Everyday Work of Art.* Naperville, IL: Sourcebooks.

Bourdieu, P. 1991. *Language and Symbolic Power.* Cambridge, MA: Harvard University Press.

Bradbury, H. 1998. "Learning with the Natural Step: Cooperative Ecological Inquiry Through Cases, Theory, and Practice for Sustainable Development". Chestnut Hill MA: Boston College Organizational Studies Doctoral Dissertation.

Bradbury, H. 2001. "Learning with The Natural Step: Action Research to Promote Conversations for Sustainable Development". In P. Reason & H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice* (pp. 307–313). London: Sage Publications.

Bradbury, H., & Reason, P. 2001. "Conclusion: Broadening the Bandwidth of Validity: Five Issues and Seven Choice-points for Improving the Quality of Action Research". In P. Reason & H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice* (pp. 447–455). London: Sage Publications.

Bravette, G. 1997. "Toward Bicultural Competence: Researching for Personal and Professional Transformation". Bath, England: University of Bath School of Management Doctoral Dissertation.

Bravette, G. 2001. "Transforming Lives: Towards Bicultural Competence". In P. Reason & H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice* (pp. 314–323). London: Sage Publications.

Brooks, C.V.W. 1974. *Sensory Awareness: The rediscovery of experiencing.* Santa Barbara: Ross-Erikson Publishers.

Bunker, B., and Alban, B. 1997. *Large Group Interventions: engaging the whole system for rapid change.* San Francisco: Jossey-Bass.

Campbell, D.T., and Stanley, J.C. 1966. *Experimental and Quasi-Experimental Designs for Research.* Chicago: Rand- McNally.

Canter, R.J. 1998. "Clinical Decision Making in a Surgical Outpatients: Relating the science of discovery with the science of implementation". Bath, England: University of Bath School of Management Doctoral Dissertation.

Capewell, E. 1998. "The Development of a Participatory Action Enquiry into the Incidence of Leukaemias and Related Cancers in Newbury". Unpublished disertation, Diploma in Action Research, University of Bath.

Carr, W., and Kemmis, S. 1986. *Becoming Critical: Education, Knowledge and Action Research.* Basingstoke: Falmer Press.

Chiu, L.F. 1998. *Woman to Woman: Promoting cervical screening amonst minority ethnic women in primary care.* Department of Health Promotion, Rotherham Health Authority.

Cooperrider, D.L., and Srivastva, S. 1987. "Appreciative Inquiry in Organizational Life". In R. Woodman and W. Pasmore (eds), *Research on Organizational Change and Development.* Greenwich, CT: JAI Press.

Cooperrider, D.L. 1998. "Capturing What Matters Most in the Practice of Appreciative Inquiry: A positive revolution in change". Paper presented at the Academy of Management Annual Meeting, San Diego.

De Roux, G.I. 1991. "Together against the Computer: PAR and the struggle of Afro-Colombians for public services". In O. Fals-Borda and M.A. Rahman (eds), *Action and Knowledge: Breaking the monopoly with Participatory action research.* New York: Intermediate Technology Pubs/Apex Press. 37–53.

Denzin, N.K. 1997. *Interpretive Ethnography: Ethnographic practices for the 21st Century.* Thousand Oaks: Sage.

Denzin, N., and Lincoln, Y. 1994. *Handbook of Qualitative Research.* Thousand Oaks, CA: Sage.

Dickens, L.N., and Watkins, K.E. 1999 (forthcoming). "Action Research: Reinterpreting Lewin". *Management Learning Special Issue: The Action Dimension.*

Douglas, C. 1999. "From Surviving to Thriving; Black women managers in Britain". Bath, England: University of Bath School of Management Doctoral Dissertation (unexamined as at 1/3/99).

Engelstad, P.H. 1996. "The Development Organization as Communicative Instrumentation: Experiences from the Karlstad program". In S. Toulmin and B. Gustavsen (eds), *Beyond Theory: Changing organizations through participation.* Amsterdam: John Benjamins.

Evered, R. and Tannenbaum, B. 1992. "A Dialogue on Dialogue". *Journal of Management Inquiry,* 1: 43–55.

Fals-Borda, O., and Rahman, M.A. (eds). 1991. *Action and Knowledge: Breaking the monopoly with participatory action research.* New York: Intermediate Technology Pubs/Apex Press.

Feyerabend, P. 1975. *Against Method: Outline of an anarchistic theory of knowledge.* London: NLB.

Fisher, D., Rooke, D. and Torbert, W.R. 1995. *Personal and Organizational Transformation through action inquiry.* Boston: Edge\Work Press.

Fletcher, J.K. 1998. "Relational Practice: A feminist reconstruction of work". *Journal of Management Inquiry,* 72: 163–186.

Ford, J. and Ford, L. 1995. "The Role of Conversations in Producing Intentional Change in Organizations". *Academy of Management Review,* 20: 541–570.

Fowler, J. 1981. *Stages in Faith.* New York: Harper and Row.

Freire, P. 1970. *Pedagogy of the Oppressed.* New York: Herder and Herder.

Gadamer, H. 1981. *Truth and Method.* New York: Continuum.

Gergen, K.J. 1985. "The Social Constructionist Movement in Modern Psychology". *American Psychologist,* 40: 266–275.

Gergen, K.J. 1994. *Realities and Relationships: Soundings in social construction.* Boston: Harvard University Press.p

Goodwin, B. 1994. *How the Leopard Changed its Spots: The evolution of complexity.* London: Weidenfeld and Nicholson.

Granada Television. 1996. World In Action: "Shadow of the Bomb".

Guba, E.G., and Lincoln, Y.S. 1994. "Competing Paradigms in Qualitative Research". In N.K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research.* Thousand Oaks, CA: Sage. 105–117.

Hall, B. 1993. "Participatory Research". *International Encyclopedia of Education.* London: Pergamon.

Harrison, R. 1995. *Consultant's Journey: A dance of work and spirit.* San Francisco: Jossey-Bass.

Heron, J. 1971. *Experience and Method: An inquiry into the concept of experiential research.* Human Potential Research Project, University of Surrey.

Heron, J. 1988. "Validity in Co-operative Inquiry". In P. Reason (ed), *Human Inquiry in Action.* London: Sage. 40–59.

Heron, J. 1992. *Feeling and Personhood: Psychology in another key.* London: Sage.

Heron, J. 1996a. *Co-operative Inquiry: Research into the human condition.* London: Sage.

Heron, J. 1996b. "Quality as Primacy of the Practical". *Qualitative Inquiry,* 2(3): 41–56.

Heron, J., and Reason, P. 1997. "A Participatory Inquiry Paradigm". *Qualitative Inquiry,* 3(3): 274–294.

Hillman, J. 1975. *Revisioning Psychology.* New York: Harper Collophon.

Horton, B.D. 1993. "The Appalachian Land Ownership Study: Research and citizen action in Appalachia". In P. Park, M. Brydon-Miller, B. Hall, and T. Jackson (eds), *Voices of Change: Participatory research in the United States and Canada.* Westport, Conn: Bergin and Garvey.

Houston, J. 1982. *The Possible Human.* Los Angeles: J.P.Tarcher.

Kegan, R. 1980. *The Evolving Self.* Cambridge, MA: Harvard University Press.

Kegan, R. 1994. *In Over our Heads: The mental demands of modern life.* Cambridge, MA.: Harvard University Press.

Kline, M. 1980. *The Loss of Certainty.* New York: Oxford University Press.

Lather, P. 1993. "Fertile Obsession: Validity after poststructuralism". *The Sociological Quarterly,* 34: 673–693.

Lather, P. 1995. "The Validity of Angels: Interpretive and textual strategies in researching the lives of women with HIV/AIDS". *Qualitative Inquiry,* 11: 41–68.

Lather, P., Smithies, C., and Lather, P.A. 1997. *Troubling the Angels: Women Living With HIV/AIDS.* Westview Press.

Lincoln, Y.S. 1997. "The Sixth and Seventh Moments in Qualitative Research". *Collaborative Inquiry* 20. Centre for Action Research in Professional Practice, University of Bath.

Lincoln, Y.S. 2001. "Engaging Sympathies: Relationships between Action Research and Social Constructivism". In P. Reason & H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice* (pp. 307–313). London: Sage Publications.

Lincoln, Y.S., and Guba, E.G. 1985. *Naturalistic Inquiry.* Beverly Hills: Sage.

Macey, D. 1993. *The Lives of Michel Foucault.* New York: Pantheon.

Macmurray, J. 1957a. *Persons in Relation.* London: Faber and Faber.

Macmurray, J. 1957b. *The Self as Agent.* London: Faber and Faber.

Marshall, J. 1984. *Women Managers: Travelers in a male world.* Chichester: Wiley.

Marshall, J. 1992. "Researching Women in Management as a Way of Life". *Management Education and Development,* 23(3): 281–289.

Marshall, J. 1995. *Women Managers Moving On — Exploring Career and Life Choices.* London: International Thomson Publishing Europe.

Marshall, J. 1999 (in press). "Living Life as Inquiry". *Systematic Practice and Action Research* 12(2).

Marshall, J., and Reason, P. 1994. "Adult Learning in Collaborative Action Research: reflections on the supervision process". *Studies in Continuing Education: Research and Scholarship in Adult Education,* 15(2): 117–132.

Mason, L., Alexander, C., Travis, F., Marsh, G., Orme-Johnson, D., Gackenbach, J., Mason, D., Rainforth, M., and Walton, K. 1997. "Electrophysiological Correlates of Higher States of Consciousness During Sleep in Long-term Practitioners of the Transcendental Meditation Program". *Sleep* 20: 102–110.

Mitroff, I. 1974. *The Subjective Side of Science: A Philosophical Inquiry into the Psychology of the Apollo Moon Scientists.* Amsterdam: Elsevier.

Mitroff, I. 1998a. *Smart Thinking for Crazy Times: The art of solving the right problems.* San Francisco: Berrett-Koehler Publishers, Inc.

Mitroff, I. 1998. "On the Fundamental Importance of Ethical Management: Why management is the most important of all human activities". *Journal of Management Inquiry,* 7(1): 68–79.

Morgan, G. 1983. *Beyond Method: Strategies for social research.* Thousand Oaks: Sage.

New Economics Foundation. 1998. *Participation Works: 21 techniques of community participation for the 21st century.* London: New Economics Foundation.

Newbury Leukaemia Study Group. 1998. http://www.newbury.net/nlsg.

Nielsen, R. 1996. *The Politics of Ethics: Methods for acting, learning, and sometimes fighting, with others in organizational life.* New York: Oxford University Press.

Nonaka, I. and Takeuchi, H. 1995. *The Knowledge-Creating Company.* New York: Oxford University Press.

Overton, W. 1997. "Developmental Psychology: Philosophy, concepts, and methodology". In R.M. Lerner (ed), *Theoretical Models of Human Development.* Volume 1 of W. Damon (ed-in-chief), *Handbook of Child Psychology,* 5th ed. New York: Wiley.

Park, P. 1999 (forthcoming). "People, Knowledge, and Change in Participatory Research". *Management Learning.*

Pfeffer, J. 1993. "Barriers to the Advancement of Organizational Science: Paradigm development as a dependent variable". *Academy of Management Review* 18: 599–620.

Pitkin, H. 1972. *Wittgenstein and Justice.* Berkeley CA: University of California Press.

Polanyi, M. 1958. *Personal Knowledge: Towards a postcritical philosophy.* London: Routledge Kegan Paul.

Pratt, J., Gordon, P., Plamping, D. 1999. *Working Whole Systems.* London: King's Fund.

Quinn, R. 1981. "A Competing Values Approach to Organizational Effectiveness". *Public Productivity Review,* 5: 122–140.

Quinn, R. 1988. *Beyond Rational Management.* San Francisco: Jossey-Bass.

Quinn, R. and Cameron, K. 1983. "Organizational Life Cycles and Shifting Criteria of Effectiveness: Some preliminary evidence". *Management Science,* 29(1): 33–51.

Quinn, R. and Rohrbaugh, J. 1983. "A Spatial Model of Effectiveness Criteria: Toward a competing values approach to organizational analysis". *Management Science,* 29(3): 363–377.

Raine, N. 1998. *After Silence: Rape and my journey back.* New York: Crown.

Reason, P. 1988. "Whole Person Medical Practice". In P. Reason (ed), *Human Inquiry in Action.* London: Sage. 102–126.

Reason, P. (ed). 1994a. *Participation in Human Inquiry.* London: Sage.

Reason, P. 1994b. "Three Approaches to Participative Inquiry". In N.K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research.* Thousand Oaks: Sage. 324–339.

Reason, P. 1996. "Reflections on the Purpose of Human Inquiry". *Qualitative Inquiry,* 2(1): 15–28.

Reason, P. 1998. "Political, Epistemological, Ecological and Spiritual Dimensions of Participation". *Studies in Cultures, Organizations and Societies,* 4. 147–167.

Reason, P. 1999. "Integrating Action and Reflection through Co-operative Inquiry". *Management Learning Special Issue: The Action Dimension in Management: Diverse Approaches to Research, Teaching and Development,* 30(2), 207–227.

Reason, P. (ed.) Forthcoming 2001. Special Issue: The Practice of Co-operative INquiry. *Systemic practice and Action Research,* 14(6).

Reason, P., & Bradbury, H. 2001a. "Inquiry and Participation in Search of a World Worthy of Human Aspiration". In P. Reason & H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice* (pp. 1–14). London: Sage Publications.

Reason, P. & Bradbury, H. (Eds.) 2001b. *Handbook of Action Research: Participative Inquiry and Practice.* London: Sage Publications.

Reason, P., and Goodwin, B.C. 1999. "Toward a Science of Qualities in Organizations: Lessons from complexity theory and postmodern biology". *Concepts and Transformations,* 4(3), 281–317.

Reason, P. and Marshall, J. 1987. "Research as Personal Process. In D. Boud and V. Griffin (eds), *Appreciating Adult Learning.* London: Kogan Page.

Rooke, D. and Torbert, W. 1998. "Organizational Transformation as a Function of CEOs' Developmental Stage". *Organization Development Journal* 16: 11–28.

Rotherham Health Authority. 1998. *Woman to Woman: Cervical screening pack for minority women.* Rotherham, UK: Rotherham Health Authority.

Rudolph, J.W., Taylor,S.S., & Foldy, E.G. 2001. "Collaborative off-line reflection: A Way to Develop Skill in Action Science and Action Inquiry". In P. Reason & H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice* (pp. 405–412). London: Sage Publications.

Runkel, P, Harrison, R., and Runkel, M. 1971. *The Changing College Classroom.* San Francisco: Jossey-Bass.

Schwandt, T.A. 1994. "Constructivist, Interpretivist Approaches to Human Inquiry". In N.K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research.* Thousand Oaks: Sage. 118–137.

Selener, D. 1997. *Participatory Action Research and Social Change.* Cornell Participatory Action Research Network, Cornell University.

Senge, P. 1990. The Fifth Discipline. New York: Currency Doubleday.

Shotter, J. 1993. *Cultural Politics of Everyday Life: Social construction and knowing of the third kind.* Buckingham: Open University Press.

Skinner, B. 1953. *Science and Human Behavior.* New York: Macmillan.

Skinner, B. 1971. *Beyond Freedom and Dignity.* New York: Knopf.

Skolimowski, H. 1994. *The Participatory Mind.* London: Arkana.

Spretnak, C. 1991. *States of Grace: The recovery of meaning in the postmodern age.* New York: Harper Collins.

Susman, G. and Evered, R. 1978. "An Assessment of the Scientific Merits of Action Research". *Administrative Science Quarterly* 23: 582–603.

Swantz, M.-L. 1996. "A Personal Position Paper on Participatory Research: Personal quest for living knowledge". *Qualitative Inquiry: Special Issue Quality in Human Inquiry,* 2(1): 120–136.

Tandon, R. 1981. "Dialogue as Inquiry and Intervention". In P. Reason and J. Rowan (eds), *Human Inquiry, A Sourcebook of New Paradigm Research.* Chichester: Wiley.

Torbert, W. 1973. *Learning from Experience: Toward Consciousness.* New York: Columbia University Press.

Torbert, W. 1974. "Doing Rawls Justice". *Harvard Educational Review* 44: 459–70.

Torbert, W. 1976. *Creating a Community of Inquiry.* London: Wiley.

Torbert, W. 1981. "Why Educational Research is so Uneducational: Toward a new model of social science based on collaborative inquiry". In P. Reason and J. Rowan (eds), *Human Inquiry: A Sourcebook of New Paradigm Research.* London: Wiley.

Torbert, W. 1983. "Research Cultivating Executive Mind, Timely Action". *ReVision* 4: 1–23.

Torbert, W. 1987. *Managing the Corporate Dream: Restructuring for Long-term Success.* Homewood, IL: Dow Jones-Irwin.

Torbert, W. 1989. "Leading Organizational Transformation". In R. Woodman and W. Pasmore (eds), *Research in Organizational Change and Development,* Vol. 3. Greenwich CT: JAI Press.

Torbert, W. 1991. *The Power of Balance: Transforming Self, Society, and Scientific Inquiry.* Newbury Park CA: Sage Publications.

Torbert, W. 1993. *Sources of Excellence: An unorthodox inquiry into quality in recent U.S. Presidencies, in Business Leadership, in Management Education, in Adam Smith's Ethics, and in Pythagorean Mathematics.* Cambridge MA: Edge\Work Press.

Torbert, W. 1994a. "The Good Life: Good money, good work, good friends, good questions". *Journal of Management Inquiry* 3(1): 58–66.

Torbert, W. 1994b. "Cultivating Post-formal Development: Higher stages and contrasting interventions". In M. Miller and S. Cook-Greuter (eds), *Transcendence and Mature Thought in Adulthood.* Lanham MD: Rowman and Littlefield.

Torbert, W. 1998. "Developing Courage and Wisdom in Organizing and Sciencing". In S. Srivastva and D. Cooperrider (eds), *Organizational Wisdom and Executive Courage.* San Francisco: The New Lexington Press.

Torbert, W. 1999a. "Creating a Transformational Social Science: Integrating quantitative, qualitative, and action research". In F. Sherman and W. Torbert (eds), *Transforming Social Inquiry, Transforming Social Action: Creating Communities of Practice at the University and in the Community.* Norwood MA: Kluwer Academic Publishers.

Torbert, W. 1999b. "The Call to Bridge Knowledge and Action: The response of the Boston College PhD Program in Organization Transformation". In F. Sherman and W. Torbert (eds), *Transforming Social Inquiry, Transforming Social Action: Creating Communities of Practice at the University and in the Community.* Norwood MA: Kluwer Academic Publishers.

Torbert, W. 1999c. "The Distinctive Questions Developmental Action Inquiry Asks". *Journal of Management Learning*, Special issue. Originally presented at Academy of Management Symposium on The Action Dimension in Management: Different Approaches to Research, Teaching, and Development, Boston: August 1997.

Torbert, W. 1999d. "The Challenge of Creating a Community of Inquiry among Scholar-consultants Critiquing One Another's Theories-in-practice". In F. Sherman and W. Torbert (eds), *Transforming Social Inquiry, Transforming Social Action: Creating Communities of Practice at the University and in the Community.* Norwood MA: Kluwer Academic Publishers.

Toulmin, S., and Gustavsen, B. 1996. *Beyond Theory: Changing organizations through participation.* Amsterdam: John Benjamins.

Traylen, H. 1988. "Confronting Hidden Agendas: Co-operative inquiry with health visitors". In P. Reason (ed), *Participation in Human Inquiry.* London: Sage. 59–81.

Van Maanen, J. 1995a. "Style as Theory". *Organization Science* 6: 133–143.

Van Maanen, J. 1995b. *Representation in Ethnography.* Thousand Oaks CA: Sage.

Van Maanen, J. 1998. "Qualitative Studies of Organizations: The Administrative Science". *Quarterly Series in Organization Theory and Behavior.* Thousand Oaks CA: Sage.

Weisbord, M.R., *et al.*, 1992. *Discovering Common Ground. How Future Search Conferences Bring People Together to Achieve Breakthrough Innovation, Empowerment, Shared Vision, and Collaborative Action.* San Francisco, CA: Berrett-Koehler Publishers, Inc.

Weisbord, M.R., and Janoff, S. 1995. *Future Search: An action guide to finding common ground in organizations and communities.* San Francisco: Berrett-Koehler.

Wilber, K. 1980. *The Atman Project: A transpersonal view of human development.* Wheaton IL: The Theosophical Publishing House.

Wilber, K. 1995. *Sex, Ecology, Spirituality.* Boston: Shambala.

Wilber, K. 1998. *The Marriage of Sense and Soul: Integrating Science and Religion.* New York: Random House.

Authors' addresses

Peter Reason
Centre for Action Research in Professional Practice
University of Bath
Bath BA2 7AY, U.K.

William R. Torbert
Carroll School of Management
Boston College
Chestnut Hill, MA 02467, U.S.A.

Contents

Concepts and Transformation

VOLUME 6 NUMBER 1 2001

ISSN 1384-6639

JOHN BENJAMINS PUBLISHING COMPANY