

Handbook of action research

Participative Inquiry and Practice

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editors

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Introduction:

Inquiry & participation in search of a world worthy of human aspiration

Peter Reason and Hilary Bradbury

I do not separate my scientific inquiry from my life. For me it is really a quest for life, to understand life and to create what I call living knowledge—knowledge which is valid for the people with whom I work and for myself. Marja-Liisa Swantz

Knowledge is always gained through action and for action. From this starting point, to question the validity of social knowledge is to question, not how to develop a reflective science about action, but how to develop genuinely well-informed action—how to conduct an action science.

Bill Torbert

I am not a social scientist interested in more participatory research, but an educator and activist exploring alternative paradigm research as one tool in the multifaceted struggles for a more just, loving world.

Pat Maguire

Practical knowledge, knowing how, is the consummation, the fulfilment, of the knowledge quest... it affirms what is intrinsically worthwhile, human flourishing, by manifesting it in action.

John Heron

The aim of participatory action research is to change practices, social structures, and social media which maintain irrationality, injustice, and unsatisfying forms of existence.

Robin McTaggart

Participatory research is a process through which members of an oppressed group or community identify a problem, collect and analyse information, and act upon the problem in order to solutions and to promote social and political transformation.

Daniel Selener

Action Research can help us build a better, freer society.

Davydd Greenwood and Morten Levin

We must keep on trying to understand better, change and reenchant our plural world.

Orlando Fals Borda

Action, participation and experience

In this Introduction, we draw together some of the major threads that form the diverse practices of action research, to provide a framework through which the reader can approach this volume. We know that our readership is varied. You may be new to action research, wanting to know

whether it has anything to offer you. You may already be an action research practitioner, maybe with allegiance to one of the schools included (or maybe not included), in this volume, and wondering how we have presented the kind of work you are committed to. You may belong to an academic discipline which draws on more orthodox forms of inquiry, wondering how this action research animal can be understood as science. And of course you may be downright hostile to the idea of action research, and are reading this to show how misguided the editors and contributors are!

There is no 'short answer' to the question 'What is action research?' But let us say as a working definition, to be expanded on in this Introduction and indeed the rest of this volume, that action research is a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview which we believe is emerging at this historical moment. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.

What we want to say to all our readers is that we see action research as a practice for the systematic development of knowing and knowledge, but based in a rather different form from traditional academic research—it has different purposes, is based in different relationships, it has different ways of conceiving knowledge and its relation to practice. These are fundamental differences in our understanding of the nature of inquiry, not simply methodological niceties. As we have studied the contributions to this volume over these past two years and more, we conclude that, while the field of action research is hugely varied and there are all kinds of choices to be made in practice, there are five broadly shared features which characterize action research which we show in Figure 1.

--Figure 1 about here--

A primary purpose of action research is to produce practical knowledge that is useful to people in the everyday conduct of their lives. A wider purpose of action research is to contribute through this practical knowledge to the increased well-being—economic, political, psychological, spiritual—of human persons and communities, and to a more equitable and sustainable relationship with the wider ecology of the planet of which we are an intrinsic part.

So action research is about working toward practical outcomes, and also about creating new forms of understanding, since action without reflection and understanding is blind, just as theory without action is meaningless. And more broadly, theories which contribute to human emancipation, to the flourishing of community, which help us reflect on our place within the ecology of the planet and contemplate our spiritual purposes, can lead us to different ways of being together, as well as providing important guidance and inspiration for practice (for a feminist perspective would invite us to consider whether an emphasis on action without a balancing consideration of ways of being is rather too heroic).

As we search for practical knowledge and liberating ways of knowing, working with people in their everyday lives, we can also see that action research is participative research, and all participative research must be action research. Human persons are agents who act in the world on the basis of their own sensemaking; human community involves mutual sensemaking and collective action. Action research is only possible with, for and by persons and communities, ideally involving all stakeholders both in the questioning and sensemaking that informs the research, and in the action which is its focus.

Since action research starts with everyday experience and is concerned with the development of living knowledge, in many ways the process of inquiry is as important as specific outcomes. Good action research emerges over time in an evolutionary and developmental process, as individuals develop skills of inquiry and as communities of inquiry develop within communities

of practice. Action research is emancipatory, it leads not just to new practical knowledge, but to new abilities to create knowledge. In action research knowledge is a living, evolving process of coming to know rooted in everyday experience; it is a verb rather than a noun. This means action research cannot be programmatic and cannot be defined in terms of hard and fast methods, but is, in Leotard's (1979) sense, a work of art.

These five interdependent characteristics of action research emerge from our reflections on practice in this developing field. Together they imply an 'action turn' in research practice which both builds on and takes us beyond the 'language turn' of recent years: the language turn drew our attention to the way knowledge is a social construction; the action turn accepts this, and asks us to consider how we can act in intelligent and informed ways in a socially constructed world. Later in this Introduction we work toward the articulation of a participatory worldview as a grounding framework for these characteristics, and show how this draws our attention to the kinds of choices that action research practitioners need to make in the course of their work, choices which have implications for the quality and validity of their inquiries.

We start from these assertions—which may seem contentious to some of the academic community, while at the same time obvious to those of a more activist orientation—because the purpose of knowledge-making is so rarely debated. The institutions of normal science and academia, which have created such a monopoly on the knowledge making process, place a primary value on pure research, the creation of knowledge unencumbered by practical questions. In contrast, the primary purpose of action research is not to produce academic theories based on action; nor is it to produce theories about action; nor is it to produce theoretical or empirical knowledge that can be applied in action; it is to liberate the human body, mind and spirit in the search for a better, freer world.

The diverse origins of action research

We doubt if it is possible to provide one coherent history of action research. Many writers on action research trace its origins back to the social experiments of Kurt Lewin in the 1940s, through the socio-technical experiments begun at the Tavistock Institute and in particular their application to practices of social democracy and organizational change. (Greenwood & Levin, 1998; see also Gustavsen, Chapter 1 and Pasmore, Chapter 3). While we are clearly indebted to this tradition there are others which deserve acknowledgement.

Others will see origins of action research in the contemporary critique of positivist science and scientism, in the movement to seek new epistemologies of practice—while all the contributions in our Groundings section address questions of the nature of knowledge, they are explored in particular by Park, Chapter 7, Kemmis, Chapter 8, and Lincoln, Chapter 11—as well as later in this Introduction. Eikeland argues in Chapter 13 that these epistemological concerns can be traced back to Aristotle's work on praxis & phronesis. Others will point out that important origins can be found in cultures which Eurocentric scholarship can overlook. Orlando Fals Borda asked in an email exchange

... where are the Maya Aristotles who discovered the Zero and taught how to build the wonderful pyramids in Yucatán? How are their intellectual and technical contributions taken into account in our discourses and narratives?

Pyrch and Castello (Chapter 37) similarly argue the importance of indigenous traditions and their current expression in "grass roots postmodernism" (Esteva & Prakash, 1998). As Hall points out (Chapter 15) participatory forms of inquiry aimed at solving practical problems have existed forever in human cultures, and have contributed to all life-supporting human activities from plant and animal husbandry to political democracy.

We can also trace the evolution of action research back to the Marxist dictum that the important thing is not to understand the world but to change it, through the theorizing of Gramsci and

others and the educational work of Freire, to the participatory research practice of those other working for liberation of the oppressed and underprivileged of this world (Fals Borda, Chapter 2; Hall, Chapter 15; Selener, 1997). This is truly a living movement worldwide for which no one person or community can claim ownership: we see the inspiration of Freire meeting the pioneering work of Marja-Liisa Swantz and her colleagues in Tanzania (Chapter 39), the movement for popular education as expressed for example at the Highlander Centre (Lewis, Chapter 35; Horton & Freire, 1990) and the Society for Participatory Research in Asia (Bhatt and Tandon, Chapter 28). More recently, through practices such as participatory rural appraisal (Chambers, 1997) practices of participative research has become part of developmental institutions—governments, NGOs and supra-national bodies such as the World Bank—which raises important questions about people's participation in relation to institutionalized power (Gaventa and Cornwall, Chapter 6).

Other writers point first to the fundamental importance of liberating perspectives on gender and race as a foundation for action research. As Maguire points out (Chapter 5), feminisms in their fullest sense challenge the structures and practices of domination in all fields. And the feminist practice of consciousness raising can in itself be seen as a form of experiential action inquiry. And Bell (Chapter 4) shows how the roots of action research were deeply embedded in progressive research on race.

Other roots of action research lie in the practices of experiential learning and psychotherapy. T-group training and encounter groups are at their best forms of mutual inquiry into the here-and-now development of group processes (Schein & Bennis, 1965). As John Rowan points out in Chapter 10, some forms of psychotherapy, particularly those informed by existential and humanist perspectives, can similarly be seen as mutual inquiries, as can a variety of forms of self-help groups such as co-counselling. In England humanistic approaches to learning and change led to experiments with learning communities based in humanistic education which directly informed the development of co-operative inquiry (Heron, 1971). All this interacted with the evolving practices of organizational development, which many would characterize as a form of action research in which the consultant's role is to facilitate reflective inquiry within the organization, for which Schein coined the term clinical inquiry (Chapter 21) and Senge and Scharmer describe as the development of a community of learning (Chapter 22).

While some approaches to action research have remained resolutely secular, others have seen some spiritual practices as inquiry (Torbert, Chapter 23; Bentz & Shapiro, 1998). The disciplines of mindfulness expressed in spiritual teachings from the Buddha to Gurdjieff, and in practices such as Tai Chi and insight meditation, can make an important contribution to our understanding of inquiry—although as Heron (Chapter 32) argues that these teaching and practices are often nested within authoritarian political structures from which they must be liberated.

Action research has been equally promiscuous in its sources of theoretical inspiration. It has drawn on pragmatic philosophy (Levin and Greenwood, Chapter 9; Greenwood & Levin, 1998), critical thinking (Kemmis, Chapter 8; Carr & Kemmis, 1986), the practice of democracy (Gustavsen, Chapter 1; Toulmin & Gustavsen, 1996), liberationist thought (Fals Borda, Chapter 2; Selener, 1997), humanistic and transpersonal psychology (Rowan, Chapter 10; Heron and Reason, Chapter 16); constructionist theory (Lincoln, Chapter 11; Ludema, Cooperrider and Barrett, Chapter 17), systems thinking (Flood, Chapter 12; Pasmore Chapter 3) and more recently complexity theory (Reason & Goodwin, 1999). In its refusal to adopt one theoretical perspective it can be seen as an expression of a post-modern sentiment, or as Toulmin might have it, a re-assertion of Renaissance values of practical philosophy:

Since 1945, the problems that have challenged reflective thinkers on a deep philosophical level... are matters of practice: including matters of life and death... The "modern" focus on the written, the universal, the general, the timeless—which monopolized the work of

most philosophers after 1630—is being broadened to include once again the oral, the particular, the local and the timely. (Toulmin, 1990:186. Emphasis in original)

The diversity of sources that inspire action research are reflected in the arenas in which action research has taken root, which range from the problems of development in the majority world to questions of organizational change in the minority world; from practices which enhance inquiry as a personal practice in everyday life to attempts to engage whole societies as communities of inquiry; from intensely practical concerns such as the preservation of local fisheries to our experience of non-ordinary realities. From a disciplinary perspective action research practices can be found in community development, organization and business, education, healthcare and medicine, social work, the human social, psychological and transpersonal sciences.

Action research, paradigms and worldviews

We will now turn to explore how the characteristics of action research we identified above can be seen as grounded in a participatory worldview which we believe is emerging at this historical moment. Let us say again that these characteristics are not simply questions of methodology. To be sure, we can argue that they lead to ‘better’ research because the practical and theoretical outcomes of the research process are grounded in the perspective and interests of those immediately concerned, and not filtered through an outside researcher’s preconceptions and interests. But far more than that, when we assert the practical purposes of action research and the importance of human interests; when we join knower with known in participative relationship; as we move away from operational measurement into a science of experiential qualities (Reason & Goodwin, 1999), we undercut the foundations of the empirical-positivist worldview that has been the foundation of Western inquiry since the Enlightenment [Toulmin, 1990 #1436]. In doing this, we are part of the current shift from a ‘modern’ to a ‘postmodern’ world, and we need to engage with the current debate about worldviews and paradigms. We need to look at the practical consequences of modernism; at the implications of the ‘language turn’ which has pointed to the importance of language in creating our world; and, in our view, point to a third possibility, a participatory worldview

Many writers and commentators are suggesting that the modernist worldview or paradigm of Western civilization is reaching the end of its useful life. It is suggested that there is a fundamental shift occurring in our understanding of the universe and our place in it, that new patterns of thought and belief are emerging that will transform our experience, our thinking and our action. We have, since the Reformation, the beginning of the era of modern science, and the Industrial Revolution made enormous strides in our material welfare and our control of our lives. Yet at the same time we can see the costs of this progress in ecological devastation, human and social fragmentation, and spiritual impoverishment. So if we fail to make a transition to new ways of thinking our civilization will decline and decay. Gregory Bateson (1972a), one of the great original thinkers of our time, argued that the most important task facing us is to learn to think in new ways: he was deeply concerned with what he called the epistemological errors of our time, the errors built into our ways of thinking, and their consequences for justice and ecological sustainability. So the challenge of changing our worldview is central to our times.

The notion of a paradigm or worldview as an overarching framework which organizes our whole approach to being in the world has become commonplace since Thomas Kuhn published The Structure of Scientific Revolutions (1962). Kuhn showed that normal scientific research takes place within a taken-for-granted framework which organizes all perception and thinking, which he called a paradigm. However, from time to time the paradigm itself shifts in a revolutionary fashion as a new perspective is deemed to make better sense of the available knowledge. This idea of a paradigm in science can be transferred to the worldview of a whole culture, and the notion that the Western worldview may be in revolutionary transition has been part of intellectual currency for quite a while.

Research in the West has been integral with a positivist worldview, a view that sees science as separate from everyday life and the researcher as subject within a world of separate objects. In this perspective, there is a real world made up of real things we can identify, operating according to natural causal laws which govern their behaviour—laws which we can deduce by analysing the operation of the component parts. Mind and reality are separate: the rational human, drawing on analytical thought and experimental methods, can come to know the objective world. This is part of a modern worldview based on the metaphor of linear progress, absolute truth and rational planning (Harvey, 1990). Seeking objective truth, the modern worldview makes no connection between knowledge and power. We start from the position, well argued elsewhere (see e.g. Lincoln & Guba, 1985; Reason, 1994), that this positivist worldview has outlived its usefulness: as Habermas has announced, ‘modernism is dead’.

Evolution of Western Thought

Stephen Toulmin's *Cosmopolis* (1990) provides a helpful account of the evolution of Western thought into and through the modernist period which prepares the ground for our discussion of an emerging participative worldview. Toulmin's argument is that the worldview which emerged with Descartes and Newton should not be seen as the first enlightened, rational correction of medieval superstition. Rather, that the break with the Middle Ages occurred considerably earlier, and that some important origins of modernity can be traced back to late 16th century writers in Northern Europe. Toulmin refers to these writers as ‘Renaissance humanists’ (he refers particularly to Michel de Montaigne). Their ‘theoretical inquiries were balanced against discussions of concrete, practical issues’ (p. 24), and they ‘displayed an urbane openmindedness and skeptical tolerance... that led to honest practical doubt about the value of ‘theory’ for human experience’ (p. 25). They argued for a trust in experience, the courage to observe and reflect, a curiosity about the diversity of human nature.

Toulmin goes on to show that during the 17th century ‘these humanist insights were lost’, and there was a historical shift from a practical philosophy based on experience and particular practical cases to a theoretical philosophy concerned with the general, the timeless, and the universal. Toulmin argues that this happened at that time because the assassination of the tolerant Henri IV of France, the devastation brought about by the dogmatic religious struggles of the Thirty Years War and other economic and political difficulties brought about a ‘counter-Renaissance’—a demand for a new certainty in the face of these appalling crises which neither humanistic skepticism nor religious dogma seemed able to meet. Thus the quest for certainty which led to the philosophy of Descartes was ‘a timely response to a specific historical challenge—the political, social and theological chaos embodied in the Thirty Years War.’

... the Cartesian program for philosophy swept aside the ‘reasonable’ uncertainties and hesitations of 16th-century skeptics, in favor of new, mathematical kinds of ‘rational’ certainty and proof... [F]or the time being, that change of attitude—the devaluation of the oral, the particular, the local, the timely, and the practical—appeared a small price to pay for a formally ‘rational’ theory grounded on abstract, universal, timeless concepts... Soon enough, the flight from the particular, concrete, transitory, and practical aspects of human experience became a feature of cultural life in general. (Toulmin, 1990:75-76)

Toulmin continues the story to the present time. As different sciences developed, particularly in the 18th and 19th centuries, a more pragmatic and practical attitude developed: each new field of inquiry had to discover its own methodology, and the hard edges of the Enlightenment were softened. But just as Europe was beginning to rediscover the values of Renaissance humanism, the roof fell in again with the First World War, the inequitable peace and the Great Depression. Re-renaissance was deferred: the intellectual response was a return to the formalism of the Vienna Circle and the monopoly of logical positivism. It was not until the 1960s that humanism could be re-invented and ‘the dream of foundationalism—i.e. the search for a permanent and

unique set of authoritative principles for human knowledge—proves to be just a dream, which has its appeal in moments of intellectual crisis, but fades away when matters are viewed under a calmer and clearer light’ (p. 174)

As Toulmin argues, the way ahead is to draw on the twin legacies of the exact sciences and the humanities: a participative worldview does just this.

The linguistic turn

The linguistic and cognitive turn has swept the social sciences and humanities since the 1960’s and brought to 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 (Lincoln, Chapter 11) (Gergen, 1994; Gergen, 1999; Schwandt, 1994; Shotter, 1993).

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 (Van Maanen, 1995:134)

We have probably left the idea of language as ‘representation’ behind us, even if it does linger in the discourse of modernism and positivism. So we may say that since the linguistic and cognitive turns, we have become more fluent in understanding the difference between phenomena and our interpretations of them. Postmodernism, indeed, is predicated on the insight about this differentiation, and sometimes threatens to collapse the distinction once again. No longer is the world to be thought of as naively ‘out there’, but in extreme constructionist positions the world is evoked always and only in a dance of signs (Derrida, 1981). Such a world perhaps, is one that is only ‘in here.’ But surely, even if phenomena such as gravity are not directly apprehended, but are understood within a cultural context mediated by language, there are ‘deeper structures of reality’ (Berry, 1999) which lie under and behind them.

The deconstructive sentiment lays bare our illusions of any kind of certainty and holds that we must be suspicious of all overarching theories and paradigms—incredulous toward metanarratives, as Lyotard (1979) put it. It asserts that there is no accessible reality behind the ‘text’, the immediate expression of human understanding we have in front of us. Since all understanding is relative, despite the range of competing paradigms currently on the social science scene (Guba & Lincoln, 1994; Heron & Reason, 1997; Lincoln & Guba, in press) there are in the end no foundation on which truth can be securely laid (Schwandt, 1996), and the postmodern perspective asks us to ‘deconstruct’ and ‘transgress’ beyond our taken-for-granted assumptions, strategies, and habits. As Lather puts it

we seem somewhere in the midst of a shift away from a view of knowledge as disinterested and toward a conceptualization of knowledge as constructed, contested, incessantly perspectival and polyphonic (Lather, 1991:xx)

The postmodern perspective points to the researcher’s ‘complicity in the constitution of their objects of study’ and the ‘interested nature of knowledge making (Calás & Smircich, 1999). It also emphasizes the intimate relationship between knowledge and power, how knowledge making, supported by various cultural and political forms, creates a reality which favours those

who hold power. Similarly, action researchers agree that objective knowledge is impossible, since the researcher is always a part of the world they study, and it points out that knowledge making cannot be neutral and disinterested but is a political process in the service of particular purposes, and one which has been institutionalized in favour of the privileged (Hall, Gillette, & Tandon, 1982). This close examination of the role of language in creating our shared reality is a great importance within the action research movement. Since action research is concerned with the development of democratic forms of knowledge it is concerned with the ways in which language is used in the service of those who hold power to define reality (Gaventa and Cornwall, Chapter 6; Lukes, 1974). As Selener puts in

One of the greatest obstacles to creating a more just world is the power of the dominant hegemony, the ideological oppression which shapes the way people think. (Selener, 1997:26)

In this volume, many contributors argue the need to see through the dominant world view and its construction of reality, and to create new possibilities: this is particularly important in Bell's account of infusion of the perspectives from race into action research (Chapter 4) and Maguire's exploration of the significance of feminist perspectives (Chapter 5). Treleaven (Chapter 24) shows how poststructuralist perspectives helped her deepen her understanding of the issues of gender in her collaborative inquiry, and suggest how they might be used creatively within a collaborative research project

However, from the perspective of action research we find that the emphasis that deconstructive and poststructuralist perspectives place on the metaphor of 'text' is limiting. There is a lot of concern with discourse, text, narrative, with the crisis of representation, but little concern for the relationship of all this to knowledge in action. For example, Denzin's (1997) fascinating exploration of interpretive ethnography is full of references to text; and Calás and Smircich (1999) ask us to consider how the 'textuality' of our writings defines the nature of knowledge. Neither ask what the text is actually for. As Lather, also writing within the postmodern tradition points out 'The question of action... remains largely under-addressed within postmodern discourse' (1991:12).

While these perspectives help us immensely in seeing through the myth of the modernist world, they do not help us move beyond the problems it has produced. If we in the West were alienated from our experience by the separation of mind and matter introduced by Descartes, we are even more alienated if all we can do is circle round various forms of relativist construction: any sense of a world in which we are grounded disappears. We are particularly concerned about this in these times of approaching ecological crisis when appreciating our embeddedness in the more-than-human-world (Abram, 1996) is so critical. Our concern is that the deconstructive postmodern sentiment will exacerbate, rather than heal, the modern experience of rootlessness and meaninglessness. While acknowledging the postmodern suspicions of metanarrative, we believe that all inquiry, and all of life, is necessarily framed by a worldview—and indeed that the postmodern/poststructuralist perspective is just such a worldview, based on the metaphor of the world as text. We need to find a way of acknowledging the lessons of the linguistic turn while not ignoring the deeper structures of reality, and propose a more creative and constructive worldview can be based on the metaphor of participation

Toward a participatory worldview

The emergent worldview has been described as systemic, holistic, relational, feminine, experiential, but its defining characteristic is that it is participatory: our world does not consist of separate things but of relationships which we co-author. We participate in our world, so that the 'reality' we experience is a co-creation that involves the primal givenness of the cosmos and human feeling and construing. The participative metaphor is particularly apt for action research,

because as we participate in creating our world we are already embodied and breathing beings who are necessarily acting—and this draws us to consider how to judge the quality of our acting.

A participatory worldview places human persons and communities as part of their world—both human and more-than-human—embodied in their world, co-creating their world. A participatory perspective asks us to be both situated and reflexive, to be explicit about the perspective from which knowledge is created, to see inquiry as a process of coming to know, serving the democratic, practical ethos of action research.

A participatory view competes with both the positivism of modern times and with the deconstructive postmodern alternative—and we would hold it to be a more adequate and creative paradigm for our times. However, we can also say that it also draws on and integrates both paradigms: it follows positivism in arguing that there is a ‘real’ reality, a primeval givenness of being (of which we partake); and draws on the constructionist perspective in acknowledging that as soon as we attempt to articulate this we enter a world of human language and cultural expression. Any account of the given cosmos in the spoken or written word is culturally framed, yet if we approach our inquiry with appropriate critical skills and discipline, our account may provide some perspective on what is universal, and on the knowledge creating process which frames this account.

This places scientific work—our extraordinary knowledge about the world we live in which that is derived from natural sciences—in a new light. Of course, some in the natural sciences draw on participative perspectives to inform their work (Clarke, 1996; Goodwin, 1999; Ho, 1998). But apart from this, a participative worldview enables us where appropriate to draw on techniques and knowledge of positivist science and to frame these within a human context. A participative medical practitioner doesn’t throw away medical training, but draws on it to work with patients in diagnosis and healing. An ecologist can draw on his or her scientific perspective to provide villagers with useful information about local forests and work with them toward better management. Scientists can, and have, claimed privileged knowledge; they can also see themselves as participants, with a particular set of skills and information, within a wider knowledge democracy.

While worldviews can be sketched out in simple cognitive terms, their nature is far richer: As Mumford put it

Every transformation of [the human species]... has rested on a new metaphysical and ideological base; or rather, upon deeper stirrings and intuitions whose rationalised expression takes the form of a new picture of the cosmos and the nature of [humanity] (Mumford, 1957:179).

In seeking to articulate some of these ‘deeper stirrings’ we will sketch below the characteristics of a participatory worldview. We start with our intimations of the participatory nature of the given cosmos whose form is relational and ecological. Since we are a part of the whole we are already engaged in practical being and acting (Skolimowski, 1994). Thus our science is necessarily an action science, which draws on a extended epistemologies, and continually inquires into the meaning and purpose of our practice. These dimensions of a participatory worldview (shown in Figure 2) echo the characteristics of action research we identified earlier (Figure 1). They also provide a basis for judgements of quality or validity in action research, which we touch on below and explore in more detail in our concluding chapter.

--Figure 2 about here--

On the nature of the given cosmos

At the centre of a participatory worldview is a participatory understanding of the underlying nature of the cosmos we inhabit and which we co-create. We can only point toward this intuition

here, drawing on Laszlo's (1996:xx) evocative metaphor, that the cosmos is a 'whispering pond', a seamless whole in which the parts are constantly in touch with each other:

Wherever scientists look and whatever they look at, they see nature acting and evolving not as a collection of independent parts, but as an integrated, interacting, self-consistent, and self-creative whole (Laszlo, in preparation)

It is now plausible to consider that the quantum metaphor, which points to space- and time-transcending interconnections between phenomena, is not confined to the sub-atomic world, but is applicable to the structure of the living world (Ho, 1998), to consciousness, and to the evolution of the cosmos itself (Laszlo, in preparation). This suggests we are living as part of a cosmos which is far more interconnected than we have hitherto suspected, a cosmos of nonlocal correlations and coherence, organized in ways that cannot be explained either by classical or systemic models. Laszlo argues that

evidence for space- and time-transcending connections is accumulating: the phenomena, investigated by physicists, biologists, consciousness researchers and cosmologists turn out to be non-locally correlated and coherently coevolving wholes. (Laszlo, in preparation)

Further, panexperientialist philosophers, developing the process philosophy of Whitehead, suggest that matter and consciousness are not ontologically separate, but are 'coeternal, mutually complementary realities'(de Quincey, 1999:23; see also Griffin, 1998) and that 'Matter and psyche always go together—all the way down' (de Quincey, 1999:23, emphasis in original)

Mind and matter are not distinct substances. The Cartesian error was to identify both matter and consciousness as kinds of substances and not to recognize them as phases in a process; that mind is the dynamic form inherent in the matter itself. Mind is the self-becoming, the self-organization—the self-creation—of matter. Without this, matter could never produce mind. Consciousness and matter, mind and body, subject and object, process and substance... always go together. They are a unity, a nondual duality. (de Quincey, 1999:24, in original)

As Griffin points out most thoroughly, this panexperientialist ontology radically confronts our assumptions about the nature of our world which for modernists and postmodernists alike assumes a separation of mind and matter. While panexperientialists are emphatically not arguing that rocks are conscious in the same way that are humans (Griffin, 1998:95), they are arguing 'a form of reality of which mind is a natural part' (1998:79) Similarly the quantum phenomena suggest a 'communicating universe in which all things are in instant and enduring communicative union—true communion—with each other' (Laszlo, in preparation).

These suggestions are 'the strangest thing in a strange world' as Laszlo points out. They do not lead to an analytic paradigm anything like the classical Newtonian worldview, but an evolutionary, emergent and reflexive worldview in which the cosmos is continually self-ordering and self-creating. Within this perspective, human persons are centres of consciousness both independent and linked in a generative web of communion both with other humans and with the rest of creation (Heron, 1992). Our reality emerges through a co-creative dance of the human bodymind and the given cosmos: while this latter is fundamentally present we can only know it through our constructs and sensitivities. Human persons do not stand separate from the cosmos, we evolved with it and are an expression of its intelligent and creative force. As Thomas Berry puts it,

the universe carries within it a psychic-spiritual as well as a physical-material dimension... the human activates the most profound dimension of the universe, its capacity to reflect on and celebrate itself in conscious self-awareness (Berry, 1988:132).

We live in a participatory world. There is a primordial givenness of being in which the human bodymind actively participates in a co-creative dance which gives rise to the reality we experience. Subject and object are interdependent. Thus participation is fundamental to the nature of our being, an ontological given (Heron, 1996a; Heron & Reason, 1997). As we are a part of the whole we are necessarily actors within it, which leads us to consider the fundamental importance of the practical.

On practical being and acting

Given this fundamental participation in the whole we human persons are already engaged and thus are already acting (Skolimowski, 1994). Thus for the action researcher practical knowing is the purpose, the consummation, the fulfilment, of the knowledge quest [Heron, 1996 #24:34]. All ways of knowing serve to support our skillful being-in-the-world from moment-to-moment-to-moment, our ability to act intelligently in the pursuit of worthwhile purposes. Human inquiry is necessarily practical and a participatory form of inquiry is an action science.

In arguing this we are following the Scottish philosopher John Macmurray (1957), who 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).

However, as Macmurray also pointed out, the concept of ‘action’ includes the development of theory which may illuminate our action, guide it and provide it with meaning:

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).

Levin and Greenwood (Chapter 9; Greenwood & Levin, 1998) follow Dewey, Rorty and other pragmatist philosophers to make a very similar point.

The concern for the ‘full concrete activity of the self in which all our capacities are employed’ invites us to articulate further the nature of knowing. It also invites us to consider our relationship with others with whom we act, and directs our attention to questions of what is worthwhile, what values and purpose are worthy of pursuit. We explore these questions in the next sections.

On the nature of knowing

A participative worldview, with its notion of reality as subjective-objective, involves an extended epistemology: we draw on diverse forms of knowing as we encounter and act in our world (Lincoln, Chapter 11). As Eikeland points out (Chapter 13) this notion goes right back to Aristotle, while in modern times Polanyi (1962), described clearly his concept of tacit knowledge, a type of embodied know-how that is the foundation of all cognitive action. He rejected the notion of the objective observer in science or any other area of inquiry, expressing his belief in engaged practice that necessarily joins facts and values in a participatory mode of understanding.

Writing more recently, Shotter argues that in addition to Gilbert Ryle’s distinction between ‘knowing that’ and ‘knowing how’ there is a ‘kind of knowledge one has only from within a social situation, a group, or an institution, and thus takes into account... the others in the social situation’ (Shotter, 1993:7, emphasis in original). It is significant that Shotter usually uses the verbal form ‘knowing of the third kind’, to describe this, rather than the noun knowledge, emphasizing that such knowing is not a thing, to be discovered or created and stored up in journals, but rather arises in the process of living, in the voices of ordinary people in conversation.

Park (Chapter 7), writing in the context of participatory research and drawing on the emancipatory traditions of Freire (Freire, 1970), Habermas (1972; see also Kemmis, Chapter 8) and others, argues that we must take an ‘epistemological turn’ and ‘think of community ties and critical awareness, as well as objective understanding of reality, as forms of knowledge’ (p. **). Thus he explores, relational and reflective, as well as representational forms of knowledge. Representational knowledge provides explanation through identifying the relationship between discreet variables, or understanding through interpretation of meaning. Relational knowledge is the foundation of community life and its development fosters community ties as well as helping create other forms of knowledge. Reflective knowledge has to do with normative states in social, economic and political realms, it concerns a vision of what ought to be, what is right and what is wrong, and arises, Park argues, through the process of consciousness raising, conscientization.

From a feminist perspective, Belenky, Clinchy, Goldberger, and Tarule wrote of ‘women’s ways of knowing’ (1986) which distinguished between connected and separated knowing: separated knowing adopting a more critical eye and playing a ‘doubting game’, while connected knowing starts with an empathic, receptive eye, entering the spirit of what is offered and seeking to understand from within. Feminist scholars generally have emphasized relational aspects of both knowing (e.g. Bigwood, 1993) and of the practice of management (Fletcher, 1998; Marshall, 1995).

Torbert (Chapter 23; also 1991) emphasizes the importance of a quality of attention which moment to moment is able to interpenetrate four territories of attention: an intuitive knowing of purposes, an intellectual knowing of strategy, an embodied, sensuous knowing of one's behaviour, and an empirical knowing of the outside world.

Heron and Reason (Chapter 16; see also Heron, 1996a) argue that a knower participates in the known, articulating their world in at least four interdependent ways: experiential knowing, is through direct face-to-face encounter with a person, place or thing; it is knowing through empathy and resonance, that kind of in-depth knowing which is almost impossible to put into words; presentational knowing, grows out of experiential knowing, and provides the first form of expression through story, drawing, sculpture, movement, dance, drawing on aesthetic imagery; propositional knowing which draws on concepts and ideas, and practical knowing, which consummates the other forms of knowing in action in the world.

While all these descriptions of extended epistemologies differ in detail, they all go beyond orthodox empirical and rational Western views of knowing, and assert, in their different ways, a multiplicity of ways of knowing that start from a relationship between self and other, through participation and intuition. They assert the importance of sensitivity and attunement in the moment of relationship, and of knowing not just as an academic pursuit but as the everyday of acting in relationship and creating meaning in our lives.

On relational ecological form

A participatory worldview is a political statement as well as a theory of knowledge. Just as the classical Cartesian worldview emerged in part from the political situation of the time (Toulmin, 1990), and found its expression not only in science and technology, but also in our political structures and organizational forms, so a participatory worldview implies democratic, peer relationships as the political form of inquiry.

This political form of participation affirms peoples’ right and ability to have a say in decisions which affect them and which claim to generate knowledge about them. It asserts the importance of liberating the muted voices of those held down by class structures and neo-colonialism, by poverty, sexism, racism, and homophobia. Throughout this handbook contributors from all perspectives have argued strongly the connections between power and knowledge.

David Selener emphasizes that while a major goal of participatory research is to solve practical problems in a community, ‘Another goal is the creation of shifts in the balance of power in favor of poor and marginalized groups in society’ (Selener, 1997:12). And as Greenwood and Levin assert, action research contributes actively to processes of democratic social change (Greenwood & Levin, 1998:3).

The political imperative is not just a matter of researchers being considerate about their subjects or acting ethically: it is about the democratic foundations of inquiry and of society. In 1791 Tom Paine argued that it is specious to think about government in terms of a relationship between those who govern and those governed; what is important is the legitimacy of the existence of government itself. Since the people existed before the government:

The fact therefore must be, that the individuals themselves, each in his own personal and sovereign right, entered into a compact with each other to produce a government: and this is the only mode in which governments have a right to arise, and the only principle on which they have a right to exist. (Paine, 1791:123, emphasis in original)

We can draw direct parallels between the legitimacy of government and the legitimacy of research. To paraphrase Paine it is for people themselves, in their own right, to enter into agreements with each other to discover and create knowledge, and this is the only principle on which research and inquiry has a right to exist.

So while we may be concerned to produce knowledge and action directly useful to a group of people, participation can also empower them at a second and deeper level to see that they are capable of constructing and using their own knowledge. It enables them to see through ways in which powerful groups in society tend to monopolize the production and use of knowledge for their own benefit. Thus participation is also a process of consciousness raising or conscientization and is thus an educative imperative. Action research is at its best a process that explicitly aims to educate those involved to develop their capacity for inquiry both individually and collectively.

This pedagogy of the oppressed, to borrow Freire’s term, must be matched by a ‘pedagogy of the privileged’: inquiry processes which engage those in positions of power, and those who are simply members of privileged groups—based on gender, class, profession, or nation. We need to learn more about how to exercise power and position legitimately in the service of participative relationships, to find ways in which politicians, professionals, managers can exercise power in transforming ways (Torbert, 1991), power with others rather than power over (See Gaventa and Cornwall, Chapter 6; Park, Chapter 7). We also need to find ways of liberating ourselves from the constraints of the Western worldview.

Relationships do not only mean those with other humans, but also with the more than human world. As we are increasingly aware that the damage that is being done to the planet’s ecosystems and the resultant sustainability crisis (Brown, 1999) has some of its origins in our failure to understand the systemic nature of the planet’s ecosystems, and humanity’s participation in natural processes, we can also see that that participation is an ecological imperative (see Hall, Chapter 15). The links between ecological devastation and our worldview are well made by deep ecologists and ecofeminists (see, for example Devall & Sessions, 1985; Diamond & Orenstein, 1990; Naess, 1987; Naess, 1989; Plant, 1989; Roszak, 1995). As Bateson wrote long ago

If you put God outside and set him vis-à-vis his creation and if you have the idea that you are created in his image, you will logically and naturally see yourself as outside and against the things around you. And as you arrogate all mind to yourself, you will see the world around you as mindless and therefore as not entitled to moral or ethical consideration. The environment will be yours to exploit...

If this is your estimate of your relation to nature and you have an advanced technology, your likelihood of survival will be that of a snowball in hell. You will die either of the toxic by-products of your own hate, or, simply, of over population and over-grazing. (Bateson, 1972b:462)

On purpose and meaning: spirit and beauty

As the quotes at the beginning of this chapter indicate, while action research practitioners suggest slightly different emphases in their work—‘quest for life,’ ‘make the world better,’ ‘loving,’ ‘freer’—there is broad agreement that the purpose of human inquiry is the flourishing of life, the life of human persons, of human communities, and increasingly of the more-than-human world of which we are a part. A participative worldview invites us to inquire into what we mean by flourishing, and into the meaning and purpose of our endeavours, and this, as we will argue, is a key dimension of quality in inquiry. As Berry asks us, what is the ‘great work’ of humanity in our time, and how are our individual human projects aligned with it (Berry, 1999).

Participative consciousness is part of a re-sacralization of the world, a re-enchantment of the world (Berman, 1981; Berry, 1988; Skolimowski, 1993). Sacred experience is based in reverence, in awe and love for creation, valuing it for its own sake, in its own right as a living presence. To deny participation not only offends against human justice, not only leads to errors in epistemology, not only strains the limits of the natural world, but is also troublesome for human souls and for the *anima mundi*. Given the condition of our times, a primary purpose of human inquiry is not so much to search for truth but to heal, and above all to heal the alienation, the split that characterises modern experience. For as R. D. Laing put it rather dramatically:

... the ordinary person is a shrivelled, desiccated fragment of what a person can be...

What we call normal is a product of repression, denial, splitting, projection, introjection and other forms of destructive action on experience... It is radically estranged from the structure of being (Laing, 1967:25-27).

As one of us wrote earlier:

To heal means to make whole: we can only understand our world as a whole if we are part of it; as soon as we attempt to stand outside, we divide and separate. In contrast, making whole necessarily implies participation: one characteristic of a participative worldview is that the individual person is restored to the circle of community and the human community to the context of the wider natural world. To make whole also means to make holy: another characteristic of a participatory worldview is that meaning and mystery are restored to human experience, so that the world is once again experienced as a sacred place (Reason, 1994:10)

We need to beware of inflating the notion of the spiritual to some remote end state that can be attained only after immense effort. For while the discipline of spiritual practice is important, as John Heron points out (personal communication 1997), ‘simple openness to everyday participative experience, feeling that subject and object are in an inseparable seamless field of imaging and resonance—a field with infinite horizons—is itself a spiritual experience’. Meister Eckhart described the spiritual path as ‘beautiful and pleasant and joyful and familiar’, and as Matthew Fox asks:

Why does he claim that his way is ‘familiar’? Is there a haunting sense in which the creation-centred way conjures up childhood and other periods of truth in our lives? Is it because what is beautiful and pleasant and joyful is necessarily familiar...? Is Eckhart’s way a familiar way because it is non-elitist?... Eckhart learned to trust his life and own life experiences... to be spiritual is to be awake and alive—the holiness of life itself absolutely fascinated Eckhart (Fox, 1983a:3-4)

Nor does attention to the spiritual mean that we lose concern for the political, for our outer work—actions in the world—are grounded in our inner work. As Heron points out (1996b), just as practical knowing derives its validity from its grounding experiential knowing, practical knowing also consummates our experiential knowing in worthwhile action. Eckhart tells us we cannot use the inner work as an excuse for abandoning the outer:

We ought to get over amusing ourselves with raptures
for the sake of a greater love
which is to administer to what people most need
whether spiritually
or socially
or physically. (Fox, 1983a:92)

But he also points out that

The outward work
will never be puny
if the inner work
is great.
And the outward work
can never be great or even good
if the inward one is puny and of little worth. (Fox, 1983a:99)

Fox (1983b) offers us a creation centred spirituality which begins in the ‘original blessing’ of awe and delight at the beauty and richness of creation. According to Fox, Adelaide of Bath taught that if we didn’t appreciate the beauty of the cosmos we deserve to be thrown out of it! And while in the Middle Ages Aquinas described God as the most beautiful thing in the universe, Descartes threw out beauty as a philosophical category for the modern age—and so we lost the notion of beauty in both philosophy and theology. Fox argues that we must reassert that the experience of wonder, awe and beauty is the basis of our experience of our participation in the cosmos—through beauty we can feel our sense of belonging.

So a participatory worldview locates the practical response to human problems in its necessary wider, spiritual context—as does Lincoln and Denzin’s ‘fifth moment’ in qualitative research (1994). If humanity can be seen as ‘nature rendered self-conscious’ as Bookchin suggests (1991:313), and humans are a part of the cosmos capable of self awareness and self-reflection (Swimme, 1984), then human inquiry is a way through which human presence can be celebrated; as Skolimowski puts it, we need to take the courage to imagine and reach for our fullest capabilities. Thus the practical inquiry of human persons is a spiritual expression, a celebration of the flowering of humanity and of the co-creating cosmos, and as part of a sacred science is an expression of the beauty and joy of active existence.

From participative worldview to quality in inquiry

Early in this introduction we identified five characteristics of action research from our understanding of the varieties of practice in the field (Figure 1). In the previous section we have shown how these can be seen as rooted in an emergent participatory worldview (Figure 2), which we can begin to sense but cannot fully articulate. This leads us to ask five kinds of questions about the validity and quality of action research practice (summarized in Figure 3), which we introduce briefly here and attend to in more depth in our concluding chapter.

--Figure 3 about here--

Our considerations of the nature of the given cosmos, which we described as radically interconnected and evolutionary, draws our attention to the living process that is action research. Action research is best seen as an emergent, evolutionary and educational process of engaging with self, persons and communities which needs to be sustained for a significant period of time. This leads us to ask questions about emergence and enduring consequence.

Our emphasis on the importance of practical outcomes draws our attention to pragmatic questions of practice and practicing. What are the outcomes of the research? Does it work? What are the processes of inquiry? Are they authentic/life enhancing?

Our reflections on ways of knowing encourages us to ask what dimensions of an extended epistemology are emphasized in the inquiry and whether this is appropriate? It encourages us to consider the validity claims of the different forms of knowing in themselves and the relationship between different ways of knowing. These are questions about plural ways of knowing.

The relationship dimension draws our attention to the quality of interaction that has been developed in the inquiry and the political forms that have been developed to sustain the inquiry. These are questions of relational practice. How have the values of democracy been actualized in practice? What is the relationship between initiators and participants? What are the implications for infrastructure and political structures?

Finally, our questions about meaning and purpose encourage us to ask whether the inquiry process has addressed questions about significance: what is worthwhile? what values have been actualized in the inquiry? And at a wider level these questions invite us to connect our work to a questions of spirituality, beauty—and whether we have created an inquiry process which is truly worthy of human aspiration.

References

- Abram, D. (1996). *The Spell of the Sensuous: perception and language in a more than human world*. New York: Pantheon.
- Bateson, G. (1972a). Form, Substance and Difference, *Steps to an Ecology of Mind* (pp. 423-440).
- Bateson, G. (1972b). *Steps to an Ecology of Mind*. San Francisco: Chandler.
- Belenky, M., Clinchy, B., Goldberger, N., & Tarule, J. (1986). *Women's Ways of Knowing: the development of self, voice, and mind*. New York: Basic Books.
- Bentz, V. M., & Shapiro, J. J. (1998). *Mindful Inquiry in Social Research*. Thousand Oaks: Sage.
- Berman, M. (1981). *The Reenchantment of the World*. Ithaca: Cornell University Press.
- Berry, T. (1988). *The Dream of the Earth*. San Francisco: Sierra Club.
- Berry, T. (1999). *The Great Work: our way into the future*. New York: Bell Tower.
- Bigwood, C. (1993). *Earth Muse - Feminism, Nature and Art*: Temple University Press.
- Bookchin, M. (1991). *The Ecology of Freedom: the emergence and dissolution of hierarchy (revised edition)*. Montreal and New York: Black Rose Books.
- Brown, L. (Ed.). (1999). *State of the World 1999: A Worldwatch Institute Report on Progress Towards a Sustainable Society*. London: Earthscan.
- Calás, M. B., & Smircich, L. (1999). Past Postmodernism? Reflections and Tentative Directions. *Academy of Management Review*, 24(4), 649-671.
- Carr, W., & Kemmis, S. (1986). *Becoming Critical: Education, Knowledge and Action Research*. Basingstoke: Falmer Press.

- Chambers, R. (1997). *Whose Reality Counts? Putting the First Last*. London: Intermediate Technology Publications.
- Clarke, C. J. S. (1996). *Reality Through the Looking Glass: science and awareness in the postmodern world*. Edinburgh: Floris Books.
- de Quincey, C. (1999). Radical Nature and the Paradox of Consciousness. *ReVision*, 21(4), 12-25.
- Denzin, N. K. (1997). *Interpretive Ethnography: ethnographic practices for the 21st Century*. Thousand Oaks: Sage.
- Derrida, J. (1981). *Dissemination*. Chicago: University of Chicago Press.
- Devall, B., & Sessions, G. (1985). *Deep Ecology: living as if nature mattered*. Salt Lake City: Gibbs M. Smith.
- Diamond, I., & Orenstein, G. L. (Eds.). (1990). *Reweaving the World: the emergence of ecofeminism*. San Francisco: Sierra Club.
- Esteva, G., & Prakash, M. S. (1998). *Grassroots Post-Modernism*. London and New York: Zed Books.
- Fletcher, J. K. (1998). Relational Practice: a feminist reconstruction of work. *Journal of Management Inquiry*, 7(2), 163-186.
- Fox, M. (1983a). *Meditations with Meister Eckhart*. Santa Fé: Bear and Co.
- Fox, M. (1983b). *Original Blessing: a primer in creation spirituality*. Santa Fe, NM: Bear & Company, Inc.
- Freire, P. (1970). *Pedagogy of the Oppressed*. New York: Herder & Herder.
- Gergen, K. J. (1994). *Realities and Relationships: soundings in social construction*. Boston: Harvard University Press.
- Gergen, K. J. (1999). *An Invitation to Social Construction*. Thousand Oaks: Sage.
- Goodwin, B. (1999). From Control to Participation via a science of Qualities. *Revision*.
- Greenwood, D. J., & Levin, M. (1998). *Introduction to Action Research: Social research for social change*. Thousand Oaks: Sage.
- Griffin, D. R. (1998). *Unsnarling the World-Knot: Consciousness, Freedom and the Mind-Body Problem*. Berkeley: University of California Press.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 105-117). Thousand Oaks, Ca: Sage.
- Habermas, J. (1972). *Knowledge and Human Interests; Theory and Practice; Communication and the Evolution of Society*. (Translated by J. J. Shapiro., Trans.). London: Heinemann.
- Hall, B., Gillette, A., & Tandon, R. (Eds.). (1982). *Creating Knowledge: A Monopoly? - Participatory Research in Development*. New Delhi: Society for Participatory Research in Asia.
- Harvey, D. (1990). *The Condition of Postmodernity*. Oxford: Blackwell.
- Heron, J. (1971). *Experience and Method: an inquiry into the concept of experiential research*: Human Potential Research Project, University of Surrey.
- 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(1), 41-56.
- Heron, J., & Reason, P. (1997). A Participatory Inquiry Paradigm. *Qualitative Inquiry*, 3(3), 274-294.
- Ho, M.-W. (1998). *The Rainbow and the Worm: the physics of organisms (2nd Edition)*. Singapore: World Scientific.
- Horton, M., & Freire, P. (Eds.). (1990). *We Make the Road by Walking: Conversation on Education and Social Change*. Philadelphia: Temple University Press.
- Kuhn, T. (1962). *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Laing, R. D. (1967). *The Politics of Experience*. New York: Ballantine Books.
- Laszlo, E. (1996). *The Whispering Pond*. Rockport, Mass: Element.
- Laszlo, E. (in preparation). Holos, the Fabulous World of the New Sciences: exploring the emerging vision of quantum, cosmos, life and consciousness. .
- Lather, P. (1991). *Getting Smart: Feminist research and pedagogy with/in the postmodern*. New York: Routledge.
- Lincoln, Y. S., & Denzin, N. K. (1994). The Fifth Moment. In Y. S. Lincoln & N. K. Denzin (Eds.), *Handbook of Qualitative Research* . Thousand Oaks: Sage.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills: Sage.
- Lincoln, Y. S., & Guba, E. G. (in press). Paradigmatic Controversies, Contradictions and Emerging Confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research, 2nd Edition* . Thousand Oaks, Ca: Sage.
- Lukes, S. (1974). *Power: a Radical View*. London: Macmillan.
- Lyotard, J.-F. (1979). *The Postmodern Condition: a report on knowledge* (G. Bennington, and B. Massumi,, Trans.). Manchester: Manchester University Press.
- Macmurray, J. (1957). *The Self as Agent*. London: Faber and Faber.
- Marshall, J. (1995). *Women Managers Moving On - Exploring Career and Life Choices*. London: International Thomson Publishing Europe.
- Mumford, L. (1957). *The Transformations of Man*. London: Allen and Unwin.
- Naess, A. (1987). Deep Ecology. *Resurgence*, 123, 13.
- Naess, A. (1989). *Ecology, Community and Lifestyle*. Cambridge: Cambridge University Press.
- Paine, T. (1791). *Rights of Man, Common Sense, and other political writings*. Oxford: Oxford University Press, 1995.
- Plant, J. (Ed.). (1989). *Healing the Wounds: the promise of eco-feminism*. London: Green print.
- Reason, P. (Ed.). (1994). *Participation in Human Inquiry*. London: Sage.
- Reason, P., & Goodwin, B. (1999). Toward a Science of Qualities in Organizations: lessons from complexity theory and postmodern biology. *Concepts and Transformations*, 4(3), 281-317.
- Roszak, T. (Ed.). (1995). *Ecopsychology: restoring the earth, healing the mind*. San Francisco: Sierra Club.

- Schein, E. H., & Bennis, W. (1965). *Personal and organizational change through group methods: The experiential approach*. New York: Wiley.
- Schwandt, T. A. (1994). Constructivist, Interpretivist Approaches to Human Inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 118-137). Thousand Oaks: Sage.
- Schwandt, T. A. (1996). Farewell to Criteriology. *Qualitative Inquiry*, 2(1), 58-72.
- Selener, D. (1997). *Participatory Action Research and Social Change*: Cornell Participatory Action Research Network, Cornell University.
- Shotter, J. (1993). *Cultural Politics of Everyday Life: social construction and knowing of the third kind*. Buckingham: Open University Press.
- Skolimowski, H. (1993). *A Sacred Place to Dwell*: Element.
- Skolimowski, H. (1994). *The Participatory Mind*. London: Arkana.
- Swimme, B. (1984). *The Universe is a Green Dragon*. Santa Fe: Bear and Co.
- Torbert, W. R. (1991). *The Power of Balance: Transforming Self, Society, and Scientific Inquiry*. Newbury Park: Sage.
- Toulmin, S. (1990). *Cosmopolis: the hidden agenda of modernity*. New York: Free Press.
- Toulmin, S., & Gustavsen, B. (Eds.). (1996). *Beyond Theory: changing organizations through participation*. Amsterdam: John Benjamins.
- Van Maanen, J. (1995). Style as Theory. *Organization Science*, 6(1), 133-143.