

## Co-operative inquiry as a discipline of professional practice

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**Summary** *The article puts forward the thesis that the purpose of inquiry is human flourishing, and that this purpose is best met if inquiry is experiential, participatory and action-oriented. A participatory worldview is articulated to support this argument, which is illustrated by a thought experiment suggesting a participatory approach to epilepsy.*

**Key words:** *Co-operative inquiry; paradigms; participation; worldviews.*

### **Inquiry as practice**

I would like to start from the proposition that the purpose of human inquiry is the enhancement of human flourishing—the flourishing of persons as self-directing and sense-making agents located in democratic communities and organisations. For human beings are centres of awareness and action in the cosmos, they are both autonomous *and* inextricably linked with other humans and the rest of creation. The tragedy of life in the late twentieth century is that both human agency and self-direction *and* human community are so poorly developed. So when I write of human inquiry I don't intend it in the abstract sense of 'contributing to the fund of knowledge'. My purpose is to contribute to the revision of how we understand and practice research, moving it away from being the primary business of the academy and re-instating it as a central aspect of a well-lived life within a self-reflective community.

I want to establish inquiry as the practice of persons situated in communities of inquiry, individuals within learning communities. Inquiry thus becomes essentially a collaborative process whose purpose is practical: to contribute to the flourishing of individual persons, the flourishing of human community, and the flourishing of the biosphere of which we are a part. In this vision, inquiry becomes more than the professional activity of academics, and becomes a central characteristic of a well-lived life.

My vision is of human inquiry as a kind of disciplined practice, in the same way as meditation or martial arts can be a practice. A discipline is a method or a training, a set of rules, exercises or procedures which educate a person toward particular ways of being and doing. As I engage with a discipline I freely consent to abide by its practice rules as a process of inquiry into both the discipline and its teachings. In doing this I commit myself to a process of liberation.

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A discipline is a practice that develops mind, body and spirit: it draws attention to intuitive or spiritual questions of purpose and meaning; to intellectual questions of understanding; and to practice questions of behaviour; and it places these in the context of the practitioner's physical and social environment. Further, a discipline is necessarily self-transcending: while the initiate may productively 'follow the rules', the mature practitioner uses rules in order to develop a quality of attention and behaviour which, while born out of and nurtured by the practice and its rules, moves beyond them. (Reason, 1994, p. 40).

A fine example of the discipline of inquiry contributing to personal and professional development and to cultural renewal can be seen in Gloria Bravette's PhD thesis *Toward bicultural competence: researching for personal and professional transformation* (1997).

This PhD thesis provides an account of one woman's personal inquiry into her 'life-world' enabling her to move from a state of naiveté and false consciousness to engagement in the processes of 'becoming' and critical consciousness. The key theme and desired outcome of the research underpinning the accounts is that of 'bicultural competence': a response to the lived experience of being a 'Black British' professional woman of African Caribbean descent 'forced' to become mono-cultural to succeed in the professional context. The specific aims of the research were:

- (a) to engage with the lived experience of being black in British society in order to identify the fundamental and underlying issues pertaining to that experience so that appropriate, authentic and informed choices and strategies were identified for living in a more life-enhancing way.
- (b) to be able to track the individual process of transformation from false to critical consciousness especially as it pertains to black British experience enabling those engaged in the inquiry process to become 'healed helpers' personally and professionally.
- (c) to make an insider contribution to the limited body of knowledge on the 'lived experiences' of the black British community ... (Bravette, 1997, p. iii).

Bravette engages with her inquiry experientially, in particular confronting 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, p. 46).

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 titled 'Writing as inquiry—facing up to the bonds that tie'. She develops a presentational form which both confronts and draws the reader toward participative, empathic response to her experience.

Bravette integrates propositional knowing in her work, exploring extensively the literature on race and culture, on professional practice in education and action inquiry methodology. This propositional knowing is intimately bound up with her experience, and leads to her

experiments in practical knowing. She provides evidence of her extended exploration in which she develops and begins to put into practice a 'vision' of a liberating pedagogy for her educational practice as a higher education 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 boys, and she provides accounts of her work to help them develop bicultural competence as they face the difficult experience of being authentically black in (white) British schools.

Finally I am beginning to be released. Finally I can begin to feel the chains falling away as I acknowledge my right to anger; and my fear; and learn to use these powerful forces rather than allowing them to incapacitate me, constructively for the rehumanisation of myself, my family, and my world. (Bravette, 1997, p. 258)

I have provided a description of Bravette's work because it provides an illustrative grounding for the abstract argument which follows, emphasising that the purpose of these abstractions is to build a form of inquiry which grows from experience toward effective action, indeed transformation, of our worlds.

### **Worldviews in the history of the West**

Inquiry in the sense I am using it here rests on a participative view of the world, a world not of separate things but of relationships which we co-author. The world we experience as 'reality' is subjective-objective, a co-creation that involves the primal givenness of the cosmos and human praxis. On this view, participation is an epistemological issue, a way of knowing in which knower and known are distinct but not separate, in an unfolding unitive field of being.

Participation is also a political issue (Bachrach & Botwinick, 1992; Bookchin, 1991). It honours the basic right of people to have a say in forms of decision-making. Following Heron (1989; 1992), I argue that institutions need to enhance human association by an appropriate balance of the principles of hierarchy, collaboration and autonomy: deciding for others, with others, and for oneself. Authentic hierarchy provides appropriate direction by those with greater vision, skill and experience—and is always concerned with transforming relationships so that those in relatively subordinate positions move toward greater skills in collaborative and autonomous action (Torbert, 1991). Collaboration roots the individual within a community of peers, offering basic support and the creative and corrective feedback of other views and possibilities (Randall & Southgate, 1980). Autonomy expresses the self-creating and self-transfiguring potential of the person (Heron, 1992). The shadow face of authority is authoritarianism; that of collaboration peer pressure and conformity; that of autonomy, narcissism, wilfulness and isolation. The challenge is to design institutions which manifest valid forms of these principles; and to find ways in which they can be maintained in self-correcting and creative tension (Heron, 1989; 1993).

The participatory worldview has emerged with increasing clarity through work with co-operative inquiry and other participative forms of action research over the past 20 years and more. The practice of co-operative inquiry *demands* that we look radically at our ontological and epistemological principles, and at the whole purpose of inquiry. Before we can do this, we need to make a brief diversion to reflect on worldview in the history of western thinking.

Many writers and commentators are suggesting that the current 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, the argument goes, our civilization will decline and decay. Gregory Bateson, 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. So it seems to me that 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 organises 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.

Henryk Skolimowski (1994) sketches out what he describes as the four great cycles of Western mind, each of which provided us with experience of a different world. If we go back to ancient Greece the experience of people was defined by a worldview we can call Mythos: people saw in the stories of their lives the visible presence of the gods, intervening from Mount Olympus. Around 600 BCE there was a radical transformation as classical Greek Logos emerged: the search for the coherent and harmonious order of the universe. The fusion of Greek Logos with Roman power provided the hegemony of the Roman Empire. However, it seems that no worldview can persist, the seeds of decay set in, leading to the Dark Ages. Out of this came Theos, the medieval worldview in which all thought and action was inspired by and dedicated to the glory of a transcendent divinity, which emphasised the transient nature of physical reality and earthly existence. Theos led to the glories of Chartres, but disintegrated with the rise of a mercantile middle class and the increasingly corrupt power of the Church. Skolimowski argues that the Renaissance which followed the disintegration of Theos was an exuberant outburst and period of liberation that did not lead to a complete and lasting new worldview, and we had to wait for Bacon, Galileo, Descartes and Newton to define the new and powerful worldview that is Mechanos.

Mechanos has been the worldview of modern times: it is based on the frighteningly simple yet powerful metaphor of the clockwork universe. 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. So the objective world spawns the objective mind, which becomes detached, analytical and thus in the end uncaring and cold. Human progress is dependent on the processes of science, the purpose of which is the pursuit of knowledge for its own sake.

In the late twentieth century Mechanos is no longer a guide to wise action. The ecological, political, social and personal crises we confront at this time need no rehearsing here. Fundamental to all these crises is the way we think and how the way we think separates us from our experience, from each other, and from the rhythms and patterns of the natural world. For example, since James Lovelock put forward the Gaia hypothesis in *Gaia a new look at life on earth* (1979) it has not been possible to see the world as an assembly of separate



parts, we have been pushed to see the planet as a living whole, a complex system of separate but inter-related entities—of which we are a part.

### Paradigms in the later 1990s

Worldviews may be viewed as sets of basic beliefs about the nature of reality and how it may be known; these beliefs are thrown into relief by three fundamental and inter-related questions. There is the *ontological* question, 'What is the form and nature of reality and, therefore, what is there that can be known about it?'; the *epistemological* question, 'What is the relationship between the knower or would-be knower and what can be known?'; and the *methodological* question, 'How can the inquiring person go about finding out whatever she or he believes can be known about?' In addition, there is the important *axiological* question which asks 'What is intrinsically valuable in human life; in particular what sort of knowledge, if any, is intrinsically valuable?' Let us look at these three questions a little more closely (see Table 1).

Guba and Lincoln (1994, p. 108), in their very useful paper describing competing paradigms for research, describe positivism (which is a more formal term for Skolimowski's *Mechanos*) as:

... the 'received view' that has dominated the formal discourse in the physical and social sciences for some 400 years.

From the positivist perspective there is a real reality that can be known through a dualist/objectivist epistemology and experimental/manipulative methodologies.

A development of positivism is postpositivism, which:

... represents efforts in the past few decades to respond in a limited way (that is, while remaining within essentially the same set of basic beliefs) to the most problematic criticisms of positivism (Guba & Lincoln, 1994, pp. 108–109)

Postpositivism thus softens the edges of positivism by recognising that 'reality' can only be known imperfectly, by recognising that inquiry takes place within a community which sets standards, and by emphasising methodological multiplism and triangulation as a way of falsifying rather than verifying hypotheses. While a positivist, realist worldview still holds the loyalty of the medical research community, and tends to dominate the culture of the Western academy its assumptions have been almost universally discredited. As Lincoln and Guba (1985, p. 24) put it, 'positivism is passé' as the dominant paradigm of our times.

The main challenge to what Charlene Spretnak (1991) calls 'the failed certainties of objectivist modernism' have been various forms of relativism. Guba and Lincoln identify these as critical theory and constructivism, which are summarised in Table 1.

The broad argument here is that what we take for reality is nothing more than a construction of the human mind, supported by various cultural and political forms to create a reality which favours those who hold power. Reality is a human creation embedded in language. All is relative. The extreme relativist position is deconstructive postmodernism which is suspicious of all overarching theories and 'grand narratives', and asserts that there is no reality behind the 'text', the immediate expression of human understanding we have in front of us. While these perspectives help us immensely in seeing through the myth that is *Mechanos*, they don't help us move beyond the problems it has produced. If we 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.

One result of all this abstraction is a loss of the concrete, and specifically a dishonouring

Table 1. *A participatory inquiry paradigm*

Issue	Positivism	Postpositivism	Critical theory <i>et al.</i>	Constructivism	Participatory
Ontology	Naive realism—'real' reality but apprehendable	Critical realism—'real' reality but only imperfectly and probabilistically apprehendable	Historical realism—virtual reality shaped by social, political, cultural, economic, ethnic and gender values crystallized over time	Relativism—local and specific constructed realities	Participative reality—subjective-objective reality, co-created by mind and given cosmos
Epistemology	Dualist/objectivist: findings true	Modified dualist/objectivist; critical tradition/community; findings probably true	Transactional/subjectivist; value mediated findings	Transactional/subjectivist; created findings	Critical subjectivity in participatory transaction with cosmos; extended epistemology of experiential, propositional and practical knowings; co-created findings
Methodology	Experimental/manipulative; verification of hypotheses; chiefly quantitative methods	Modified experimental/manipulative; critical multiplicity; falsification of hypotheses; may include qualitative methods	Dialogic/dialectical	Hermeneutic/dialectical	Political participation in collaborative action inquiry; primacy of the practical; use of language grounded in shared experiential context
Axiology	Propositional knowing about the world is an end in itself, is intrinsically valuable	Propositional, transactional knowing is instrumentally valuable as a means to social emancipation, which is an end in itself, is intrinsically valuable			Practical knowing how to flourish with a balance of autonomy, co-operation and hierarchy in a culture is an end in itself, is intrinsically valuable

of the body and the separation of humanity from the natural world. Morris Berman drew attention to this in his book *Coming to our senses* (1989), arguing that in a quite literal sense we need to honour again the wisdom of the body, locating knowing in the experience of sensation instead of in intellectually elaborated paradigms of thought. The body is the lodge of spirit in this life, yet we have an immensely ambivalent relationship to it, often very concerned with the presentation of a 'face', powerful or beautiful, to the outside world, yet being quite out of touch with our physical inner processes. The body and the natural world are deeply connected: our body is that piece of wilderness that we carry around with us all the time, a living ecology which provides a home to many creatures and life events, which may be in balance or out of balance.

### **Toward a participatory worldview**

A basic problem of the objective mind of Mechanos is that, since it lays claim to one reality and one truth it cannot be self-reflexive and acknowledge the framing paradigm it has created. It cannot see that the ground on which it stands to frame its world is itself its own creation. It confuses the mysterious presence of the given cosmos with the mechanical worldview which it has itself generated and uses to shape the given. In consequence, its outlook tends to be immodest, intolerant and imperialist. A basic problem with the relativist mind, in its postmodern extreme, is that it dismisses any ground as valid simply because there is another ground or context beyond it. It confuses relative truth with nihilistic scepticism: it thinks that because no ground is final, no ground has any claim to truth. In consequence, it exacerbates the modern experience of rootlessness and meaninglessness. A participatory worldview seeks to recognise that there is a fundamental givenness about our world, which we encounter directly in our day-to-day engagement with being, our explicit knowing of this givenness is always interactive and co-creative. Further, human knowing is not simply intellectual, but is materially grounded in our experience of the world and expressed in the practice of our lives. Let us look at these issues in more detail.

#### *A subjective-objective ontology*

While positivism sees a world of separate objects independent of human construing, and the relativist worldviews see nothing but constructions of the human mind and culture, in the participative worldview there is a given cosmos, a primordial reality, in which human intelligence—body, mind and spirit—actively participates. Human intelligence and the given cosmos are engaged in a co-creative dance, so that what emerges as reality is the fruit of an interaction of the given cosmos and the way mind engages with it. We actively participate in the cosmos, and it is through this active participation that we meet what is Other:

Worlds and people are what we meet, but the meeting is shaped by our own terms of reference (Heron, 1996, p. 11).

The sceptic may ask how we can know we meet anything or anyone, if the meeting is always given our own shape. The answer is that when we open ourselves to meeting the given we are arrested by the presence of Other; or to put it another way, the Other declares itself to us so that we resonate with its presence in the world. More bluntly, the 'outside world', and the world of other knowing subjects, frequently and unexpectedly 'object' to our shaping actions.

Abram follows Merleau-Ponty in showing how perception itself is participatory so that:

... in so far as my hand knows hardness and softness, and my gaze knows the moon's light, it is as a certain way of linking up with the phenomena and commu-

nicating with it. Hardness and softness, roughness and smoothness, moonlight and sunlight, present themselves in our recollection not pre-eminently as sensory contents but as certain kinds of symbioses, certain ways the outside has of invading us and certain ways we have of meeting the invasion (Merleau-Ponty, 1964, p. 317).

As Abram (1996, p. 124) has it, this means that there is 'underneath our literate abstractions, a deeply participatory relation to things and to the earth, a felt reciprocity ...'

So our encounter with our world is transactional, interactive: to touch, see or hear something or someone does not tell us either about our self all on its own, nor about a being out there all on its own. It tells us about a being in a state of inter-relation and co-presence with us. Reality is thus subjective-objective:

It is subjective because it is only known through the form the mind gives it; and it is objective because the mind interpenetrates the given cosmos which it shapes (Heron, 1996, p. 11).

Or as Skolimowski puts it:

Things become what our consciousness makes of them through the active participation of our mind (1994, pp. 27–28).

The cosmos or the universe is a primordial ontological datum, while the 'world' is an epistemological construct, a form of our understanding (1994, p. 100).

Bateson makes the point that between the extremes of solipsism, in which 'I make it all up', and a purely external reality, in which I cease to exist, there is:

... a region where you are partly blown by the winds of reality and partly an artist creating a composite out of inner and outer events (in Brockman, 1977 p. 245).

*Epistemology: four ways of knowing and critical subjectivity*

A participative worldview, with its notion of reality as subjective-objective, 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.* This 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 creative shaping of a world through imaging it, perceptually and in other ways. Experiential knowing thus articulates reality through inner resonance with what there is, and is the essential grounding of other forms of knowing.

*Presentational knowing.* This emerges from and is grounded on experiential knowing. It clothes our encounter with the world in the metaphors 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 symbolise both our felt attunement with the world and the primary meaning which it holds for us.

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

*Practical knowing.* This 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 situation within which the action occurs. It fulfils the three prior forms of knowing, brings them to fruition in purposive deeds, and consummates them with its autonomous celebration of excellent accomplishment.

This extended epistemology differs radically from both positivist and relativist worldviews in emphasising the significance of experiential knowing in grounding us in our bodily presence in the world, and the primacy of practical knowing as the consummation of other forms of knowing.

Thus the emphasis on experiential knowing may seem a little strange to positivists and relativists alike. However, studies in phenomenology, work with co-operative inquiry, in mindfulness practices and ceremony, and attempts at aware everyday living all provide convincing evidence that experiential encounter with the presence of the world is the ground of all being and knowing. This encounter is prior to language and art—although it can be symbolized in language and art. The human encounter with the elemental properties of the world, or the I-Thou encounter with a living tree or person, *cannot* be confused with our symbolic constructs. This primal meeting grounds us in our bodily presence in the world, which we ignore at the cost of alienation from each other and from the more-than-human world (Abram, 1996; Bigwood, 1993; Spretnak, 1997). Experiential knowledge cannot be reduced to either propositional or presentational knowledge. This, we argue, is not an ungrounded metaphysical statement but is based on a radical phenomenology which can be tested through experiential inquiry; thus others, both sceptical and sympathetic, can inquire into the validity of this perspective.

And while knowledge is usually seen as taking the form of concepts expressed in language, I follow John Heron in arguing that practical knowledge is in an important sense primary (Heron, 1996; Reason, 1996). Our action *consummates* our understanding of our world: the point of human inquiry is to find ways to live our values and purposes in practice. Further, as Macmurray (1957) pointed out, while you can divorce thought from action, you cannot divorce action in the world from thought. What we learn about our world will be richer and deeper if this descriptive knowledge is incidental to a primary intention to develop practical skills to change the world. This is what Heron (1996, p. 114) has called the action paradox:

We learn more profoundly about our worlds when we are more interested in enhancing them with excellence of action than in learning about them.

Torbert (1991, p. 221) underlines the pre-eminence of practical knowing with his view that what we need is an action inquiry useful to the actor and the point of action, rather than a reflective science about action. His account of action inquiry is that a person is conscious in the midst of action, seeing and correcting, 'on-line', incongruities among the goal of the action and wider purposes within which it is nested, the strategic means, the immediate behaviour, and outcomes in the world. This, he holds, is an holistic and inclusive inquiry paradigm.



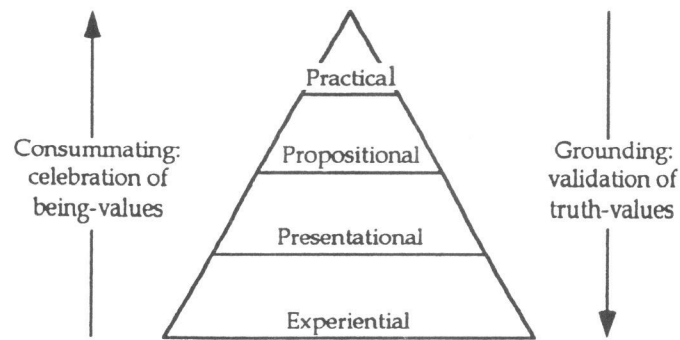


Figure 1. Relationship between the four aspects of the extended epistemology (from Heron, 1996).

It is equally important that action not only consummates the prior forms of knowing, but is also grounded in them. It is in this congruence of the four aspects of the extended epistemology that lie claims to validity. This relationship can be shown as in Figure 1.

Human persons have, it seems, enormous latitude in using these ways of knowing both as separate components and in association with, or dissociation from, each other. I would assert that a challenge for us all is to fully inhabit these ways of knowing, and thus the extended epistemology presents us as knowers with an interesting developmental challenge. I have called this challenge critical subjectivity. It involves an awareness of the four ways of knowing, of how they are currently interacting, and of ways of changing the relations between them so that they articulate a reality that is unclouded by a restrictive and ill-disciplined subjectivity. Critical subjectivity means that we attend both to the grounding relations between the forms of knowing, and also to their consummating relations.

Critical subjectivity is a state of consciousness (toward which we can move through the disciplines of inquiry) different from either the naive subjectivity of 'primary process' awareness and the attempted objectivity of egoic 'secondary process' awareness. It means that we do not suppress our primary subjective experience but accept that it is our experiential articulation of being in a world, and as such is the ground of all our knowing. At the same time, we accept that, naively exercised, it is open to all the distortions of those defensive processes by which people collude to limit their understanding. So we attend to it with a critical consciousness, seeking to bring it into aware relation with the other three ways of knowing, so that they clarify and refine and elevate it at the same time as being more adequately grounded in it.

In addition, since we accept that our knowing is from a perspective and that we are aware of that perspective, of its authentic value and of its restricting bias, we articulate this awareness in our communications. Critical subjectivity involves a self-reflexive attention to the ground on which one is standing. This is echoed in what Torbert (1987, p. 211) calls 'a reframing mind' which 'continually overcomes itself, divesting itself of its own presuppositions'. It is related to what Bateson (1972) describes as Learning III, in which the mind can choose its premises of understanding and action, can detach itself from all frameworks to peer into and reflect on their presuppositions. It is Kegan's (1994) trans-paradigmatic fourth order consciousness.

Critical subjectivity extends to critical intersubjectivity. Since our personal knowing is always set within a context of linguist-cultural and experiential shared meaning, having a critical consciousness about our knowing necessarily includes dialogue, feedback and exchange with others, and this leads us to the methodology of co-operative inquiry.

*Methodology: collaborative forms of action inquiry*

Inquiry methodology within a participative worldview needs to be one which draws on this extended epistemology in such a way that critical subjectivity is enhanced by critical intersubjectivity; hence a collaborative form of inquiry—of which there are many forms—in which all involved engage together in democratic dialogue as co-researchers and as co-subjects. In our articulation of this, which we call co-operative inquiry (Heron, 1996; Reason & Heron, 1995; 1996), people work together to define the questions they wish to explore and the methodology for that exploration (propositional knowing); together or separately they apply this methodology in the world of their practice (practical knowing); which leads to new forms of encounter with their world (experiential knowing); and they find ways to represent this experience in significant patterns (presentational knowing) which feeds into a revised propositional understanding of the originating questions. Thus co-researchers engage together in cycling several times through the four forms of knowing in order to enrich their congruence and deepen their complementarity.

Research cycling is itself a fundamental discipline which leads toward critical subjectivity and a primary way of enhancing the validity of inquirers' claims to articulate a subjective-objective reality. There is also a further range of procedures which develop this effect. These include: 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. For a full discussion of these, together with a set of radical skills of being and doing required during the action phases of the inquiry, see Heron (1996).

While co-operative inquiry has formed that basis of my own theorising and practice, I see it as closely related to other collaborative or participatory forms of inquiry such as action science (Argyris & Schon, 1974; Argyris *et al.*, 1985; Schön, 1983), action inquiry (Torbert, 1991), participatory action research (Fals-Borda & Rahman, 1991), critical action research (Carr & Kemmis, 1986), appreciate inquiry (Cooperrider & Srivastva, 1987) and some forms of feminist inquiry (Mies, 1993; Olesen, 1994). Fals-Borda reports that some 35 varieties of participative action inquiry have been identified worldwide. I have explored some of these relationships in Reason (1994b).

*Axiology: what is intrinsically worthwhile*

Guba and Lincoln (1994) define an inquiry paradigm through the three kinds of question: the ontological question about the nature of reality, the epistemological question about the nature of knowing, and the methodological question about how to know, what sorts of injunctions to follow. Heron and I argue (Heron & Reason, 1997) that there is a fourth fundamental question which is necessary fully to define an inquiry paradigm: the axiological question about what is intrinsically worthwhile, what it is about the human condition that is valuable as an end in itself? The first three questions—the ontological, the epistemological and the methodological—are all about matters to do with truth. What is really, i.e. truly, there? What is the nature of truthful knowledge of it? By what method can the truth be reached? The fourth and axiological question is about values of being, about what human states are to be valued simply by virtue of what they are. This is a necessary complement to balance and make whole the concern with truth exhibited by the first three questions. And the first value question to be raised is about the valuing of knowledge itself.

The basic question here is whether truth in propositional form is an end in itself, and as the only end in itself. This tends to be the position of the Western culture, defining

intellectual excellence was the highest end. If knowing propositional truths is the most worthwhile human purpose, then ultimately this legitimates all kinds of mayhem on the way to acquiring it. Hence the view of Bacon that nature must be tortured to wrest her secrets from her. Hence the modern propensity to educate the intellect in damaging dissociation from feeling, imagination and action. Hence the need for ethics committees to guard against the potential damage to human persons of experimental manipulation. Since universities are the home of inquiry paradigms and since they are largely Aristotelian institutions in their commitment to intellectual excellence, we need to know, as a defining feature of it, where each paradigm stands on this fundamental issue.

The participatory paradigm answers the axiological question in terms of human flourishing, conceived as an end in itself. One form of this flourishing is practical knowing: knowing how to choose and act—hierarchically, co-operatively, autonomously—to enhance personal and social fulfilment and that of the eco-networks of which we are a part. Such human fulfilment is consummated in the very process of choosing and acting. So in the participatory paradigm, practical knowing is a primary end in itself. While there will always be a case for important inquiry projects that are primarily informational and result in propositional knowing, transformational projects are primary (Heron, 1996).

The axiological question can also be put in terms of the ultimate purpose of human inquiry, since any ultimate purpose is an end-in-itself, a state of affairs that is intrinsically valuable. In the participative worldview the ontological account of reality as subjective-objective, as co-created with the given cosmos, leads over into the axiological question. For what purposes do we co-create reality? The answer to this is put quite simply by Fals-Borda: to change the world (Fals-Borda, 1996); or as Skolimowski (1994) points out, *participation* implies *engagement* which implies *responsibility*. The participative worldview necessarily leads to an action orientation; not an impulsive action which, as Bateson (1972) describes it, cuts through the circuits of that natural world, but a reflective action, a praxis, grounded in our being in the world.

Of course, experiential, presentational and propositional forms of knowing are also of value for their own sake: experiential knowing values our presence in the world and our encounter with other presences in the world; presentational knowing asserts aesthetic values; propositional knowing the elegance of the intellectual. However, all these are consummated in the practical: our inquiry is our action in the service of human flourishing. Our knowing of the world is consummated as our action in the world and participatory research is thus essentially transformative.

I have earlier suggested (1993; 1994a) that a significant purpose of inquiry in our times is to heal the split that characterises modern existence, and suggests that such healing practice will have a sacred dimension:

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, 1994a, p. 10).

This means expressing living knowledge in practical service to peoples' lives (Reason, 1996). This active participation in community, which makes holy, is also a political process, honouring the right of people to have a say in forms of decision-making, in every social

context, which affect their flourishing in any way. This includes, most importantly, the right to be involved in the knowledge creation processes that affect their lives.

As Guba and Lincoln (1994, p. 113) point out, critical theory seeks a liberationist purpose in 'the critique and transformation of social, political, economic, ethnic and gender structures that constrain and exploit humankind', and constructivist perspectives seek 'understanding and reconstruction', with advocacy and activism also key concepts of this view. However, there is a basic axiological difference. We would claim that within the participative worldview practical knowing is of central intrinsic value, whereas both constructivism and critical theory are concerned only with propositional knowing and its instrumental value in generating social emancipation.

Furthermore, the purpose of inquiry is not only the relief of oppression. As Skolimowski (1994) puts it, we need to find again ways in which human presence can be celebrated, we need to take the courage to imagine and reach for our fullest capabilities. It is argued that humanity is 'nature rendered self-conscious' (Bookchin, 1991, p. 313), that human beings are a part of the cosmos capable of self-awareness and self-reflection (Swimme, 1984). We hold that humans consummate such self-awareness as creative agents, whose practical inquiry is 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.

### **Toward the practice of participation**

I started this article with a brief example of inquiry as a discipline for personal and professional development and then turned to a more conceptual discussion of the participatory research paradigm. This needs further examples of inquiry projects to ground it in practice. These can be found in the books I and others have edited (Fals-Borda & Rahman, 1996; Reason, 1988, 1992; Reason & Rowan, 1981; Selener, 1997) and in PhD theses (Bravette, 1991; D. Quinlan, 1996; J. Quinlan, 1996; Treseder, 1996). In particular there are several accounts of collaborative inquiry in health practice (Heron & Reason, 1985; Reason, 1988, 1991; Reason & Heron, 1986; Reason *et al.*, 1992). What follows is a proposal for a hypothetical collaborative and experiential inquiry project which might both respond to practical health care needs and at the same time provide a developmental discipline for all those involved and contribute more generally to primary health care practice.

This example of collaborative research as professional practice can be seen as a 'thought experiment' or a proposal for a piece of research which would stretch thinking and practice thoroughly into a participative paradigm. It owes its origin to a conversation with Peter Fenwick, with whom I was discussing co-operative inquiry over breakfast at a conference. Somehow the conversation turned to the experience of people with epilepsy. Fenwick told me that, contrary to orthodox medical opinion, research suggests that some 40% of people with epilepsy can forecast and even control their seizures. He further suggested that children with epilepsy appear to use their condition strategically to gain attention and influence within their family. Now clearly this research does not fit within a medical paradigm (i.e. positivist or postpositivist) in which epilepsy is a physical condition separate from human intention from which people suffer. However, a participative worldview, within which the experience of epilepsy and how it 'presents' itself in different people will be the outcome of an interaction between a physical condition, the human mind and the social context, provides a different approach to inquiry and practice. Fenwick was critical of traditional research into epilepsy which appears to be concerned primarily with reducing the number of seizures patients have. As he said:

You don't operate on patients to reduce the number of their seizures, although that

would be useful if you did, you operate on them to enhance their quality of life. Nobody had gone back to these patients and said, 'was the operation good, was it useful?' ... [The] researchers took their target [and] applied it to people ... [But] as soon as you start this process of [co-operative] inquiry you get quite different goals and quite different aims (quoted in Richardson & Velmans, 1997, p. 232).

Before taking my 'thought experiment' any further I offer the following *caveats*. First, although I have discussed these issues with sympathetic clinicians, I do not claim any in-depth personal or professional knowledge of epilepsy: my purpose is to stimulate thought rather than provide an analysis accurate in all detail. Second, an examination of the literature, for example from the Epilepsy Information Service, shows that questions of the quality of life *are* regularly included in the management of epilepsy; and that education into self-help procedures (such as relaxation and autohypnosis using aromatherapy) are being introduced. Third, clearly the best of clinical practice in all fields of medicine involves implicit (and sometimes explicit) collaborative inquiry between clinician and patient (Canter, *forthcoming*); in the treatment of epilepsy, patients do participate in diagnosis, for example with Epilepsy Recording Information Charts. Further the Epilepsy Association provides a range of services for those affected by epilepsy. However, research into the treatment of epilepsy is conducted within a positivist framework, and I believe that a different framework based on collaborative inquiry would integrate research with practice and enhance work in three arenas: the development of systematic self-help; in the clinical practice of both doctors and specialist nurses; and at an institutional level.

We might therefore invite a group of people who suffer from epilepsy to join, as co-researchers, a co-operative inquiry group whose broad aim is to explore the personal management, day-to-day, of their condition. As with all co-operative inquiries, much care would be needed in the establishment of the group as a potential learning community with shared purposes (Reason, 1995), with providing appropriate facilitation (Heron, 1992). Experience shows that it is not possible to 'set up' such a group, but rather must work to establish the conditions from which collaborative inquiry can emerge (Reason & Goodwin, 1997). Once the group has been established the first stage of co-operative inquiry is to agree the questions which the group wishes to address and the formal and informal theories that guide their understanding.

As an example, let us assume that the epilepsy group chooses to explore as a first step the possibility of predicting when they are likely to have a seizure, and following that how to ameliorate its consequences. They might, therefore at this early stage, hear stories from each other which articulated their experience of predicting and managing seizures (*experiential* knowing expressed in *presentational* form) and from this develop a tentative model of self-directed management of epilepsy (*propositional* knowing). The next stage of the inquiry is to design ways of exploring this tentative understanding in practice (*practical* knowing), which might involve observing their experience in more detail, maybe in particular to rhythms of energy and tiredness, practising exercises that were suggested as helpful, paying attention to the effect of particular foods or experiences. They would also agree a means of recording their experience (e.g. in diaries, through self-monitoring questionnaires designed by the group).

The second phase of the co-operative inquiry involves taking these agreements into everyday life practising the methods and collecting information as agreed. This phase of an inquiry is important, since the participants need to be careful to notice the subtleties of experience, to hold lightly the propositional frame from which they started so that they are able to notice how practice does and does not conform to their original ideas. For this phase of practice can lead to a deep and potentially illuminating encounter with the issues they wish to explore, in which both their own preconceptions and medical models are to some extent



'bracketed off'. This stage is in some ways the touchstone of the inquiry method, since the co-researchers:

... become fully immersed in and engaged with their experience. They may develop a degree of openness to what is going on so free of preconceptions that they see it in a new way. They may deepen into the experience so that superficial understandings are elaborated and developed. Or they may be led away from the original ideas and proposals into new fields, unpredicted action and creative insights. It is also possible that they may get so involved in what they are doing that they lose the awareness that they are part of an inquiry group: there may be a practical crisis, they may become enthralled, they may simply forget (Reason & Heron, 1995, p. 127).

To complete the cycle, the co-operative inquiry group would meet again at an agreed time, bringing accounts and records of their experiences. They would explore these carefully and consider their original propositions and questions in the light of their experience. As a result they may modify, develop or reframe their models and questions; or reject them and pose new questions. This second meeting of the inquiry group will then lead to a second cycle of action which may focus on the same or on different aspects of the overall inquiry. The group may also choose to amend or develop its inquiry procedures—forms of action, ways of gathering data—in the light of experience.

Thus a series of inquiry cycles is begun, with the group moving through cycles of action and reflection—through propositional, practical, experiential and presentational ways of knowing:

In a full inquiry the cycle will be repeated several times. Ideas and discoveries tentatively reached in early phases can be checked and developed; investigation of one aspect of the inquiry can be related to exploration of other parts; new skills can be acquired and monitored; experiential competencies are realized; the group itself becomes more cohesive and self-critical, more skilled in its work. Ideally the inquiry is finished when the initial questions are fully answered in practice, when there is a new congruence between the four kinds of knowing. It is of course rare for a group to complete an inquiry so fully (Reason & Heron, 1995, p. 128).

In the process of research cycling, the inquiry group would be invited by its facilitators to pay attention to questions of validity in co-operative inquiry. The research cycling is itself a discipline which leads toward the kind of critical awareness required for this kind of research.

There are also a range of further procedures which develop this effect. These include: 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 (Heron & Reason, 1997, p. 284).

There is no space here for a full articulation of the theory and practice of co-operative inquiry in general or of validity issues in particular; for a full discussion, see Heron (1996).

One would expect that a successful co-operative inquiry into the management of epilepsy would result in the participants having a greater sense of power and autonomy in the management of their condition and a continuing network of support. Practices for the management of epilepsy would have been developed and to some extent tested which would be useful to the participants and could in addition form the basis of a self-management education programme under either medical auspices or through a body such as the Epilepsy Association. Further, models for understanding the experience of epilepsy, based on the

experience of those affected, would be articulated which could form a basis for further co-operative inquiries; such inquiries might choose to focus in more detail on different aspects of the management of epilepsy. One might imagine also that following a first successful inquiry other groups would be established and over time a culture of self-help inquiries might be established.

Such inquiries would be challenging but not difficult, given the resources. But it would be instructive to take this thought experiment forward, to extend it to inquire more generally into the management of epilepsy, and by implication to other chronic conditions. We might imagine that alongside the inquiry groups sketched out in the preceding paragraphs we establish a group of medical practitioners concerned to develop patient-oriented practices in the management of epilepsy. (I leave aside details of who might best be involved in such a group: clearly there are several possible configurations of participants.) The group could engage in its own cycles of inquiry, developing its own models for enlightened medical practice, exploring how medical practitioners establish collaborative relationships with their patients, novel and patient-centred forms of treatment, and so on. Several groups might be formed, maybe of different professional groups, or focusing on different aspects of clinical work, or exploring the requirements for an interdisciplinary form of practice. Such a process of inquiry could in itself be challenging to conventional medical practice, as was the first co-operative inquiry with medical practitioners into the theory and practice of holistic medicine (Heron & Reason, 1985).

But we might also establish a collaboration between self-help and clinical inquiry groups. This would need careful planning and facilitation, and there are several forms it might take. The most conservative arrangement would be for each group to conduct its own inquiry and meet toward the end to compare their experiences and conclusions. The most radical arrangement would be for the two groups to meet together from the beginning as one inquiry group. I suspect the most practicable arrangement would be for two groups to be established which, while conducting their own inquiries, would meet regularly to establish a mutually influential dialogue. The details of such an arrangement do not concern us here, but the reader can use her or his imagination to consider possible ways such dialogue might develop.

Of course, we might extend this kind of inquiry process even further. We might establish groups of parents and others who care for with those with epilepsy, children and young people with epilepsy, complementary practitioners working with epilepsy, medical researchers working on epilepsy, workers in epilepsy charities. One can imagine a federal arrangement of separate inquiry groups, each pursuing the agendas of their own constituents—which are of course in some sense separate—while meeting regularly in collaborative conferences, maybe using future search or open space conference design (Weisbord & Janoff, 1995; Owen, 1997), to compare learnings, debate priorities, set agendas for further co-operative inquiries and bio-medical research. In this way we could move towards a transformation of all those involved in the management of epilepsy into a community of inquiry, working in collaboration on the political, medical, personal and professional dimensions of their work.

### **In conclusion**

The participative worldview has political, epistemological, ecological and spiritual dimensions. Politically, it affirms the right of people to have a say in decisions which affect them, and in the production of knowledge which purports to be about them. It points toward democratic forms of professional practice. Epistemologically, it affirms that all knowledge is subjective-objective, is rooted in our embodied experiential encounter in our world, given form through the accounts we give, articulated in our theories and models and expressed in our skilled and aware action in our worlds. Ecologically, it roots human beings again as a part

of the natural world. Spiritually, it heals the wounds of alienation. 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. To celebrate participation places us back in relation with each other, with our knowing and with the wider environment of which we are a part.

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