# Extending Epistemology within a Co-operative Inquiry

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Co-operative inquiry is a form of second-person action research in which all participants work together in an inquiry group as co-researchers and as co-subjects – not research on people or about people, but research with people. As co-researchers work together through cycles of action and reflection they engage in an 'extended epistemology' of experiential, presentational, propositional and practical ways of knowing. Our purpose in this chapter is to consider this extended epistemology in some depth. After an introductory overview, we consider each way of knowing in turn, first with some general remarks, then with a look at its role in the reflection phase, the action phase and the outcomes of a co-operative inquiry, including some examples from inquiry practice. We conclude with comments on issues of quality in the cyclic use of the four ways.

Co-operative inquiry is a form of secondperson action research in which all participants work together in an inquiry group as co-researchers and as co-subjects. Everyone is engaged in the design and management of the inquiry; everyone gets into the experience and action that is being explored; everyone is involved in making sense and drawing conclusions; thus everyone involved can take initiative and exert influence on the process. This is not research on people or about people, but research with people

(Heron, 1971, 1996a; Heron and Reason, 2001/2006; Reason, 1988b, 1994, 1998, 1999, 2003; Reason and Torbert, 2001).

The inquiry group members work together through cycles of action and reflection, developing their understanding and practice by engaging in what we have called an 'extended epistemology' of experiential, presentational, propositional and practical ways of knowing. Our purpose in this chapter is to consider this extended epistemology in more depth than in previous conjoint writings.

After an introductory overview, we consider each way of knowing in turn, first with some general remarks, then with a look at its role in the reflection phase, the action phase and the outcomes of a co-operative inquiry, including some examples from inquiry practice. We conclude with comments on issues of quality in the cyclic use of the four ways.

A useful background to this chapter is our general introduction to co-operative inquiry (Heron and Reason, 2001). While the extended epistemology is foundational to co-operative inquiry, it is clearly not limited to it. It can be applied to everyday knowing and all forms of action research practice.

# OVERVIEW OF THE FOUR WAYS OF KNOWING

The radical epistemology discussed here is a theory of how we know which is *extended* beyond the ways of knowing of positivist oriented academia. These we see as based primarily on abstract propositional knowledge and a narrow empiricism. However, we note the parallel developments in what Denzin and Lincoln (2005b) refer to as the later 'moments' in the development of qualitative research practices (Reason, 2006).

The four ways of knowing can be briefly defined as follows, both in terms of process and outcome. Experiential knowing is by being present with, by direct face-to-face encounter with, person, place or thing. It is knowing through the immediacy of perceiving, through empathy and resonance. Its product is the quality of the relationship in which it participates, including the quality of being of those in the relationship. Presentational knowing emerges from the encounters of experiential knowing, by intuiting significant form and process in that which is met. Its product reveals this significance through the expressive imagery of movement, dance, sound, music, drawing, painting, sculpture, poetry, story and drama. Propositional knowing 'about' something is intellectual knowing of ideas and theories. Its product is the informative spoken or written statement. *Practical knowing* is knowing howto do something. Its product is a skill, knack or competence – interpersonal, manual, political, technical, transpersonal, and more – supported by a community of practice (Heron, 1981, 1992, 1996a).

Everyone naturally employs these four ways of knowing and tacitly interweaves them in all sorts of ways in everyday life. In co-operative inquiry they become intentional, and we say that knowing will be more valid if the four ways are congruent with each other: if our knowing is grounded in our experience, expressed through our images and stories, understood through theories which make sense to us, and expressed in worthwhile action in our lives. We also think of the intentional use of the ways in terms of a virtuous circle: skilled action leads into enriched encounter, thence into wider imaginal portrayal of the pattern of events, thence into more comprehensive conceptual models, thence into more developed practice, and so on.

#### EXPERIENTIAL KNOWING

We start from the position that all knowing is based in the *experiential presence* of persons in their world. Any form of inquiry that fails to honour experiential presence – through premature abstraction, conceptualization and measurement, or through a political bias which values the experience only of socially dominant or like-minded groups – ignores the fundamental grounding of all knowing.

Thus we can describe experiential knowing, at its simplest, as my direct acquaintance with that which I meet in my lifeworld: the experience of my presence in relation with the presence of other persons, living beings, places, or things. This kind of knowing is essentially tacit and pre-verbal. It is also profoundly 'real' – sound, solid and vibrant at the moment of experience – yet often elusive to express both to ourselves and to others. Geoff Mead describes the experiential grounding of his own inquiry:

As an integral part of my being in the world, my *living inquiry* is firmly anchored in the bedrock of my experience. ... I have actively sought new experiences and pushed my boundaries considerably in doing so, whether it be ritual menswork, separation and divorce, storytelling performances, or creating and delivering large-scale educational programmes for the police and other public services. ... Without such experiential grounding, I believe that action research remains as speculative and 'theoretical' as its reductionist cousins. (Mead, 2001: 66)

Our warrant for this assertion of the experiential as the ground of knowing is itself fundamentally experiential - although also rooted in a participatory worldview, as we explore below. Our work with co-operative inquiry, in mindfulness practices, ceremony and charismatic embodiment (Heron and Lahood, Chapter 29) and our attempts at aware everyday living all convince us that experiential encounter with the presence of others and of the world is the ground of being and knowing. This encounter is prior to language and art - although it can be symbolized in language and art. Our meeting with the elemental properties of the living world, the I-Thou encounter with a person (or other being), cannot be confused with our symbolic constructs: If you find yourself doubting this, try the simple exercise of opening yourself to the presence of another and compare that with thinking about her or him.

Experiential knowing is not a positivist grasping of other things in the world, for we say that the very process of perceiving is a meeting, a transaction, with what there is. When I hold your hand, my experience includes both subjectively shaping you and objectively meeting you. To encounter being or a being is both to image it in my way and to feel its presence, to know that it is there. To experience anything is to participate in it, and to participate is both to mould and to encounter, hence experiential reality is always subjective-objective, relative both to the knower and to what is known. Such encounter has greater immediacy and less mediation than our propositional knowing.

Experiential knowing is thus a ground for the symbolic frameworks of conceptual, propositional knowing, a necessary ground but not an infallible one, because of the vulnerability of human sensibilities. The validity of the encounter can be described as 'declarative'. Worlds and persons are what we meet, and the reality of the relation of meeting, its qualitative impact, declares the tangible sense of the realness of the presence of each to each, and of each to herself or himself, and all of this in a shared field. Two people or a group in a meeting can open to and feel the quality of this shared field. We can only describe it metaphorically, but we can sense its qualitative shifts as the dynamic of the meeting unfolds. This quality of the field, whether harmonious or tense or joyful or blighted, is a living key to appropriate understanding and action in the situation, and a vital component of our experience of interpersonal reality.

#### Experiential Knowing and a Participatory Worldview

Experiential knowledge is close to what William James called 'knowledge of acquaintance', and he made the classic distinction between this and 'knowledge-about'. 'All the elementary natures of the world', he says, must be known by acquaintance or not known at all; and it is 'through feelings that we become acquainted with things' (James, 1890: 221).

For Whitehead, perceptual knowledge by acquaintance is rooted in 'prehension': a direct participative, emotional rapport with the environing field of events, rooted in the 'withness of the body' which is continuous with the rest of the natural world. Leslie Paul, following Whitehead, talks of the ineffable bed of sentience, a primary cosmic sensitivity, which gives an understanding of the interrelated web of being in which the organism is suspended (Paul, 1961).

The notion of basic, unitive engagement with the world is also important in the phenomenology of Merleau-Ponty. He argues that all language and discursive knowledge presupposes the pre-objective world of perception, consciousness-world union, which is anterior to every distinction including that of consciousness and nature. It is an unformulated consciousness of the totality which is body-and-world, the body being co-extensive with the entire field of possible perceptions, i.e. the world (Merleau-Ponty, 1962).

Our own view builds on this tradition. We hold that the very foundation of human perceptual sensibility is the capacity for feeling, which we define as a participatory relation with being and beings, integrating the distinctness of knower and known in a relational whole. Experiential knowing is feeling engaged with what there is, participating, through the perceptual process, in the shared presence of mutual encounter. We see this capacity for feeling as the quintessential nature of the life, the living energy, that is within us – the life that is the immanent pole of our embodied spirit (Heron, 1992, 1998).

Our notion of experiential knowing thus points toward a participatory view of the world. Our inherited 'Cartesian' worldview tells us the world is made of separate things: the objects of nature are composed of inert matter, operating according to causal laws. But as Thomas Berry puts it, the living world is not a collection of objects: it is a community of subjects of which the human community is part (Berry, 1999; Reason, 2001). Reality is both One and Many: the beings of the world are differentiated centres of consciousness within a unified cosmic presence (Heron, 1992, 1996a, 1998). Freya Matthews and other panpsychic philosophers hold that our primary relationship with our world is erotic: our knowing must be grounded in loving, not manipulation (Mathews, 2003; Skrbina, 2005). This places humans in the web of life as embodied participants, 'living as part of the whole' (Reason, 2005). Buddhist myth offers the image of Indra's net where all things both reflect and are reflected in all. Participation is our nature: we do not stand separate from the cosmos, we evolved with it, participate in it and are part of its creative force. (For further explorations of a participatory worldview see

Abram, 1996; Eisler and Loye, 1990; Ferrer, 2002; Goodwin, 1999; Mathews, 2003; Skolimowski, 1994; Skrbina, 2005; Tarnas, 1991, 2000, 2006.)

# Experiential Knowing in the Reflection Phases of Inquiry

One of the implications of this view for the practice of co-operative inquiry is that the co-inquirers are present, open to encounter with each other. In a successful inquiry group co-inquirers will develop a sense of preconceptual communion or resonance in their shared life-world, as a ground for subsequent reflection together. Of course, our participative worldview suggests that at some level this communion is going on tacitly and unintentionally as the very condition of being in a world. Co-inquirers don't have to generate it, they have only to open to it, honour it and enhance it intentionally and awarely. A variety of rituals and attunement practices can empower this natural process of mutual resonance (Heron, 1998, 1999; Heron and Lahood, Chapter 29).

Inquiry groups will also need to deal along the way quite explicitly with issues of inclusion, control and intimacy (Reason, 2003; Srivastva et al., 1977) for which appropriate facilitation may be needed. This process of interpersonal clearing can be enhanced by adopting further disciplines which provide a fertile ground for opening to communion, practices such as meeting in a circle, sharing time equally, listening attentively, and so on (see, for example, Baldwin, 1996; Randall and Southgate, 1980; McArdle, Chapter 42).

A group of graduate students and faculty at the University of Bath met for a workshop on Power and Participation. When we turned to discuss issues of power and participation within the group the feeling of tension greatly increased and strong feelings were expressed on both sides. We worked hard to understand, holding two disciplines: to listen to each person in turn fully without interruption; and to record their experience clearly in writing on the whiteboard. ... After a while several people commented on the shift in feeling in the

group: we were quieter, more appreciative, more deeply understanding both our differences and the shared pattern of experience. In this sense we became more present with each other. (personal notes, Reason, 2005)

#### Experiential Knowing in the Action Phases of Inquiry

The action phases often involve co-inquirers being busy with their individual action inquiries in everyday life, apart from each other. Their inquiries will be enriched to the extent that they are able to deepen and extend their encounter with their world. We see this as happening in three ways. First, the very fact of being part of an inquiry will alert them to new dimensions of their world: once we join a group of people pursuing similar questions new aspects of our world are inevitably evoked. Indeed, it is often wise in the early stages of an inquiry for participants simply to notice how their new world looks to them. Thus, for example, the young women who accepted Kate McArdle's invitation to join an inquiry into young women in management simply through being part of that group noticed and felt more deeply the casual sexism that characterized their organization (McArdle, 2002, 2004).

Second and most important they can practise the bedrock skill of being present and open, of becoming intentional about, and make explicit in all its fullness, their participation in what is present. This includes open-hearted engagement with the relation of person-toperson meeting, being responsive to the changing qualities of its shared field as vital pointers toward relevant understanding and action in the situation. And third, they need to be alert to a tendency to become so engrossed in their everyday world, so engaged in the moment, that they forget they are part of an inquiry, and their experiential knowing reverts to becoming almost completely tacit. When this happens, interactions later on in reflection phases with other inquirers may enable the qualitative impact of their experiences to be rekindled and revisited.

### Experiential Knowing as an Outcome of Inquiry

This kind of outcome is awkward for models of education and research which both presuppose and foster the value of dissociated intellectual excellence, but is fundamental for whole person education, learning and inquiry. Clearly, if the cultivation of radical presence in mutual resonance with other persons and in participative engagement with the world is a basic aspect of the inquiry process, then transformations of personal being, and of empathic relating both with the human world and the more-than-human world, are important outcomes.

These kinds of outcome are affirmed in the Heron and Lahood inquiry into the realm of the between (Chapter 29). Participants in an extended inquiry into transpersonal activities in everyday life agreed that transformations of personal being - e.g. 'a very important integration of deep face-to-face intimacy and the transpersonal' - were the most basic kind of outcome of the inquiry (Heron, 1998: 183). In a very different way, transformations of presence are evident as outcomes of the MSc in Responsibility and Business Practice at the University of Bath, which draws strongly on action research and experiential knowing in its educational principles (Coleman and Marshall, in preparation) and in the work of 'learning to love our black selves, described by Taj Johns in Chapter 32.

Such outcomes may be qualitatively specific to the focus of *any* kind of inquiry and, together with the practical life-skills that are co-involved with them, validate an inquiry in quite basic and long-lasting ways, through living repercussions and ripples, even if there are no written or presentational outcomes of any kind.

#### PRESENTATIONAL KNOWING

Presentational knowing is made manifest in images which articulate experiential knowing, shaping what is inchoate into a communicable form, and which are expressed nondiscursively through the visual arts, music, dance and movement, and discursively in poetry, drama and the continuously creative capacity of the human individual and social mind to tell stories. In all civilizations these products have been developed through imaginative discipline into a wide range of sophisticated cultural forms that independently symbolize our experience of the human condition. Presentational knowing is a fundamental part of the process of inquiry, and its expression is both a meaningful outcome in its own right, and a vital precursor to propositional outcomes.

However, the process of presentational knowing of our world, through intuiting significant patterns in our immediate experience, can have its great cognitive potential constrained by the conceptual power of language. The imaginal mind is continually creative in the transaction between the psyche and being, generating the visual, auditory and tactile images that participate in and disclose a world (Heron, 1992: 138-50). But this imaginal participation is entirely unconscious: I am only aware of the image, the outcome, and not of the imaging process. Moreover, I convert the image into an appearance of a world that seems to be quite independent of anything going on in me. This reification is massively reinforced by the use of language and the way in which its concepts and class names become embedded as an interpretative layer in our perceiving. This process of conceptualizing perception disrupts its transactional, participatory nature, breaking up the primordial synthesis of perceiver and perceived, and leading to a split between an alienated subject and an independent object (Heron, 1992: 25).

Once we enter the worlds of presentational knowing permeated by propositional knowing, the arguments of the language turn and the social construction of knowledge apply (see Chapter 10): knowledge mediated by language is a cultural construct formed from a certain perspective – in modern times a broadly Cartesian worldview, as mentioned

above – and for certain purposes (although, as we have argued, constructionist views tend to be deficient in any acknowledgement of experiential knowing; Heron and Reason, 1997).

The importance of presentational forms of knowing in their own right, and of releasing them from overcontrolling conceptual-rational dominance, has become increasingly apparent in the social sciences in recent years – notice for example Denzin and Lincoln's emphasis on the 'crisis of representation' (Denzin and Lincoln, 2005a: 18). Jerome Bruner makes the distinction between Mythos and Logos:

There are two modes of cognitive functioning, two modes of thought, each providing distinctive ways of ordering experience, of constructing reality. The two (though complementary) are irreducible to one another. Efforts to reduce one mode to the other or to ignore one at the expense of the other inevitably fail to capture the rich diversity of thought. ... Perhaps Richard Rorty is right in characterizing the mainstream of Anglo-American philosophy (which, on the whole, he rejects)# as preoccupied with the epistemological question of how to know truth - which he contrasts with the broader question of how we come to endow experience with meaning, which is the question that preoccupies the poet and the storyteller. (Bruner, 1988: 99-100)

For Bruner stories are of the essence of Mythos, keeping the process of knowing open and creative. He argues that 'It is part of the magic of well-wrought stories that they keep these two landscapes intertwined, making the knower and the known inseparable' (2002: 27). And he makes the point that while we may 'come to conceive of the 'real world' in a manner that fits the stories we tell about it', it is nevertheless our good fortune that 'we are forever tempted to tell different stories' about the same events in the same world (2002: 103).

### Presentational Knowing in the Reflection Phases of Inquiry

We argued above for the importance of coinquirers developing a sense of pre-conceptual

communion or resonance in their shared life-world, as a ground for subsequent reflection together. Presentational form can be of profound importance in shaping this communion: the possibility of mutually participative open encounter will be enhanced if coinquirers meet in patterns which emphasize equality and mutuality. This may mean meeting in a circle of chairs or cushions without tables; with flowers or other centrepieces; with facilitation that is light and encouraging; with time shared reasonably equally between participants; and so on. For the patterns we manifest together in space and time - our postures, gestures and spatial relationships, our verbal distribution of time - symbolize fundamental qualities of our relating, and can be seen as a first, basic form of presentational knowing. Christina Baldwin and her colleagues exemplify this well in their process of 'calling the circle' (Baldwin, 1996; Baldwin and Linnea, 1999). Heron and Lahood in Chapter 29 recount how presentational forms of toning in mutual resonance, and of posture, gesture and motion in aware spatial interaction, can open up an empowering presence between those involved.

As the inquiry process develops, cycling between action and reflection, presentational knowing is the most basic way of making sense of our experience. Often this is in the form of stories which we bring back to our colleagues in the inquiry group. We will not rush quickly into propositions, but will hold open the presentational and imaginal space and allow it to do its sense-making magic, allowing our stories to resonate with those of other group members. We can play with the stories with a variety of storytelling practices (Mead, 2001; Reason and Hawkins, 1988). We can draw the stories, sculpt them in clay or psychodramatically with our bodies - thus countering our tendency to attribute one set of meanings to experience. In some forms of inquiry (see in particular Chapters 30, 34, 35) the use of presentational form such as theatre becomes a major vehicle for opening participants to new ways of seeing their experience.

Kate McArdle describes the importance of storytelling as a lead-in to the propositional for the members of a co-operative inquiry of young women in management (YoWiM).

Taking time to 'tell our stories' mattered, and required much facilitative attention. ... Through this process we were able to then create shared meaning and understanding around what we were talking about. This led us to move into the propositional — being able to name behaviours, processes and actions described in the stories and to feel that we were 'all on board' with what these names meant. (McArdle, in preparation)

Often the storytelling process is powerfully simple.

The co-operative inquiry into holistic medicine sought among other things to understand the meaning of 'spirit' in general medical practice. Diana came to the group with a deeply moving account of a terminally ill woman who learned through a dream to let go of concerns for her family and die in peace surrounded by them. ... The directness and simplicity of this story produced a prolonged silence in the group. It stimulated other doctors to remember and tell of similar quite simple times when 'spirit' had entered medical practice. It led the group to consider that 'spirit in general practice' was not esoteric, but could be seen as an everyday affair. (for full account of inquiry, see Heron and Reason, 1985)

Yorks and Kasl (2002) in their review of eight collaborative inquiries stress the role of presentational knowing in counterbalancing traditional academic overreliance on critical discourse and analytic forms of knowing. The diverse inquiries used video, film, a Brahms concerto for violin, reproductions of paintings, guided visualization, symbolic ritual movement, Black Angel cards, a game of tag, clay sculpture, watercolour design, birthing metaphors, stories about family, ancestors and progeny yet to be born. Such imaginal methods, Yorks and Kasl affirm, evoke experience, are a pathway for emotion, clarify and codify experience, and are pivotal in providing access to holistic knowing.

## Presentational Knowing in the Action Phases of the Inquiry

Presentational knowing can help bring a quality of curiosity to the action phase of

inquiry. If we are not going to find out what we already know, just as we must open ourselves to new encounters and new experiential knowing, we must also be open to new stories and metaphors, new patterns in space and time, with which to give form to that experience. In order to do this we may find it helpful to experiment with new presentational forms in our encounters with others

- Doctors in the holistic medicine inquiry experimented with dressing informally, re-arranging their offices, and with different non-medical ways of asking patients to tell of their ailments. (Heron and Reason, 1985; Reason, 1988a)
- The YoWiM group, seeking to engage other young women in the organization, changed the layout of the meeting room from its usual formality and decorated it with flowers and posters to create an atmosphere conducive to open conversation. (McArdle, 2004)
- In the Realm of the Between inquiry, presentational forms of toning, posture, gesture, movement and percussive rhythm themselves constitute the charismatic action phase of the inquiry. (Heron and Lahood, Chapter 29)
- Jennifer Mullett, in Chapter 30, describes how visual art, poetry and song were used by women in mid life as part of a women's health in mid-life project.

Action phases include keeping records of actions taken and of their significance – as reports to bring to subsequent reflection phases. There is great and highly relevant scope here for the use of presentational forms: dramatic accounts, poetic evocations, diagrams and line drawings, coloured graphics, choreographed mime, audiovisual recordings, and more. These are ways of keeping alive the comprehensive qualitative richness of actions and experiences more effectively than may be the case with the use of nothing but spare and bare verbal jottings in a diary.

### Presentational Knowing as an Outcome of Inquiry

Traditionally, research findings are 'written up' in propositional form with evidential support from empirical data. If we take seriously the interplay of Mythos and Logos, we can see that discoveries of a co-operative inquiry process may also be expressed in presentational form, either as stand-alone expressions or in conjunction with propositional text. A number of doctoral dissertations at CARPP include such presentational form. Geoff Mead (2001: 59-65) has worked this genre thoroughly, explicitly evoking the interplay of Mythos and Logos. This thesis includes, among other stories, 'Postcards from the Edge' in which he seeks to 'deftly integrate' living and telling by offering a series of accounts of loving relationships over his life; 'The Men's Room', with narratives about men's retreats, men's support groups, friendship, and a co-operative inquiry into men's development in organizations (pp. 82-121). The Leadership for a Changing World programme (see Chapter 28) has posted on its website narrative accounts by members of co-operative inquiry groups. Gillian Chowns worked with children to produce a participatory video (Chapter 39), and Michelle Fine and Maria Torre theorize different forms of product in Chapter 27.

When co-operative inquiries are undertaken within postgraduate degrees, there is a noticeable tendency for discursive presentational outcomes, that is, stories and narratives (always together with propositonal outcomes), to be used rather than nondiscursive ones such as the graphic and plastic arts, dance and movement, and music. It indicates once again the dominating power of the written word prevailing in our academic institutions. The nondiscursive forms are more freely used in the ongoing reflection and action phases, where issues of readily assessing a final degree-bearing outcome are not at stake.

#### PROPOSITIONAL KNOWING

Propositional knowing is knowing 'about' something in intellectual terms of ideas and theories. It is expressed in propositions, statements which use language to assert facts about the world, laws that make generalizations about facts and theories that organize

374

the laws. This is very familiar territory, as the propositional is the main kind of knowledge accepted in our society – not only in academic theories, but in the statements of politicians, propagandists, managers, marketeers and others who would define our world; and indeed in the more or less explicit theories each of us carry around which define who we are and the kind of world we tell ourselves we live in. In propositional form, 'knowing' easily becomes reified as 'knowledge'; and in this sense 'knowledge is power' and constitutes what Foucault (1980) described as 'regimes of truth' which create our reality.

The co-operative inquiry process can be very liberating in using different terms to 'redescribe' experience (to borrow a phrase from Rorty, 1989) in ways that are both more liberating and more fundamentally informative. Propositional knowledge is indeed essential for naming, in a well-rounded and grounded way, the basic features of our being-in-a-world in order to empower effective action in it.

However, propositional knowing needs handling with care, especially in the languagedriven worlds of late-modernity. It has great conceptual power to divide the world into isolated mental subjects and independent nonmental objects. This split between humanity and nature, and the arrogation of all mind to humans, is what Weber meant by the disenchantment of the world and, we would argue, is one of the fundamental origins of the current ecological devastation. In contrast, writers since Gregory Bateson (1972) have argued that mind is immanent in ecological systems, and modern complexity theories demonstrate how the natural world is in a continual process of creative self-organization, a self-creative autopoesis (Maturana and Varela, 1987).

This process of objectification has been applied also to relations between persons. Traditional social science research is founded on the notion that the researcher alone does all the thinking associated with a research project, deciding what questions to explore, developing theory, asking questions, making sense of what is discovered.

The so-called 'subject' is the passive respondent to this attention and is seen as making no intelligent contribution to the research endeavour. Co-operative inquiry, along with all other forms of participative inquiry, aims to break this 'monopoly of knowledge' (Fals Borda and Rahman, 1991); and participative forms of social action, closely related to participative inquiry, aim in similar fashion to restore a sense of self-direction to those disempowered by this kind of political cognitive monopoly (e.g. New Economics Foundation, 1998).

In developing and using propositional knowing we must continually remind ourselves that 'the map is not the territory', as Korzybski pointed out to us a long time ago. But our tendency to confuse map and territory is usually closely linked up with social power (see Gaventa and Cornwall, Chapter 11 in this volume).

## Propositional Knowing in the Reflection Phases of Inquiry

Co-operative-inquiry practice emphasizes the importance of research cycling so that propositions are continually tested in practice and thus rooted back in experiential knowing. This counters the tendency for ideas to fly off into a life of their own and to keep them grounded in experience and in participative relationship. Emphasis is placed on the epistemological heterogeneity which the whole of the extended epistemology articulates – the mutually enhancing effect between the four ways of knowing – rather than valuing propositional expression over and above the other forms.

On the other hand, propositional sensemaking is important in giving the cyclic process focus and clarity, in transferring learning from a previous action cycle to fruitful planning of the next, and in producing carefully worded outcomes that can effectively influence social policy and social change. Charles and Glennie (2002) describe how the clarity of propositional knowing re-energized a tired inquiry group exploring the implementation of guidelines for child protection. Taking an active role as facilitators, they encouraged the group to identify four key inquiry questions and choose one to take forward. By doing this 'the group started to own the inquiry process and steer it, directing their energies into a sense making exercise' (Charles and Glennie, 2002: 216).

### Propositional Knowing as an Outcome of Inquiry

While co-operative inquiry emphasizes the primacy of the practical (for which see below), nearly all inquiries have some kind of informative purpose: they aim to provide insight into social relations and to offer propositions and theories that will aid understanding. Such propositional outcomes are rarely simply descriptive but aim to be critical and emancipatory. They will resist the 'naturalization' of the social order which sees the 'socially/historically constructed order ... as necessary, natural, rational and self-evident': the domination of the interests of the powerful and the suppression of conflicting interests; the 'domination of instrumental reasoning': and the 'orchestration of consent' whereby existing power relations and definitions of reality are taken for granted (Alvesson and Deetz, 2005: 74; see also Kemmis, Chapter 8).

We affirm that there are five main kinds of important propositional outcomes of a co-operative inquiry: those mentioned above that are informative about the domain or field of inquiry; those that report on the transformative practices undertaken, and on their effects; those that describe the inquiry process; those that evaluate the soundness of the inquiry process; and those that evaluate the soundness of its informative and transformative outcomes (Heron, 1996a: 109-10). However, it is also important to note that each of these kinds can be complemented by (as mentioned above under presentational outcomes), or even entirely replaced by, appropriate presentational outcomes.

#### PRACTICAL KNOWING

Practical knowing is knowing how-to-do, how to engage in, some class of action or practice. It is evident in the skills and competencies the inquirers develop, both in knowing how to do co-operative inquiry, and in knowing how to do those transformative actions in the world that the inquiry is engaged with.

As we have argued elsewhere, the argument for the primacy of the practical owes a lot to the philosophy of John Macmurray (1957), who holds that 'I do' instead of 'I think' is the starting point and centre of reference for grasping the form of the personal: the self is an agent and exists only as an agent. The self as thinking subject cannot exist as subject; it can be subject only because it is an agent. The self as knowing subject is in and for the self as agent. Knowing in its fullness is consummated in and through agency, and pure thought divorced from action leads to a lesser kind of knowing that is secondary, derivative, abstract, and negative.

We make a similar point that there is an 'up-hierarchy' of knowledge grounded in experiential knowing, which unfurls in presentational and then in propositional ways of knowing, and is consummated and fulfilled through practice. Practical knowledge, the realm of skills, is immediately supported by propositional knowing - i.e. by descriptive and prescriptive concepts and schema - but necessarily goes beyond these into the autonomous ineffability of knacks, of the very act of skillful doing. Such practical knowing is embodied in the individual; and in a shared 'culture of competence' in which particular practices are not only supported and valued but are embodied in the interactions of a whole community (Heron, 1992, 1996b).

Traditional academic thinking has difficulty with the notion of practical knowing, because, as Rorty (1999) argues, it is attached to the idea of theory as representing the world. If we give up the idea of knowledge as an attempt to represent reality and argue for the primacy of the practical, the

relationship between truth claims and the rest of the world become causal rather than representational, and the issue becomes whether our propositional knowing provides reliable guides to the practical realization of our values.

## Practical Knowing in the Reflective Phrases of Inquiry

The reflection phases of the inquiry, where co-researchers are meeting together, are important crucibles for the development of practical knowing. As we discussed in the section on experiential knowing, the quality of being together in fully mutual presence allows for the emergence of an attitude of inquiry, an open curiosity toward each other and to the experiences each brings to the group. Group members will develop and integrate skills of inquiry – both personal skills of aware openness, reflection and experimentation, and the skills associated with opening an inquiring space for others.

There is a specific way of practical knowing that is central to establishing full reciprocity among co-inquirers: knowing how to make decisions together. This skill involves a practical interplay, within each co-inquirer, and between all, of four basic political values: autonomy, active hierarchy, passive hierarchy, and co-operation (Heron, 2001: 122–3). Each person, in contributing to group decision-making, can move freely between four positions, and the first three positions are precursors to, and components of, the culminating fourth:

- Autonomy: I can identify my own idiosyncratic true needs and interests;
- Active hierarchy: I can identify options that promote the true needs and interests of all of us, individually and collectively;
- Passive hierarchy: I can identify an active-hierarchy proposal made by someone else as one that I can freely and authentically follow;
- Co-operation: I can co-operate with that is, listen to, engage with, and negotiate agreed decisions with my peers, celebrating diversity and difference as integral to genuine unity.

Active hierarchy here is the creative leadership which seeks to promote the values of autonomy and co-operation in a peer-to-peer inquiry. Such leadership is exercised in two ways. First, by the one or more people who take initiatives to set up the inquiry. And second, as spontaneously emerging and moving leadership among the peers, when anyone proposes initiatives that further enhance the autonomy and co-operation of all participating members.

The skill required for an individual person to manage these four positions, and to keep them in creative interplay while at the same time interacting with several other persons each of whom is busy with the same multiple interplay, is considerable. While there can be agreed procedural guidelines to support the process, the challenge to each person (and especially initiating leaders) to modify the demands of ego in the service of collaboration is formidable. Hence there can be occasions when confusion, chaos, individual frustration and interpersonal tension become acute - although these may also be fruitful opportunities for letting go of egoic compulsions, and for remarkable liberating zest when the breakthrough into creative and expanded social synchrony occurs.

This practical know-how has three areas of application in the reflection phase of an inquiry. The first is in decisions about managing the sequence of procedures for the whole phase; the second is in decisions about what sense co-inquirers have made of the previous action phase; and the third is in decisions to do with forward planning of the next action phase of the inquiry.

## Practical Knowing in the Action Phases of Inquiry

What skills are needed in the action phase? In the informative strand of an inquiry, which asks whether, in the light of our experience, the world is the way we envisaged it, we need the skill of radical perception, being fully present and imaginally open to our experience, together with the ability to bracket off habitual conceptual frames and try out new frameworks, new ways of enacting the present situation. In the transformative strand, we need the skill of radical practice, the ability to maintain, while we act, an alert, intentional dynamic congruence among the motives of the action, its goals, the strategy or means it employs, its guiding norms (technical and moral), its ongoing effects, our beliefs about its context (Heron, 1996a). Torbert and Taylor (Chapter 16) describe this as congruence between the four territories of experience: the outside world, one's own sensed behaviour and feeling, the realm of thought, and attention/intention.

On the wider inquiry canvas, there are skills to exercise in our fundamental choices about action phases. How many action phases do we need for this particular inquiry and on what time scale? What is the appropriate balance between action and reflection? Do we use the action phases to converge on an increasingly focused question or to diverge over several main facets of the inquiry topic? Shall we take a more Apollonian or Dionysian approach to action? The Apollonian mode uses the reflection phase systematically to preplan, in the light of a review of the previous action phase, what is done in the next action phase; the Dionysian mode uses more presentational forms of knowing to review the previous action phase, and intentionally allows that learning to emerge in creative actions that arise spontaneously in response to future situations. Both have their place, and no inquiry is likely to follow a purely Dionysian or Apollonian approach (see Heron, 1996a; Heron and Reason, 2001/2006 for a fuller exploration of these issues).

# Practical Knowing as an Outcome of Inquiry

The most basic, but not the only, outcome of co-operative inquiry is a transformative one, which crucially involves individual change of behaviour – the acquisition of new skills, new know-how – supported by peer inquirers. Thus

Geoff Mead (2001) relates how the inquiry context enabled a constraining and controlling manager to receive and elicit feedback that he could use to develop a more spacious and empowering style in his relations with staff.

Important issues then arise about the relation between changed individual practice and the occupational culture or sub-culture within which it is set. Traditionally there has been a fundamental asymmetry between an individual skill and such cultural development. Any radical agenda of transforming practice rested exclusively with the individual pioneer. Even where cultures of competence have promoted research and development, the breakthrough has come through the efforts of one or two individuals, sometimes vying with each other.

With the advent of co-operative inquiry and related forms of participative research, cultures of competence can become selftransforming as collectives. A co-operative inquiry group that is busy with transforming practice within a culture is involved with three interdependent kinds of skills outcomes, three kinds of transformation: new skills in transformative collaborative inquiry, new individual and co-operative working skills, new skills in regenerating the culture of competence within which those skills have their home. Thus a group of doctors who participated in the whole person medicine inquiry (Heron and Reason, 1985) went on to found the British Holistic Medical Association on participatory principles. Torbert has made a similar point in his emphasis on the development of communities of inquiry (Torbert, 2000, 2004); Gustavsen et al. (Chapter 4 in this volume) argue that action research must help develop the wider social movement within which separate inquiries are rooted.

# INQUIRY CYCLING THROUGH THE EXTENDED EPISTEMOLOGY

We have articulated some of the key characteristics of four ways of knowing which

together constitute cycles of action and reflection. Each of the ways of knowing makes its own contribution to the quality of the knowing that results from the inquiry cycle and is of value on its own account and in its contribution to the cycle as a whole.

Thus quality in experiential knowing is rooted in the openness through which we encounter the presence of the world. The threat to quality knowing here is that coresearchers create a defensive inquiry which guards against the discovery of the novel and different, and which reproduces in encounter the habitual social and personal taken-forgranted. Quality inquiry will courageously challenge habits, seek new encounters and deepen contact with experience.

Quality in presentational knowing arises through intuitive playfulness so that expressive forms articulate experiential knowing in creative ways, opening inquiry both back toward deeper experience and forward to new ideas and theories. The danger here is that co-researchers will stay with the same old stories and images and thus recreate existing realities and confirm existing beliefs. Quality inquiry will actively experiment with redescription and draw on a range of presentational forms to turn stories, accounts and images upside down and inside out in the pursuit of creative expression and imaginal range and depth.

Quality in *propositional knowing* articulates presentational form through conceptual schema. It depends on clarity of thinking and critical sense-making and carries with it a strong awareness of the links between propositional knowledge and social power. It will refuse to be held within a hegemonic paradigm and uncritical acceptance of taken-forgranted theories (and its identical opposite, the uncritical acceptance of the currently fashionable oppositional position!), but will engage accepted theory critically and forge new theoretical perspectives.

Quality in *practical knowing* is expressed in the ability of individuals, organizations and communities to accomplish worthwhile, desirable individual, social and ecological ends. It is rooted in the skills and knacks of individuals and more widely in cultural practices that support and co-ordinate such skills. The danger is always that individuals and groups will fool themselves about the efficacy of their actions and support practices for which there is no good evidence. The key quality question is whether, through cycles of action and reflection, sufficient good evidence is produced to support the practical claims that are made.

As we have argued, there is a strong case for seeing practical knowing as primary, the consummation of our inquiry as worthwhile action in the world, guided by propositional categories, inspired by presentational forms and rooted in and continually refreshed through experiential encounter. When coinquirers are working together, there is a dynamic interplay between their actions and their state of being, mediated by intuitively grasping a significant pattern in their current behaviour and by conceptually naming the quality it reveals. Once this quality is identified and agreed, the inquirers can negotiate action to enhance or modify it. This alters their behaviour and the quality of the meeting. Co-sensitivity to the changing interactive qualities within a shared field, and co-acting to develop there an overall quality of human flourishing, are at the heart of excellence in a co-operative inquiry. In inquiry as in life, the basic call is to act intelligently, sympathetically, and creatively together to enhance the quality of our relationships with each other and our world.

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