

9 Co-operative Inquiry

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Orthodox scientific approaches to research honour participation neither as a way of knowing nor as a political system. They use a divisive epistemology that separates the knower from the known, and an authoritarian political system in which researchers make all decisions about content, methodology and findings so that their subjects are treated as passive objects of observation. Since scientific research is such a powerful force in our lives it is shocking that its techniques largely ignore the epistemological and political significance of participation.

Co-operative inquiry is one of several methodologies which emphasize participation (Reason, 1988; Reason, 1994a; Reason and Rowan, 1981a). *Feminist research* asserts the need for research to honour women's experience and explore it from the inside, often by the adoption of participative methods (Bowles and Duelli Klein, 1983; Mies, 1993; Olesen, 1994; Reinharz, 1992). *Participatory action research* (PAR) (Fals-Borda and Rahman, 1991; Tandon, 1989) confronts the way established elements of society hold power through a monopoly on the definition and use of knowledge. PAR works to reclaim the right of common people everywhere to create knowledge from their own lived experience, and emphasizes Paul Freire's notion (1970) of *conscientization*, developing collective awareness through self-inquiry and reflection. *Action science* was a term developed by Argyris and his colleagues to emphasize research in the service of effective action (Argyris and Schon, 1974; Argyris et al., 1985). This has been developed by Torbert (1981, 1987, 1991), who emphasizes the importance of developing a quality of attention which embraces both inner purpose and external outcomes; and the significance of transformational leadership in creating genuine communities of inquiry within communities of action.

The case for co-operative inquiry

The idea of co-operative experiential inquiry was first presented in 1971 by John Heron, who later set out a full account of the philosophical case for the method and an articulation of its practice (Heron, 1971, 1981a, 1981b). This has been extended and developed particularly in Reason (1988), Heron (1992) and Reason (1994b). Here we summarize several ideas which are particularly important in the development of our thinking.

Persons as self-determining

We start from the view that a person is a fundamental spiritual entity, a distinct presence in the world, who has the potential to be the cause of his or her own actions. To actualize this capacity and become fully a person is an achievement of education and self-development. It involves learning to integrate individualizing characteristics with a deeper communion with others and the world (see Heron, 1992: chap. 3).

A person's intentions and intelligent choices are causes of his or her behaviour; they are self-determining. If the behaviour of those being researched is directed and determined by the researcher, then they are not being present as persons. The research is being done on them, at a subpersonal level. One can only do research with persons in the true and fullest sense if what they do and what they experience as part of the research is to some significant degree directed by them. So persons can only properly study persons when they are in active relationship with each other, where the behaviour being researched is self-generated by the researchers in a context of co-operation.

This means that all those involved in the research are both co-researchers, who generate ideas about its focus, design and manage it, and draw conclusions from it; and also co-subjects, participating with awareness in the activity that is being researched. One of the critical differences between co-operative inquiry and orthodox research is that for the former the primary source of knowing, and thus the primary 'instrument' of research, is the self-directing person within a community of inquiry, and method is a secondary expression of this; whereas for the latter, method is primary and the subjects are subordinate to it.

The nature of knowledge

The model of co-operative inquiry was originally based on an extended epistemology including three kinds of knowledge: (1) *experiential knowledge* is gained through direct encounter face-to-face with persons, places or things; (2) *practical knowledge* means knowing 'how to' do something, demonstrated in a skill or competence; (3) *propositional knowledge* is knowledge 'about' something, expressed in statements and theories. In research on persons the propositional knowledge stated in the research conclusions needs to be grounded in the experiential and practical knowledge of the subjects in the inquiry. If the concluding propositions are generated exclusively by a researcher who is not involved in the experience being researched, and are imposed without consultation on the practical and experiential knowledge of the subjects, we have findings which directly reflect neither the experience of the researcher nor that of the subjects.

Recently Heron (1992) has clarified the additional notion of *presentational knowledge*, by which we first order our tacit experiential knowledge of the world into spatio-temporal patterns of imagery, and then

symbolize our sense of their meaning in movement, sound, colour, shape, line, poetry, drama and story. The development of presentational knowledge is an important, and often neglected, bridge between experiential knowledge and propositional knowledge.

Critical subjectivity

While co-operative inquiry overlaps with qualitative and naturalistic research methods, it is also significantly different from them because it invites people to join in the co-creation of knowledge about themselves. A recent major text on qualitative research methods (Denzin and Lincoln, 1994) explores the history of qualitative research methods, and the developing attempts of researchers to represent the experience of their subjects. This process has led to calls for a 'thick description' of particular events (Geertz, 1973), and to various 'interpretative' paradigms of inquiry. Qualitative researchers, under the influence of postmodern sentiments, have begun to attend to the perspective on which their inquiry is based, seeing that 'any gaze is filtered through the lens of language, gender, social class, race and ethnicity' (Denzin and Lincoln, 1994: 12).

Co-operative inquiry approaches these issues from a rather different direction. It is a fully participatory process in which people engage together in cycles of action and reflection. In doing so they have an opportunity to develop their critical awareness of the theories and ideas they bring to their action in the world, and the extent to which their behaviour and experience are congruent with these theories. Thus in the process of inquiry, both theory and practice are developed. To do this fully, the co-researchers need to develop a particular form of consciousness which we have called critical subjectivity.

Critical subjectivity is a state of consciousness different from either the naïve subjectivity of 'primary process' awareness or the attempted objectivity of egoic 'secondary process' awareness. It means that we do not suppress our primary subjective experience but accept that our experiential encounter with ourselves in our world is the grounding of all knowing. At the same time, we accept that naïve subjectivity is potentially open to all the distortions of defence processes and the processes through which groups of people collude to limit their understanding, and so we attend to our experience with a critical consciousness. Inquiry thus becomes, in Torbert's words, 'consciousness in the midst of action' (1991: 221). 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 and thus is very close to what Bateson (1972) describes as Learning III and which Kegan (1994) refers to as fourth-order consciousness.

So we hold that reality is both one and many. Human persons are centres of consciousness within a field of universal consciousness, each unfolding a unique perspective within it (Heron, 1992). As we choose and co-create our world, our knowledge can develop this quality of critical subjectivity. As Bateson puts it:

The word 'objective' becomes, of course, quite quietly obsolete; and the word 'subjective', which normally confines you within your skin, disappears as well. . . . The world is no longer 'out there' in quite the way it used to be. . . . There is a combining or marriage between an objectivity that is passive to the outside world and a creative subjectivity, neither pure solipsism nor its opposite. . . . Somewhere between these two 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. (quoted in Brockman, 1977: 245)

And as we have argued before:

. . . we have to learn to think dialectically, to view reality as a process, always emerging through a self-contradictory development, always becoming; knowing this reality is neither subjective nor objective, it is both wholly independent of me and wholly dependent on me. (Reason and Rowan, 1981b: 241)

Thus there will be as many knowings as there are knowers, and we must accept an epistemological heterogeneity. Truth about reality (or realities) may be more fully revealed in the way these different perspectives overlap and inform each other.

Methodology

In traditional research, the roles of researcher and subject are mutually exclusive. The researcher only contributes the thinking that goes into the project, and the subjects only contribute the action to be studied. This relationship of unilateral control can be represented as in Figure 9.1. In co-operative inquiry these mutually exclusive roles are replaced by a co-operative relationship based on reciprocal initiative and control, so that all those involved work together as co-researchers and as co-subjects. This more complex relationship can be represented as in Figure 9.2. It may of course take time, skill and hard work to establish full, authentic reciprocity, as we shall explore later in this chapter.

Co-operative inquiry can be seen as cycling through four phases of reflection and action, although it should be noted that the actual process is not as straightforward as the model suggests: there are usually mini-cycles within major cycles; some cycles will emphasize one phase more than others; and some practitioners have advocated a more emergent process of inquiry which is less structured into phases (Treleaven, 1994).

In Phase 1 a group of co-researchers come together to explore an agreed area of human activity. They may be professionals who wish to develop their understanding and skill in a particular area of practice; women or members of a minority group who wish to articulate an aspect of their

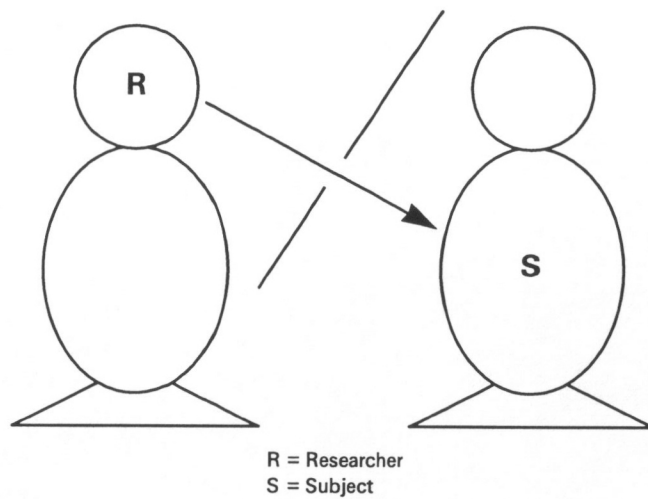


Figure 9.1
(after Heron, 1981b)

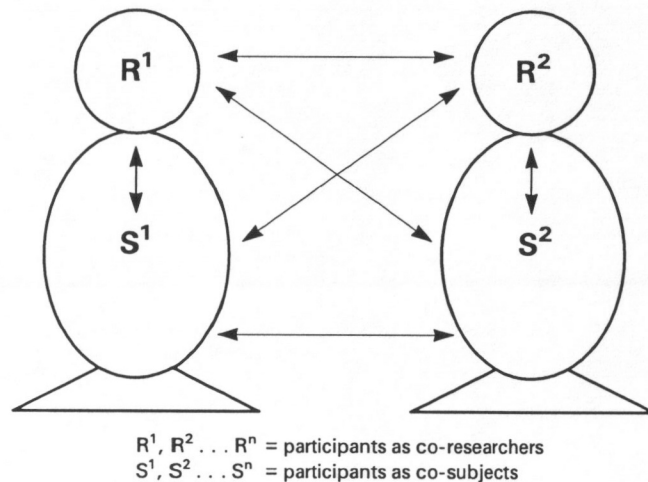


Figure 9.2
(after Heron, 1981b)

experience which has been muted by the dominant culture; they may wish to explore in depth their experience of certain states of consciousness; to assess the impact on their well-being of particular healing practices; and so on. In this first phase they agree on the focus of their inquiry, and develop together a set of questions or propositions they wish to explore. They

agree to undertake some action, some practice, which will contribute to this exploration, and agree to some set of procedures by which they will observe and record their own and each other's experience.

Phase 1 is primarily in the mode of propositional knowing, although it will also contain important elements of presentational knowing as group members use their imagination in story, fantasy and graphics to help them articulate their interests and to focus on their purpose in the inquiry. Once the focal idea – what the inquiry is about – is agreed, Phase 1 will conclude with planning a method for exploring the idea in action, and with devising ways of gathering and recording data from this experience.

In Phase 2 the co-researchers now also become co-subjects: they engage in actions agreed and observe and record the process and outcomes of their own and each other's experience. In particular, they are 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. This phase involves primarily practical knowledge: knowing how (and how not) to engage in appropriate action, to bracket off the starting idea and to exercise relevant discrimination.

Phase 3 is in some ways the touchstone of the inquiry method. It is a stage in which the co-subjects 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. Phase 3 involves mainly experiential knowing, although it will be richer if new experience is expressed, when recorded, in creative presentational form through graphics, colour, sound, movement, drama, story, poetry, and so on.

In Phase 4, after an agreed period engaged in phases 2 and 3, the co-researchers reassemble to consider their original propositions and questions in the light of their experience. As a result they may modify, develop or reframe them; or reject them and pose new questions. They may choose, for the next cycle of action, to 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. Phase 4 is primarily the stage of propositional knowing, although presentational forms of knowing will form an important bridge with the experiential and practical phases.

This cycle of action and reflection can be represented as in Figure 9.3. In a full inquiry the cycle will be repeated several times. Ideas and discoveries

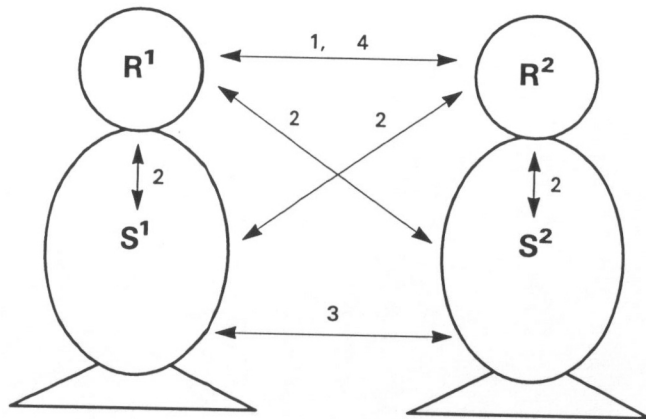


Figure 9.3
(after Heron, 1981b)

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 competences 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.

The cycling can really start at any point. It is usual for groups to get together formally at the propositional stage often as the result of a proposal from an initiating facilitator. However, such a proposal is usually born from experiential knowing, at the moment when curiosity is aroused or incongruity noticed. And the proposal to form an inquiry group, if it is to take flight, needs to be presented in such a way as to appeal to the experience of potential co-researchers.

The relationship between the fourfold epistemology described above and the inquiry phases is shown in Figure 9.4. An alternative diagram which in some ways shows better the relationship between the four ways of knowing is shown in Figure 9.5.

Examples

Inquiries into holistic and complementary medicine

A series of inquiries have been conducted and are planned in this area, so an account of them may illustrate both the practice of one inquiry and the way a field of practice may be explored using co-operative inquiry as a method.

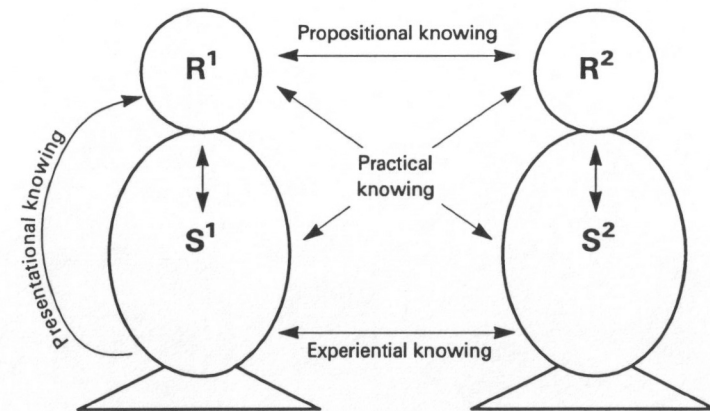


Figure 9.4
(after Heron, 1981b)

The first inquiry was initiated by the authors and sponsored by the British Postgraduate Medical Federation, University of London (Heron and Reason, 1985; Reason, 1988). We sent a letter of invitation to general practitioners associated with the Federation, proposing that the time was ripe for an exploration of the theory and practice of holistic medicine within primary health care. After a series of introductory meetings a group of some 15 GPs formed the inquiry group, agreeing to meet together for six inquiry cycles, with each reflection phase taking place over a two-day workshop, and each action phase lasting six weeks.

At the first (Phase 1) workshop we engaged in a variety of activities to help the co-researchers get to know each other and build open communications. We then undertook a series of exercises which helped us articulate a five-part model for holistic medical practice from the experience so far of the participants; and we brainstormed ways of putting this model into practice in the surgery and of recording what happened. Finally, each participant made a contract with the group to engage in certain (self-chosen) practices and forms of record-keeping over the coming action period.

Phase 2, the action phase, took place in the participants' surgeries. In early action phases widely differing aspects of the model of holistic medicine were explored in daily practice. Later, participants focused either on power-sharing between doctor and patient, or on the use of spiritual interventions with patients. Phase 3 was evident at those times when participants became open to new insights in the heart of practical experience, such as when one doctor helped a patient to die in the arms of her family; also when in their busy professional life they inevitably became utterly immersed in practice with little immediate space for conscious attention.

Health visitors

Hilary Traylen, as part of her MPhil research at the University of Bath, established an inquiry group with health visitors to explore sources of stress in their work (Traylen, 1989, 1994). A group of eight health visitors worked together for nine months.

Early on the group saw that a major source of their stress lay in 'hidden agendas' such as depression and child abuse which they suspected were present in the families they visited. They were not sure whether they should raise these issues with the families, or indeed whether they were sufficiently skilled to do so. In the course of the inquiry they identified families at risk, practised different interventions using role play, visited the families and tried working with them in these new ways, met together and reviewed their experience. This inquiry was extremely anxiety-provoking for all members of the group, but as a result they felt significantly empowered and were able to write a report of their experience for their colleagues and managers.

Inquiry as staff development for women

Lesley Treleaven is Staff Development Manager at a university in Australia, with a responsibility to arrange staff development activities for women under the equal opportunity legislation. As a feminist, she objected to the traditional form of women's staff development, which she saw as based on a 'deficit' model, assuming that women lacked some skills and competencies which men presumably already had. In consequence, she developed a model of staff development based on inquiry (Treleaven, 1994).

She portrays the university in question as a bastion of male privilege. Women have only recently played any significant part as students or as faculty at the university, originally an agricultural college set in rural surroundings, and development activities for women were met with hostility by many male staff.

Treleaven set up her inquiry with an unstructured space in which women could meet in psychological safety to explore their experience. She was not happy with the formal cyclical models such as we have outlined above, feeling that these constrained a naturally emergent process. A regular meeting time and place was established, but no firm boundaries were set on attendance.

By telling their stories to start the inquiry, the women developed an understanding of their individual and shared experience in that institution, and a sense of shared purpose as a group. They realized how their behaviour was often stigmatized as irrational by male managers, and reaffirmed their commitment to the values they felt were important. The inquiry moved from sharing stories to action in the university as occasions arose to which they chose to respond: sexist language was confronted in meetings; the general invisibility of women challenged; and strategies were developed to ensure women's representation on committees.

Inquiry in a mental health unit

As we have noted, co-operative inquiry is one of a number of related collaborative approaches and in some projects a combination of approaches is fruitful (Reason, 1994a). David Quinlan is a clinical psychologist exploring the process by which he and his colleagues worked with 'difficult' patients in a mental health unit. Some 18 months into the project he was very self-critical because he had failed to establish a 'proper' co-operative inquiry group, a group which would have clear boundaries, would meet in phases of action and reflection as we had described.

On reflection he realized that he had been deeply engaged in several forms of experiential inquiry: sometimes drawing on Torbert's practice of action inquiry, paying careful attention to his own behaviour, monitoring the congruence of his purpose, theory, action and the outcomes, and seeking feedback; sometimes as participatory action research, establishing dialogue with patients and nursing staff who might otherwise not have a voice; and sometimes in co-operative groups, which met for relatively short periods of time to review learning from one or two incidents.

He felt that this combination of methods was appropriate to assist in the development both of his own practice and of the organization as a community of inquiry. He resolved to continue with the approach, making it more systematic and explicit with his colleagues so they too could contribute to its development.

Altered states of consciousness

John Heron has initiated four co-operative inquiries in the field of altered states of consciousness (Heron, 1984, 1988b, 1993b). Traditional research in this field, whether nineteenth-century psychical research or more recent controlled tests in the laboratory for an ESP effect, has been limited because the researchers did not themselves get involved in the states their subjects were in. Therefore they could not reliably devise categories of understanding appropriate to the states; they had no personal grasp of issues involved in how to enter or exit them; and they could not generate experiential criteria for distinguishing between valid and invalid forms of them. By the use of co-operative inquiry, the co-researchers are also those who participate in the subtle states being researched. This enables them to have experiential access to suitable theoretical constructs, to entry and exit protocols, and to relevant criteria of validity.

Facilitation and the development of the inquiry group

Co-operative inquiry is demanding. It requires of its practitioners, especially those who initiate and facilitate inquiry groups, a range of skills beyond those required of orthodox social science inquiry: an understanding of group behaviour, proficiency in group facilitation, attentional

skills and emotional competence. Co-operative inquiry is also immensely rewarding for those who engage in it. And while the skills we outline below are vital, we also believe they can be developed in everyday life by ordinary people who wish to explore their worlds. To quote from one group of co-researchers:

... our collaborative group consisted mainly of people who would not consider themselves to be academic; most have not had the experience or opportunities of further or higher education. The initiator was a novice in the methodology. Yet between us, and without the supervision of an expert in the field, we have made an honourable effort. We firmly believe that any group of people committed to a particular area of research can employ a full-blown collaborative inquiry method. (Tiernan et al., 1994: 137)

It is also important to note that co-operative inquiry is an emergent process. Co-researchers will only develop the competencies required through extended practice: their understanding of the process will deepen, the group will mature as the issues which arise in the inquiry demand creative responses. Further, it may be argued that our culture is in the process of a major transition toward a participatory worldview. Tarnas (1991) portrays the history of Western mind and spirit as a masculine project driven by a heroic impulse to forge a separate and autonomous rational human self. This gives rise to a longing for reunion with that which has been lost – for a re-emergence of a participatory consciousness – and at the same time, Tarnas argues, prepares the ground for that reunion, in what is essentially one side of a vast dialectical process:

... the West's restless inner development and incessantly innovative masculine ordering of reality has been gradually leading, in an immensely long dialectical movement, toward a reconciliation with the lost feminine unity, toward a profound and many-levelled marriage of masculine and feminine, a triumphant and healing reunion. (1991: 444)

Paradoxically, the practice of co-operative inquiry is both part of this transition, and also requires this new worldview to flower fully (Reason, 1994b).

Group development

Co-operative inquiries are usually established because one or two people see the need and are inspired to take the initiative. We know of no full inquiries that emerged entirely from an existing group. Thus the first stage for the initiator is to find or establish his or her group. For major inquiries this may involve the complex process of applications for funding and access to organizations. But very often the group is to hand: the initiator wishes to work with a community, with immediate colleagues or friends to explore some aspect of their life together.

Often an initial meeting is organized at which the project is suggested, the method outlined and some initial commitment established (Reason, 1988, 1994b). Subsequent meetings may be held to organize detailed

arrangements before the inquiry proper begins. This phase of contracting is of great importance, since it is at this time that the tone of the whole venture may be established. The initiator needs to find the balance between sufficient clarity of purpose and method to get the project off the ground while at the same time leaving space for the embryonic group to contribute ideas.

Small inquiry groups run well with between six and eight members. Anything less than six does not allow sufficient diversity of experience; more than eight requires more careful and skilled facilitation. An experienced inquiry facilitator might work with a group of up to 12 persons, and with a co-facilitator with maybe 18 or 20. Larger groups than this may be successful only if quite highly structured as 'search conferences' (Gustavsen, 1992) with most of the process decisions managed by professional staff, and so are no longer strictly speaking co-operative inquiry groups. We have played with the idea of establishing a federal structure in which several inquiry groups might contribute different aspects in the exploration of a major issue, but we have not been able to put our ideas into practice (Reason and Heron, 1986).

It is well established that groups evolve through initial phases of anxiety and insecurity, during which time the need is to establish safety and cohesion. People need help to feel at home, to get to know each other, to share their hopes and desires, and to contribute to the life of the group. Often a clear structure of activities is useful at this time. There often follows a more robust period, in which differences can be explored and in which more energy is available for task accomplishment. Facilitation at this time will involve acknowledging differences, helping people to learn to listen to each other in-depth and provide a containment so that conflict can be explored in safety. Only when attention has been devoted to these issues of inclusion and influence can the truly creative group emerge, one in which all are fully equal members of a network of relationships, with each person's skills and abilities fully known and honoured. The development of a group can be facilitated if attention is paid to these process needs (Heron, 1989, 1993a; Randall and Southgate, 1980; Srivastva et al., 1977).

The notion of co-operative inquiry means that each person's agency is fundamentally honoured. It does not mean that everyone will do the same thing, but that each will make a significant personal contribution. Groups are much more effective if the different roles required are identified and rotated, so that it is clear which roles members are adopting at any time, for example facilitator, recorder, and so on (see Tiernan et al., 1994, for an example).

Facilitation

We would recommend that those who wish to initiate inquiry groups have some prior exposure to group process and facilitation. At a very minimum

they need to get a measure of their base-line competence working in groups. Some people seem to be almost 'natural' facilitators, with an artless open good-heartedness and an ability to respond to the needs of other people, while others are uncomfortable and clumsy so that they generate discomfort in others. But all people can benefit from studying the practice of facilitation, partly from what has been written (Heron, 1989, 1993a) but better by attending a course in humanistic group facilitation. As the inquiry proceeds and the group acquires coherence and confidence, the role of facilitator may be rotated among some of its members.

Supervision

When co-operative inquiry takes place within the context of an academic institution in pursuit of a higher degree some issues of organizational politics arise. In some ways these inquiry methods fit quite comfortably within the best of the Western academic tradition, with its emphasis on creative inquiry; in other ways they confront the rigidities of academia head on. It is quite possible for students to use collaborative inquiry methods in pursuit of academic qualifications – our students have been doing so for 14 years – provided the staff are willing and able to support them. If supervisory staff are anxious, half-hearted or ambivalent about the approach, the student may be in trouble.

Over the years a process-oriented approach to supervision has been developed at the University of Bath which is particularly appropriate for supporting students engaged in collaborative forms of inquiry:

Rather than concentrate on providing 'expert' advice on the content and methodology, our primary attention is on the student's life energy as they engage with their research. We seek to facilitate the personal learning in research, and so help people realize their potential project which has relevance to their lives. In our view, good research is an expression of a need to learn and change, to shift some aspect of oneself. (Marshall and Reason, 1993: 118)

Validity in co-operative inquiry

Co-operative inquiry claims to be a valid approach to research with persons because it 'rests on a collaborative encounter with experience' (Reason and Rowan, 1981b: 244). The touchstone of the approach is that any practical skills or theoretical propositions which emerge can be said to derive from and be congruent with this experience. The validity of this encounter with experience in turn rests on the high-quality, critical, self-aware, discriminating and informed judgements of the co-researchers. Of course, this means that the method is open to all the ways in which human beings fool themselves and each other in their perceptions of the world, through cultural bias, character defence, political partisanship, spiritual impoverishment, and so on. As we have argued earlier (Heron, 1988a:

53–5; Reason and Rowan, 1981b: 244), co-operative inquiry is threatened by unaware projection and consensus collusion.

Unaware projection means that we deceive ourselves. We do this because to inquire carefully and critically into aspects of our experience which we care about is an anxiety-provoking business which stirs up our psychological defences. We then project our anxieties onto the content we are supposed to be studying (Devereaux, 1967).

For example, the co-researchers on our holistic medicine inquiry had invested half a lifetime, years of education, practice and commitment into being orthodox doctors: to set this aside to explore new attitudes and ways of practice was a formidably difficult task, involving the personal risk of error and shame, and the possibility of injury and death. The health visitors were deeply troubled as they struggled to find ways to work with the hidden agendas in their practice. It is much more comfortable to hold onto the worldview one already knows. Therefore it is easy for one's defences to give rise to a whole variety of self-deceptions in the course of the inquiry, so one cannot or will not see a new truth.

Consensus collusion means that the co-researchers may tacitly band together as a group in defence of their anxieties, so that areas of their experience which challenge their worldview are ignored or not properly explored.

Procedures for enhancing validity

We suggest the following procedures may serve to counteract (but not eliminate) these threats to validity (Heron, 1988a; Reason and Rowan, 1981b).

1 *Development of discriminating awareness.* One of the fundamental skills that all co-researchers need to develop is attentional competence. By this we mean the ability to notice what is going on, to bring attention to bear on their activity moment to moment and to bracket off limiting preconceptions in order to be fully open to their experience. Torbert has written at length about this:

The vision of action inquiry is an attention that spans and integrates the four territories of human experience. This attention is what sees, embraces, and corrects incongruities among mission, strategy, operations, and outcomes. It is the source of the 'true sanity of natural awareness of the whole'. (1991: 219)

There are many disciplines that may be practised to cultivate high-quality awareness – meditation, martial arts, the exercises set out by Heron (1992) and Houston (1982) – and which can be integrated within an inquiry. However, the process of inquiry itself, the iteration between action and reflection, the process of bringing attention to bear on everyday behaviour while suspending restricting beliefs about it, is in itself a discipline which will enhance attentional competence.

2 *Research cycling, divergence and convergence.* Research cycling means taking an idea several times around the cycle of reflection and action.

Primarily, this provides a series of corrective feedback loops; it may also clarify and deepen the ideas being thus explored (Heron, 1988a). Divergence and convergence are complementary forms of cycling. We may choose to explore one aspect of our inquiry in-depth over several cycles; or we may choose to diverge into different aspects so we can see phenomena in context; or both. Through convergent cycling the co-researchers check and recheck with more and more attention to detail. Through divergent cycling they affirm the values of heterogeneity and creativity that come with taking many different perspectives, and they acquire a systemic view of the phenomena.

This interweaving of convergence and divergence over several cycles has the effect of knitting together various strands of the inquiry into a comprehensive whole. It assures that, while any one piece of data or conclusion may be tentative or open to error, the final outcome is a network of interrelated ideas and evidence which together have a holistic or contextual validity (Diesing, 1972).

Thus in our holistic medicine project we completed six cycles of action and reflection in the course of a year's study. We started the project with each person following his or her own interests. Some explored delegation with their patients by organizing self-help groups for particular ailments; some set out to widen the kinds of issues they explored with patients in the surgery; others decided to look critically at their own lifestyle; and so on. It seemed right to continue this degree of divergence through the first two cycles, since it sustained creativity and commitment, and enabled the group as a whole to range freely over the whole field. At the third meeting, however, we established two subgroups, one exploring power-sharing strategies and another the use of spiritual interventions, thus seeking a balance between divergence and convergence in our research cycling.

3 *Authentic collaboration.* It is clearly not possible to do this kind of research alone; the diversity of viewpoint, the loving support of colleagues, the challenge when we seem to be in error, are all essential. Since collaboration is an essential aspect of this form of inquiry, it must be in some sense authentic. Group members must internalize the inquiry method, make it their own and not simply be directed by the initiating researchers. They must not be overdominated by a charismatic individual or a small clique, but develop a climate in which each person can in time find a place to be him- or herself, to make his or her own contribution to decision-making and creative thinking, and in which the differences among all concerned may be celebrated. Our experience with a variety of learning groups convinces us that it is possible to facilitate the emergence of intimate collaboration with appropriate amounts of both support and confrontation. We know that this also takes time, willingness and skill.

As Hilary Traylen writes of her inquiry with health visitors:

... the experience of exploring together did lead to personal growth and development. The group members found themselves growing in confidence and able to be more assertive, particularly in situations where they felt they were

being manipulated or devalued. The group did I think achieve considerable autonomy and the choices made about the directions of the inquiry were reached on a co-operative basis. The inquiry very much developed as we went along and roles within the group were constantly changing. There was some tendency to collude over getting into the action rather than reflecting on the processes of the research and the meaning of our work. (Traylen, 1994: 79)

4 *Falsification.* We have mentioned above the danger of consensus collusion. It is essential that inquiry groups build in norms which will counter this tendency: we need what Torbert (1976) described as 'friends willing to act as enemies'. We have found the Devil's Advocate procedure helpful in this. The Devil's Advocate is a member of the group who temporarily and awarably takes the role of radical critic to challenge hidden and unowned assumptions, behaviour that seems to diverge from espoused intention and ideology, or group collusion to bury some issue, and so on. The Advocate may be self-appointed and act *ex tempore*, or may be appointed by the group to act as continual internal critic; or special times may be agreed at which the Advocate's role is systematically exercised, critically challenging tentative findings, as in Heron's (1988b) inquiry into impressions of another reality.

Tiernan and her colleagues describe how they used this method:

The process was simple. When an individual or small group was sharing their learning, another small group acted as Devil's Advocate, asking probing questions which assumed the contribution(s) to be 'wrong', 'illusory', 'colluding', 'confused', 'dishonest', 'inaccurate' or 'contradictory'. Another individual or small group acted as supporter(s) to the contributor(s), ensuring all parties heard each other, sharing an understanding of both questions and answers. They also ensured the contributors were not overwhelmed by the pressure of the process. (1994: 126)

5 *Management of unaware projections.* We have pointed out above how unacknowledged distress and psychological defences may seriously distort inquiry. Some systematic method is needed which will draw the distress into awareness and resolve it. Devereaux (1967) suggested that the researcher should undergo psychoanalysis; we have used co-counselling (Heron, 1979), a method of paired support in which each person takes a turn as client to uncover and release any hidden emotion that may be warping the research thinking and action. Psychodrama can be similarly used (Hawkins, 1988). In our view a full co-operative inquiry will include as part of its process regular sessions at which incipient distress can be acknowledged and worked through. (For a general exploration of research as a personal process, see Reason and Marshall, 1987.)

6 *Balance of action and reflection.* Collaborative inquiry involves both action and reflection, and somehow these need to be brought into appropriate balance. Too much action without reflection is mere activism; too much reflection without action is mere introspection and armchair discussion. The right sort of balance will depend on the inquiry in question, and on the judgements of those involved. Some inquiries will move quite

quickly into extensive action phases, while others, like Treleaven's, need a more extended period of reflection.

7 *Chaos*. From our early inquiries we came to the conclusion that a descent into chaos would often facilitate the emergence of new creative order. There is an element of arbitrariness, randomness, indeterminism, in the scheme of things. If the group is really going to be open, adventurous and innovative, to put all at risk to reach out for the truth beyond fear and collusion, then once the inquiry is well under way, divergence of thought and expression is likely to descend into confusion, uncertainty, ambiguity, disorder and perhaps chaos, with most if not all co-researchers feeling lost to a greater or lesser degree. There can be no guarantee that chaos will occur; certainly one cannot plan it. The key validity issue is to be prepared for it, to be able to tolerate it, to go with the confusion; not to let anxiety press for premature order, but to wait until there's a real sense of creative resolution. We make this argument for openness to extreme uncertainty to counterbalance the human being's enormous capacity for creating and sustaining order, even when it inhibits the emergence of a deeper understanding.

Application of validity procedures

These validity procedures can be applied systematically to review the quality of inquiry work. Use of them does not mean that the experiential, practical or propositional knowing which comes out of the research is valid in any absolute sense of the term. Its validity is relative to the effectiveness with which the procedures have been applied by one group in a particular setting. By using them to resolve some distortions of its inquiry and illuminate others which may have occurred, the group can show more clearly and communicate to others the perspective from which its findings are derived.

It is important to distinguish between the influence of perspective and distortion. For example, the perspective of our holistic medicine inquiry is that of a group of general medical practitioners who are interested in and committed to the development of holistic practice. Other groups – patients, professional medical researchers, hospital doctors, etc. – would have worked from equally valid but different perspectives. In contrast, the inquiry and its findings will be distorted to the extent that it is driven by unacknowledged and unresolved distress and a collusion within the group not to explore rigorously its perspective. Thus, for example, the holistic medicine inquiry was distorted to the extent that the group colluded to ignore participants' fear of radically changing their practice.

Conclusion

The outcomes of a co-operative inquiry process are not simply theories written in learned papers. As we have argued, knowledge has a

quadrupartite quality: our understandings of our world are not only sets of propositions or theories about the subject matter (propositional knowledge), but also the validating competencies (practical knowledge) and experiences (experiential knowledge) of those participating in it, and the varieties of aesthetic expression of these experiences (presentational knowledge). This point about integrative knowing is echoed by Torbert, who argues that the important thing is 'not how to develop a *reflective science about* action, but how to develop genuinely well-informed action – how to conduct an *action science*' (1981: 145). Furthermore, an effective co-operative inquiry will not simply address a certain set of questions of understanding and practice, it will in itself raise the capacity of individuals and groups to use inquiry as a way of life – it will develop inquiring individuals and communities of inquiry.

A report on an inquiry – which might be written for other interested professionals, or as part of a process of academic accreditation – should therefore include evidence concerning all four forms of knowing. It will explore the theories and ideas that have informed the inquiry, and the sense that participants have made of their world and their practice; as for example in a new model of holistic medicine. It will include evidence that appropriate practical skills have been developed; as for example the health visitors showed how they had developed new forms of relationships with their clients. It will show how the inquiry is rooted in the experiential knowing of participants; as for example with the inquiries into altered states of consciousness. It will demonstrate that inquiry competence was developed in individuals and in the group. And it will present these findings in a rich, well-founded aesthetic form that speaks to the audience to which it is aimed and in some sense resonates with their own experience.

It is rarely possible for a report on an inquiry to be written by all participants – not everyone is interested or has the skills. Usually one or two people are committed to writing, in which case they need to agree how to present their reports. We usually suggest that a group adopt the norm that anyone can write or speak about the inquiry, but they must agree to state whether their report carries the responsibility of the whole group. Thus a report might contain a note to the effect that 'This paper reports the work of the XYZ inquiry group and has the approval of all members. A draft was circulated to inquiry group members and their various comments incorporated in the text'; or 'While this paper reports on the work of the XYZ inquiry group, it has not been discussed with all participants and remains the sole responsibility of the authors'; or whatever.

Co-operative inquiry can be conducted as part of an academic degree – we have been doing so at the University of Bath for 14 years. Such work is demanding for both students and faculty! It is important that academic staff supervising realize that such work is an intensely personal process for the student who is initiating and facilitating the inquiry, and that they find

ways to provide support through the inevitable personal challenges that will arise (Marshall and Reason, 1993). Our sense is that the most important question to ask in evaluating an inquiry in this context is: 'Has this person provided evidence that they can facilitate the emergence of an effective community of inquiry – including its intellectual, practical, experiential and presentational aspects?'

Co-operative inquiry is probably the clearest methodological expression of all the forms of collaborative inquiry. While we have much confidence in this approach, which we have developed in theory and practice over 20 years, we would not wish it to become a new orthodoxy. The ideas and methods summarized in this chapter will, we hope, be taken by readers as stimuli for the creative development of a form of collaborative inquiry which suits the purposes and opportunities of their particular topic and situation, their own needs and wishes and those of their co-researchers.