Action Research

A Pathway to Action, Knowledge and Learning

Nita Cherry Ph.D

Qualitative Research Methods series Series editor: Professor John Bowden

RMIT University Press Melbourne First published by RMIT Publishing 1999 Reprinted 2002 © Nita Cherry 1999

Edited by Gillian Fulcher Design by David Constable Production by Publishing Solutions

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means electronic, photocopying, recording or otherwise, without the prior written permission of the publisher.

Cherry, Nita. Action Research: a pathway to action, knowledge and learning.

Bibliography ISBN 0 86459 020 2

1. Action research. 2. Research – Methodology. I. Title. (Series: Qualitative research methods series (Melbourne)).

001.42

RMIT Publishing A Division of RMIT Training Pty Ltd ACN 006 067 349 PO Box 12058, A'Beckett Street, Melbourne Victoria 8006 Australia Telephone (03) 9925 8100 Fax (03) 9925 8134 Email: info@rmitpublishing.com.au http://www.rmitpublishing.com.au

Contents

Preface		v
Prologue	The action research paradigm	xi 1
Chapter 1:	The action research paradigm	4
	Action research and action learning	4
	The action reflection techniques of learning: levels of 'knowingness'	10
	Ethical implications of action research	10
Chaptor 2	The work of the action researcher	14
Chapter 2:	The action work	17
	The tools for focusing our action	17
	Focusing the knowledge work	10 22
	Focusing the learning work	27
	Using the questions	29
Chaptor 2	Action research and the transformation of	29
Chapter 3:	practice: the contribution of reflective practice	31
	The overarching significance of the learning work	32
	Facilitating deeper layers of collective learning	33
	The challenges of developing individual and	55
	collective practice	39
	The complexity and emotional cost of learning	40
	Reflection-in-action: a kind of knowing	44
	Using metaphor when the words don't come easily	47
	Applications to the development of praxis	49
Chapter 4:	The status of action research as a	1)
Onapter 4.	research methodology	53
	Choosing the right paradigm	54
	The capacity of action research to generate useful	51
	knowledge	60
Chapter 5:	Individuality and subjectivity in action research:	00
Shapter St	its implications for generating data, knowledge	
	and learning: An exploration of subjectivity	65
	The potential of the research process to change the	00
	researcher	69
		00

	The researcher as part of the product and the	
	process of research	72
	The researcher as the subject of research	73
Chapter 6:	Sustaining 'critical subjectivity' in reflective	
	learning and action research	77
	Reflective techniques as tools in research activity	79
	A description of reflection	80
	Other reflective techniques in the research	
	literature	83
	The challenge of sustaining critical subjectivity	86
	The value of cooperative inquiry in sustaining	
	critical subjectivity	89
Chapter 7:	The creation of meaning through narrative,	
	storytelling and writing	93
	The power of narrative in the creation of meaning	95
	But is it research?	99
	The value of the individual case study	104
References		107
Appendix 1	Experiences from the field	
	(Pamela J. Fitzpatrick-Herrera)	115
Appendix 2	Learning and developing by doing and	
	reflecting (Julian Lippi)	121
	Using action research (Tricia Hiley)	128
Appendix 4	The element of surprise (Di Percy)	136

Preface

Over the past few years, a number of us among the academic staff at RMIT who use qualitative methods in our research have found ourselves invited with increasing frequency to attend postgraduate classes to discuss our approaches to qualitative research. These have always proved to be exciting and rewarding activities. Normally, the postgraduate students are at the beginning of the research cycle: they are developing or firming up their research questions and they are seeking an appropriate research method. Many are interested in qualitative methods but find it difficult to get a feel for any particular method from the existing literature.

I have always found that such students are hungry for first hand accounts and this is what is so rewarding for people like us. There is nothing better than to participate in these classes and have 10 to 20 fertile minds using the occasion to plan their next few years work. During the sessions students participate eagerly and continually look for links to their own research objectives. It is very satisfying to receive e-mails later in the week from students who want to make appointments for further discussion because they believe they have found the appropriate research method. It is equally rewarding to hear from others who express thanks because they now realise, after months of confusion, that the research method discussed is not appropriate for their research questions.

Nita Cherry and I have often but not always found ourselves on the same postgraduate classroom circuit and we have made a number of similar observations.

- There is a paucity of literature focused on the process of choosing the appropriate qualitative research method.
- Many postgraduate students choose qualitative methods in which their supervisors are not expert.
- Exposure of a particular postgraduate student to any one qualitative research method relies too much on serendipity.

We decided that it would be worthwhile to invite all RMIT staff and their students to a one-day symposium on qualitative research methods in June 1998 and discuss these issues. We expected that perhaps 30–40 might attend. The event attracted nearly 100 attendees and one of the outcomes was support for the idea of a monograph series.

This series of five monographs on qualitative research methods is intended primarily to assist postgraduate research students to understand what the different methods are about and how to choose the most appropriate method for their particular research interests, as well as to provide guidance in the conduct of the research throughout candidature.

The series includes four monographs on the major qualitative methods used in research at RMIT. This first monograph is about Action Research. The second will be about Phenomenography and the third will deal with various forms of Phenomenology. The fourth monograph will provide briefer descriptions of a number of other qualitative research methods.

The fifth monograph will take the perspective of the new postgraduate student and deal with the kinds of choices that need to be made along the pathway to a successful thesis.

The monographs on the different methods are similar in the following ways. First of all, the authors are people who have had extensive experience in using the research methods being discussed. Secondly, the descriptions of what the research method is about and how the researcher uses the research method have a 'warts and all' feel about them. The pros and cons are discussed as well as some of the difficulties in undertaking the research highlighted. Thirdly, there is much use of the first person in the prose, along with descriptions of how it 'feels' to do the research in this way. Fourthly, the individual monographs are not written to convince the reader to take up the particular method. Indeed, the emphasis is on matching the research method to the project aims and a conclusion that a particular method is inappropriate and that a different method is needed should be the most common outcome from reading any one monograph. Finally, each monograph includes accounts by recent postgraduate students who discuss why they chose their particular research method and how it worked for their thesis topic.

We do not see these monographs totally replacing the kinds of discussion sessions we have enjoyed participating in so much over the years. We hope, however, that they will make such sessions less frenzied because the students will be better informed and, therefore, more sophisticated questions can be addressed directly. The serendipity referred to earlier applies not just to the likelihood of exposure to a particular method but the capacity to follow up further down the research track when more sophisticated questions arise. We expect that these monographs will provide ongoing guidance for students, even as their personal experiences lead them to new ways of seeing the research. Re-reading the monographs with new eyes should reveal things not seen before.

Supervisors of postgraduate research students who are using qualitative research methods and the examiners of their theses are also likely to find these monographs valuable. We hope that supervisors not expert in the particular qualitative methods discussed in this series will be able to use the monographs to better assist their students to make choices. Examiners could also benefit from reading any of the monographs in this series whenever they are asked to examine a thesis based on their content expertise but find themselves unfamiliar with the particular qualitative research method used in the thesis research.

It is hoped that the five monographs in this series will assist all postgraduate students, whose research questions call for qualitative research methods, to make more informed choices about which method suits them best. It is further hoped that the particular monographs that match their interests will be of continuing value to them, their supervisors and their examiners as the research unfolds and their theses are written and examined.

> Professor John Bowden Series editor

Acknowledgments

The inspiration and support from our RMIT colleagues has been fundamental to the development of this monograph series and this first title. The author and the series editor are also grateful to RMIT University for its generous financial support of the series.

Prologue

We shall not cease from exploration And the end of all our exploring Will be to arrive where we started And know the place for the first time. (T.S. Eliot 1943, p. 38)

This monograph has been prepared to assist people who are undertaking, supervising or examining action research. It is an individual's commentary, based on some years of work in the field, and not an official 'stance' of the Royal Melbourne Institute of Technology on action research. It has been written to complement similar commentaries on action research (see, for example, Kemmis and McTaggart 1988), also to fill a potential gap in that literature. In particular, it seeks to explore aspects of action research which are currently scattered across many texts and several disciplines.

The monograph:

- briefly describes the origin of action research and the uses to which it can be put;
- explores the layers and strands of work that are involved in action research: including the work of taking action, learning, changing and generating useful knowledge in complex occupational and social environments;
- offers a practical guide to uncovering the issues embedded in each of the layers of work;
- reviews the status of action research relative to other research methodologies (the ontological and epistemological issues);
- explores the whole notion of 'subjectivity' in research and how reflective practice can make the thoughts and feelings of individuals a robust source of knowledge and guidance for the rest of us; and

• describes some other ways to strengthen the extent to which the findings of action research can be generalised (a form of validation).

Action research accomplishes something with and for an 'other' or 'others' apart from oneself. It aims to enhance understanding and knowledge of what has happened, and to develop the capacity of both 'other' and researcher to do 'it'—or something like it—again in the future (Rapoport 1970). Action research affects practice, changing it at a number of levels.

In this prologue, I write personally so as to bring to life the layers of work that action research involves. The experience of conducting action research, and of writing a thesis based on that experience, is both personal and private—each undertaking is 'unique' in the twists and turns of its creation, as well as in the end product offered to the world.

In researching and writing two action-based theses, and in helping many other people to produce theirs, I've noticed two different phases. Firstly, there are times when the action itself, and the reflection on it, engage all one's time and energy. At such times, the thought of systematic writing is unappealing and has led to the design of at least one T-shirt bearing the slogan 'Don't ask me about the thesis!' In this phase, writing is confined to field notes and journal entries. At other times, thinking and writing become a priority, something that can't be left alone until that 'bit' is 'done'. Of course, there are 'inbetween' phases when one writes steadily and methodically without either great excitement or boredom—when writing becomes another job of work, to be carried out with detached interest. Generally, however, these two phases predominate.

At some stage the researcher suddenly confronts the questions: what am I really doing? what am I really writing about? what is the key issue or question I'm investigating? This is more likely to happen in action research (Lewin 1946) than in some other forms of research such as those aiming to test a hypothesis. The action research methodology encourages those questions. It asks that a plan, an idea or a theory be checked against action and experience, and that, conversely, action be informed and enriched by theory, planning and ideas. It is truly disconcerting—when you think you are more or less 'on track' with a research design—to discover that what is being 'found out' is very different from what you thought you were doing. At the start of action research, I say to students: 'You may think you are investigating and implementing a strategy for improving customer service and *then*

discover that you are really engaged in the management of internal politics and a personal fight for survival.'

How often do we proffer advice we most need ourselves? My confidence in the integrity and quality of my own work as an actionlearner, not just as a researcher, has often been severely shaken by experiences which have led me to ask: 'how did I ever get into this? why has this turned out to be so complicated?'

The act of writing the narrative of the thesis can itself trigger crises of confidence, when one becomes aware that the thesis involves something much bigger or harder than anything imagined at the beginning. Such glimpses can be both exhilarating and frustrating. At this stage it is easy to overlook the fact that there are two journeys in action research: an 'inner' and an 'outer' journey. The 'outer' journey is the task or intervention or piece of work the practitioner is doing—whether as manager, as change-agent or as researcher. The 'inner' journey is the practitioner's discovery of how to achieve that task: this goes beyond strategies and techniques to include the skills, qualities and 'mental models' (Argyris & Schon, 1978) which make up and guide an individual's behaviour and the way they practice their craft.

Percy, one of my graduate students, expressed these ideas in the notion of the 'layers of work' to be done in the course of action research. The layers she described included:

- the day-to-day work undertaken by the action researcher and others in the external world: plans made, meetings attended, reports written, techniques and strategies used to get things done and make things happen;
- the work of understanding the multiple and sometimes contradictory or paradoxical perceptions of that work by the players involved;
- the work of using those contradictions and paradoxes to illuminate, guide and refine what the action researcher and others are undertaking in the external world by
- the work of building knowledge, understanding, and even theory, which can enhance and enrich the future practice of all those involved.

This is one useful way of describing the many different levels of work which action research encompasses. I have also found it useful, over the last eight years of working with action researchers enrolled in higher degrees, to talk of three **strands** of work. To meet the criteria for action research, all three strands must be present in both the research and in the thesis which derives from it:

• an **action strand** which is about making change: making useful and noticeable difference to the world outside of oneself, and to how things get done in that world (the 'outer journey').

At its best, the action strand can challenge the existing paradigms which lock whole groups of people into dysfunctional ways of doing things, and create opportunities for action which have not been tackled previously:

• a **knowledge strand** which is about enriching our collective wisdom about how and why things and people work.

The knowledge strand has the potential to create new levels of insight which may be relevant in many different situations where people are having to change the way they do things in a changing and demanding world:

• a **learning strand** which is about developing individual and collective practice, enhancing our capability to do the same or different—possibly harder—things in the future.

The learning strand offers the possibility of an inner journey, one which involves the unconscious acquisition of skills and the acquisition of highly self-conscious and self-reflective processes for gaining wisdom about self.

Ideally, none of these strands will dominate. But often one strand is emphasised so that the 'weaving' has a more 'textured' feel. My view is that all three strands must be present both in the research work and in the writing about it.

For the research student, a key challenge is understanding when one is undertaking which kind of work, and in recognising the tensions and opportunities which arise as the different kinds of work mingle and sometimes 'collide'. In a wonderful little book called *The Way of the Thesis*, Turner (1989) compares a dissertation to a piece of stout rope. One should be able to pull on the rope at any point and find that it doesn't come away in one's hand: that it is an integral part of the whole. The central task of the thesis writer is to discover what the 'whole' is, and to weave a stout rope in which each strand is closely intertwined and connected. In sum, to engage in action research is to operate in both the inner and outer world, to be capable of both action and reflection. It is about doing things and doing them in ways that create understanding, knowledge and learning, so that next time we can do similar things better or new things. By definition, the processes are varied, even contradictory or paradoxical. The **action** involved is experimental—at times planned and guided and at other times spontaneous and 'free-wheeling'. The creation of **meaning or knowledge** is both systematic and creative—both about the discovery or deeper understanding of what is 'out there' waiting to be known, and the invention of something new and 'frame breaking'. When it comes to the **learning** strand, we 'invent' ourselves and discover or 'find' ourselves. This can be paradoxical as the fragment of T.S. Eliot's poem (quoted earlier) suggests: in the act of reinvention, of starting anew, we may find that we discover what was there all the time.

For the action researcher, choosing the research tools carefully, using them 'knowingly' and keeping them finely honed is particularly important. This is because the researcher's own behaviour and practice become the subject of research: subject to sustained reflection and inquiry. This means examining oneself and others in action, as well as the effectiveness of that action. Reason (1988) calls this aspect of the research process 'critical subjectivity'. Action researchers examine the knowledge, theories, ideas and assumptions that generate their own behaviour (and possibly the behaviour of others) and then explore the need to extend or change them. The tools of action research must be kept in good order at all times if they are to withstand the inner and outer journeys and the 'layers of work' that Percy (1992) describes.

From this perspective, the creation of meaning is both a learning issue and a research (knowledge) issue. Chapter 1 describes how the cycles of action research and action learning create meaning through the interplay of action and reflection. This has significant implications for the kind of reading and exploration which action researchers need to undertake. They need to become acquainted with the literature and the people who are already expert in the specific fields with which the action researcher is concerned, and to add to that literature and expertise on the basis of their own research. They also need to know the literature on research methodologies (for example, Morgan 1983) which acknowledges the creation of personal meaning as an element in research, and the literature which explores the 'management' of subjectivity as part of the inquiry process (for example, Reason, 1988). It is also important to find out how action and reflection produce learning and change in practice; again, reading and discussion are useful here. Action research is about participating in, and facilitating such changes; and wisdom about learning and change management is one of the necessary 'tools of the trade'. Donald Schon's *Educating the Reflective Practitioner* (1987) is an example of the relevant literature. Schon explores the facilitation of adult learning through what he calls 'reflection-in-action': a dialogue between facilitator and learner in which the learner experiments, takes action, and reflects (both alone and in dialogue with the facilitator), and then submits that reflection to further experience.

Schon suggests that the skilled behaviour which we associate with the arts, with craft industries and with the traditional professions, cannot be 'taught' in a literal sense. The dialogue is not about prescription or rule-giving; rather, it is about creating or crafting something which emerges gradually, individually and on the basis of extensive and disciplined practice. It is not that one person simply hands another a blueprint or vision of effective performance. For one thing, the vision—if it exists—is often difficult to articulate, therefore to share or prescribe. The necessary discipline is reflection, close attention to the experience, the 'doing' and the remembering.

Schon's examples—which we can also see as metaphors—are the 'Master Class' in musical performance, the architectural studio and the Master craftsman. The notion of craft brings together the paradigms of science, the arts and sporting achievement: the basic training in rules, techniques, laws, procedures, theorems and formulae; the patient and determined repetition and continued practice transformed into art by the wisdom which knows when to abandon or modify or stick to the rules; and the instinct which takes over the process and makes it truly the expression of an individual, not just the product of a mass production assembly line.

Mintzberg (1987) has also explored the notion of skilled intellectual and social behaviour as 'craft'. Like Schon, Mintzberg's central concept is that of something which emerges—which is literally crafted—from the overlay of experience or intentions, from the ability to take the clay of 'raw' data from the past and present and use it to advantage for learning and gradually shaping the future, working carefully with what is, while nurturing and shaping the possibilities for what might be. Writing of both organisations and individuals, and reflecting on the processes of organisational and strategic planning, he writes: As Kierkegaard once observed, life is lived forward but understood backward. Managers may have to live strategy in the future, but they must understand it through the past. Like potters at the wheel, organisations must make sense of the past if they hope to manage the future. Only by coming to understand the patterns that form in their own behaviour do they get to know their capabilities and their potential. This crafting strategy, like managing craft, requires a natural synthesis of the future, present and the past (Mintzberg 1987, p. 75).

For the individual action researcher, Milner's words capture the essence of the experience: 'Life is not just the slow shaping of achievement to fit my preconceived purposes, but the gradual discovery and growth of a purpose which I did not know' (Milner, 1936).

It is with that mind-set that I suggest the action research experience needs to be undertaken. The following chapters outline its implications for undertaking the three strands of action, knowledge and learning in action research.

CHAPTER 1

The action research paradigm

The process of action research can be described as a continuous cycle of planning, action and review of the action. Figure 1 outlines this cycle. In this process, action is continually enriched by reflection, planning and the injection of ideas; at the same time, the action produces experience which changes the way we think about things. Successful interventions (ones that work) and meaning (knowledge and learning) are created by the sustained interplay of activity and reflection. During the action research cycle, experience is continually recycled; earlier experiences and data are revisited in the light of accumulated data; new action is planned in the light of what went on before, and all experiences are systematically reviewed and evaluated.

As Dick (1992) has noted, and as the name suggests, action research is a methodology which has two aims:

- an action aim (to bring about change in some community or organisation or program or intervention); and
- a research aim (to increase knowledge and understanding on the part of the researcher or the client or both, or some other wider community).

As Dick notes, the relative importance of the two aims can vary. Rapoport's widely quoted definition of action research is consistent with this view:

> Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework (Rapoport 1970 p. 499).

Others have added a third aim: that of developing people's capacity to help themselves in dealing with key issues and tasks, so that they become more self-sufficient. This objective sees learning for both researcher and others as a key outcome (see, for example, Susman and Everard 1978).

The role of researcher in action research is often combined with that of an agent-actor (as a manager, consultant or other 'changeagent') who, to achieve results, must work with others. These 'others' may be clients, colleagues, staff, customers or any other individual or group with an interest (declared or not) in the action and its outcomes.

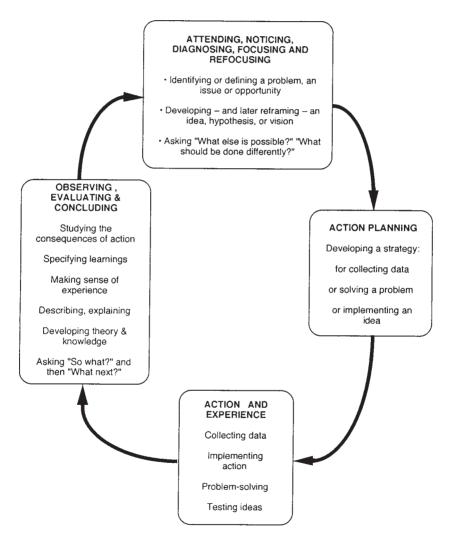


Figure 1: The action research cycle

Prideaux (1990) has identified five potential outcomes of action research:

- a change in the situation, practice or behaviour of the client or 'other';
- improved understanding of the client's situation or behaviour for both the client and the researcher/change agent;
- development in the competence and practice of the researcher/change agent;
- additions to the store of knowledge and theory available to the wider professional and general community;
- improved understanding of the processes through which individuals, groups, organisations or larger social systems change.

Chapter 4 examines the ontological and epistemological status of action research. Susman and Everard (1978) systematically assess the scientific merits of action research. Judged against the criteria of positivist science, action research cannot offer scientific explanation; judged more broadly, it has the capacity to generate knowledge for solving problems which individuals and organisations face. As to the question of whether positivist science or action research is the best method, Susman and Everard say that it all depends on what you want to study and under what conditions. The action research paradigm can be useful, they suggest, when:

- the 'subject' of the research is capable of self-reflection (one or more people);
- the reason for undertaking the action research intervention is to solve a problem which cannot be solved without the active involvement of the client (or 'other');
- the research question or purpose cannot be teased out without the cooperation of the 'other';
- transparency around what is being done, and why and how, is important for researcher and 'other';
- broad or fuzzy research questions are to be developed and tackled in a very particular context;
- a wide range of factors are at play in the context of a dynamic relationship between actors in a complex 'real-life' situation;
- the central issues or tasks can only be fully defined by sustained exposure to, and involvement with, the 'other' over a long period of time;

- current experience is the most effective way of creating possibilities and opportunities for change;
- the practitioner needs a methodology that combines rigour with responsiveness;
- the practitioner needs to continuously tap into and extend his or her own experience and knowledge in order to help effect change in the issue or problem being addressed;
- the knowledge and skills of both researcher and 'other' will be challenged and extended by the process.

Rapoport's definition of action research (cited earlier) emphasises that the action is carried out collaboratively, by the action researcher and the system of the 'other' or client. At best, the research is 'arm-inarm' with the client. In practice, that collaboration might be focused on all or only some phases of the action research cycle. Either the client or the researcher might undertake all or most of the action, while the other participates in the diagnosis, planning, reflection and evaluation. One party may be more involved than the other in any phase of the process; this pattern might change as further cycles of the process occur.

Whatever the level and focus of involvement, action research has been developed around the premise that people are to be engaged with, not acted upon, that they are capable of managing themselves in their organisational roles rather than being made the objects of research.

Action research and action learning

The English-speaking world has generally attributed the notion of action research to social psychologist Kurt Lewin. Lewin (1946) saw this methodology as a way of combining action, especially the achievement of social and organisational change, with the generation of knowledge and theory. However, McTaggart notes that J.L. Moreno preceded Lewin:

recent historical work by Peter Gstettner and Herbert Altrichter then at the University of Klagenfurt shows that 'action research' did not have its origins in the disciplines of social psychology but in community activism. The familiar plan, act, observe, reflect spiral attributed to Kurt Lewin (1946) was not the beginning of action research, even though his biographer claimed that Lewin was the inventor of the term (Marrow, 1969). Gstettner and Altrichter have discovered that J.L. Moreno, physician, social philosopher, poet and the inventor of the concepts of 'sociometry', 'psychodrama', 'sociodrama' and 'role play' had a much more 'actionist' view of action research. Moreno was also the first to use the terms 'inter-action research' and 'action research' (McTaggart 1992, p. 2).

Lewin's interest was founded in his immediate concerns about Fascism, anti-Semitism and intergroup conflict during the early 1940s. He saw traditional positivistic research methods as helpless in resolving critical social problems. The Tavistock Institute of Human Relations—an interdisciplinary group, based in Britain, which drew on psychoanalysis and social psychiatry—was also committed to 'the social engagement of social sciences' (Susman & Everard 1978). Braun et al. also make this point:

Action research has as its central feature the use of changes in practice as a way of inducing improvement in the practice itself, the situation in which it occurs, the rationale for the work, and in the understanding of all of these. Action research uses strategic action as a probe for improvement and understanding (Braun et al. 1988 p. 103).

The originators of action research had in mind changes which went well beyond superficial shifts in the practice of individuals. They were concerned with challenging the mind-sets of organisations and whole societies. Various contemporary writers have expressed concern that this fundamental goal of action research has been seriously eroded. For example, McTaggart (1992) believes that the original values of action research are in danger of being corrupted when:

> organisations use the rubric (action research) for activities such as action learning—for example in the work of 'quality circles', themselves little more than a post-modern expression of Taylorism in the guise of the propagation of 'world best practice' (Watkins, 1992). In these situations, workers, managers and investors are alike coopted into the value-system of the organisation and its fundamental purposes as a societal institution are not called into question. The ordinary expectation among action researchers is the antithesis of that: a fundamental purpose of action research is to make practices and the values they embody explicit and problematic . . .

When we see modern technicist versions of action research and action learning which are oriented, for example, towards 'quality control' or 'staff development' with both being very narrowly understood, we understand how an emphasis on 'learning' denies the fundamental liberatory aspirations of Moreno's work with prostitutes in Spittelburg, Vienna, at the turn of the century, Kurt Lewin's work with those disadvantaged by race and poverty in post-war United States, and Reg Revan's (1980, 1982) work in the mines of Sheffield in postwar England where the term 'action learning' first gained currency. 'Workplace learning' too often means applying routines invented by others, believing reasons invented by others, servicing aspirations invented by others, and giving expression to values advocated by others. In contrast, work place knowledge production means participation in the praxis of intervention and construction of new ways of working, in the justification of new ways of working and new working goals, and in the formulation of more complex and sophisticated ways of valuing work, work culture and its place in people's lifeworlds (McTaggart 1992, pp. 4-6).

Kemmis (1992) and Zuber-Skerritt (1991) raise the same issue. Berger and Luckmann (1966) describe the social construction of reality, reminding us how completely that construction of reality is determined by the particular society in which one lives, and noting that body of Russian and German thinking and literature which suggests that even the inner plane of consciousness is generated by society. For them, one of the values of action research is that it has the potential to liberate or emancipate individuals from socially conditioned mindsets, values and possibly even states of consciousness. This is consistent with what Freire describes as 'conscientisation':

> The process by which people, not as recipients, but as knowing subjects, achieve a deepening awareness both of the sociohistorical reality which shapes their lives and of their capacity to transform that reality (Freire, 1970, p. 27).

This challenges the action researcher because it asks: how far are you prepared to fundamentally challenge your client or 'other'?, and how far are you prepared to challenge your own practice and mind-set? In the action research paradigm, learning and change are not just about making adjustments to cope better with existing conditions; they

involve asking whether what currently exists is what we should live with.

When he originally coined the term 'action learning', Reg Revans was certainly thinking of very fundamental shifts in practice (see, for example, Revans, 1980 and 1982). He was particularly interested in what he called 'the science of praxeology'. *The Concise Oxford Dictionary* defines praxis as 'accepted practice, custom; set of examples for practice', and as deriving from a Greek word for 'doing'. It is a term used in some professions, such as social work, to describe a set of practices or customs prescribed and endorsed by the whole profession, or by specialisations and subgroups within it.

I define praxis as the integration of opportunities and chances for action based on bringing to the surface and acknowledging individual and collective ways of thinking and behaviour. In simple terms, praxis is what results when action is informed and enriched by asking the question: why am I doing what I'm doing? why do I think this will be appropriate or effective?

Revans says about praxeology:

The science of praxeology—or the theory of practice—remains among the underdeveloped regions of the academic world. And yet it is, or should be, the queen of all, settling the ancient argument about the relative natures of nominalism and realism, bringing Plato, St Dominic and Descartes into the same camp as Aristotle, St Francis and Locke. For successful theory is merely that which enables him who is suitably armed to carry through successful practice. This is the argument of the pragmatists, William James, John Dewey and even Karl Marx: to understand an idea one must be able to apply it in practice, and to understand a situation one must be able to change it. Verbal description is not command enough. It is from consistently replicated and successful practice that is distilled and concentrated the knowledge we describe as successful theory (Revans 1981, p. 493).

Lessem (1982) traces the development of Revan's work and thinking in a delightful 'biography of action learning'. He notes that Revans' original work predates, by many years, the first application in the 1970s, of the action learning concept in British industry (Lessem 1982, p12).

Action learning is an approach to development which is based on learning from experience. In its 'purest' form, an individual is invited to spend a number of months working on a new project or task, perhaps in an unfamiliar situation. During that time, the individual becomes part of a learning-set or group of four or five other learners, employing a social process through which, 'by the apparent incongruity of their exchanges . . . (the learners) . . . frequently cause each other to examine afresh both 'project' design and its implementation' (Lessem 1982, p.12).

Later developments of the concept do not necessarily presume the continued existence of a learning group, but they still invite the learner to engage in systematic reflection on their experience in a variety of ways (see, for example, Marsick et al. (1992) on 'action-reflection learning'). Another related approach is Bowden's (1986) problem-oriented process: this builds the context of a management development program on the real issues and problems facing the organisation and the managers in it. In educator Schon's (1987) work, the use of systematic reflection as an effective way for practitioners to learn is described as a particular kind of dialogue between 'learner' and 'educator'. The metaphor of 'the master class' perhaps sums up best the context in which he explains reflection.

The key to experience-based learning is that the individual is asked to access direct personal experience and practice in 'real life' situations: this contrasts with reading about other people's experience and ideas, or simply thinking about ideas in a training situation. The role of the educator is to facilitate ways in which people can create, access and reflect upon their experience. Kolb's (1984) learning cycle describes the processes involved for the learner. These include collecting data through experience, trying to make sense of the data, perhaps developing an idea or conclusion which can be tested through further experience and the engaging in continuous cycles of reflecting, concluding and experiencing. It is the same concept as in Figure 1.

While there are many techniques which assist the process of action learning, it is perhaps helpful to mention two illustrative examples. One is the contract learning process (Knowles, 1984): it provides a framework for thinking about and documenting experiences that provide learning opportunities. Prideaux and Ford (1988) describe the phases in a learning contract as:

- diagnosing a learning need
- specifying learning objectives
- developing a learning plan
- implementing the learning activities set out in the plan; and finally,

• evaluating the learning achieved and the benefits of the learning to that individual and to the 'others' with whom they work or interact.

Critical incident analysis is a technique designed to help individuals learn from and through experience. Those who describe this tool include Pedler, Burgoyne and Boydell (1986). Critical incident analysis requires the individual to document and reflect upon a specific incident or encounter which has occurred during the course of everyday experience, at work or elsewhere. The incident will usually be one which has created some discomfort, challenge, difficulty or surprise something that has not worked out as expected, whether that involves surprise, dismay or unexpected pleasure at how something has been managed.

The invitation is to reflect systematically on the experience from a number of viewpoints, through questions such as: what exactly happened?, what did I do?, what did I say?, what did others do or say?, how did I feel about what was happening?, do I have any idea of how they felt?, what was the impact of what I—and they—did?, did I do what I really wanted or needed to do?, if not, do I know why not?, what would I do differently *next* time?

This technique applies the action learning cycle to a particular event. Though it relies on memory of the events, it is like 'replaying the tape' and watching it in slow motion. It may also, where appropriate, access the experience of others involved—as a means of testing the reality of one's own interpretations and recollections.

Because reflection leads back into action of one kind of another, and action is followed by reflection of one kind or another, this technique increases the possibility that applied learning will occur. I define applied learning as a sustained change in behaviour.

Such a change can happen for several reasons. For example, systematically thinking about the experience can trigger new or deeper understanding of what is or was happening and, equipped with this insight, we can slightly modify our behaviour next time, or actively experiment with something quite different. Or the act of diagnosing and focusing can bring an issue into different perspective and lead to a reframing of what we think we are trying to do and actually need to do. When this reframing leads to a significant shift in the way we view the world and in the way we act in the world, we tap the full potential of the action research process.

The action reflection techniques of learning: levels of 'knowingness'

Argyris (1982, 1983, 1985), and Argyris and Schon (1974, 1978, 1989), have tried to develop a picture of the action learning process which illuminates what is happening when we reflect in the fundamental ways which Lewin and Revans had in mind. Argyris and Schon adopted the term 'single-loop learning' from cybernetics to describe the process of judging achievements solely in relation to predetermined goals (as in management by objectives and in most appraisal systems). They saw 'double-loop learning' (ongoing judgement of the adequacy of the goals themselves) and 'learning to learn' (improving the capacity of individuals, groups and the organisation as a whole to learn) as key elements of the learning organisation. These writers have also explored the concepts of implicit theories which guide behaviour, the defensive routines which prevail in social interaction and which make some subjects 'undiscussable', and 'double-loop learning' which involves recognising and bringing to the surface the theories and routines which limit effective individual and collective action.

Morgan has observed that in research, as in life, we 'meet our-selves':

Both (conversation and research) are forms of social interaction in which our choice of words and action return to confront us because of the kinds of discourse, knowledge or action that we help to generate . . . When we engage in research action, thought and interpretation, we are not simply involved in instrumental processes of acquiring knowledge, but in processes through which we actually make and re-make ourselves as human beings (Morgan, 1983 p. 373).

The practitioner, no less than the researcher, contributes to the creation of his or her professional experience. When experience, which we have generated by our own actions, jumps up and bites us in unexpected ways, we may experience what Argyris and Schon (1978) have called a 'dilemma of effectiveness'. This happens when our 'theories' (which we might or might not have articulated to ourselves and others) fail because they have failed to effectively predict or influence the behaviour of other people. Action research has the potential to create powerful learning for all parties by the experience of these dilemmas of effectiveness. Equally, it is possible for those involved to seal over the recognition of these learning possibilities and to revert to old routines. Argyris called his approach 'action science', arguing that by creating a more open relationship between the researcher and those 'researched', and by bringing to the surface and confronting the rules which govern their interaction, valid data is more likely to be collected.

Some years ago, I first worked with academic colleagues who were much influenced by the work of Argyris and Schon whose concepts are not necessarily easy to grasp. My colleagues were using the term 'meta-me' to describe the process of standing aside from oneself to observe and hear oneself in action, and to catch glimpses of the implicit theories, assumptions and values driving the behaviour. To use the 'meta-me', students were encouraged to imagine that they were capturing themselves on video- or audio-tape, and that they were able to replay the tape slowly and repeatedly after the event. Sometimes this was achieved by literally using video- and audio-tape, but most commonly by processes of visualising past events in the imagination, by role-playing them, and by 'journalising' them-that is, writing them down. The critical incident analysis described earlier is an example of this. The idea was that by writing things down or by 'replaying' them in other ways, one could see oneself for better or worse, recognise what might be done differently and plan-even rehearse—what that would involve.

I coined the notions of 'first', 'second' and 'third' positions or levels of awareness to assist students in understanding the metareflective process.

In the first position, we simply take action—we do what comes naturally, through habit, instinct or skills. We don't stop and think about it, we just do it.

In the second position, we do stop and think about it—usually because someone or something has challenged our first position behaviour in some way: perhaps we didn't get the response we expected, or perhaps we were facing something new or unfamiliar or difficult that caused us to stop and review our action.

In the third position, we stop and not only think, but think about the way we are thinking: we start questioning why we are doing what we are doing. For example, we might check the assumptions we've been making or the way we've been feeling or the motives behind our actions. When we act from this third position we are engaging in double-loop learning. Senge (1990) would say that we are reviewing our 'mental models', Argyris and Schon (1978) that we are accessing our 'implicit theories'. Both these phrases imply a reliance on thinking but the term third position extends this to emotional and intuitive processes and experience. From experience, I know that trying to be conscious of this process—trying to keep track of it and from time to time manage it, by deliberately shifting the gears from first, to second or third position and back again—requires will, skill and technique. There are numerous skills or meta-competencies involved, and my short-list would in include being able to:

- find the time and develop the discipline of reflection;
- 'tune in' to the data of experience—both one's own internal data (feelings, thoughts, reactions) and external data (what is going on in the world, including the reactions of others and the impact of one's own behaviour on others);
- frame and ask questions;
- be both patient and persistent in seeking answers;
- recognise when critical choices are being made—by oneself and others—which affect the work being done;
- live with the uncertainty, ambiguity, and sometimes risk, which arise when questions are asked and immediate or obvious answers are not forthcoming;
- force oneself to third position, even when that is hard and uncomfortable;
- spot the key assumptions oneself and others are making;
- reframe our understanding of things so that we create more options for action for ourselves and others, and greater flexibility in what we do and how we do it;
- look at what is uncomfortable for ourselves and our 'others' and to use that as a trigger for constructive growth; to even create 'crises of confidence';
- live with such crises of confidence in oneself and others;
- stand back and sort out the difference between internal and external data, and understand the point at which they merge so completely that separation is impossible;
- take responsibility for the unseen and unintended impacts of one's behaviour (both on oneself and on others);
- sometimes use oneself as a litmus test (for example, to assume that if a situation is making you uncomfortable, it may be making others feel the same way);
- avoid premature judgements;
- work collaboratively with others while at times challenging their practice and thinking; and being able to
- sometimes, switch off completely, go to first position and just do what comes naturally!

Argyris (1990) offers some specific guidance and techniques to assist in articulating implicit theories and revealing defensive routines, and Senge (1990) has identified as a 'learning discipline' the skills involved in bringing to the surface and testing 'mental models' (a concept which incorporates tacit assumptions, beliefs, implicit theories and other meaning schema).

Pope and Deniculo (1992) have tackled the issue from a different perspective, tapping into the thinking of the psychologist George Kelly. Kelly's 'personal construct theory' reflects a philosophical stance that human beings are continuously engaged in the process of constructing and reconstructing their reality and that 'no-one needs to be a victim of his [sic] biography' (Kelly 1955, p.15). Kelly's stance as therapist and educator was to encourage clients/learners to articulate their world views and regard them as hypotheses potentially open to invalidation: 'Finding better ways to help a person reconstrue his [sic] life so that he need not be the victim of his past' (Kelly 1955, p. 23). Pope and Deniculo (1992, p.106) have themselves used Kelly's repertory grid technique to bring to the surface personal constructs, plus techniques of concept mapping and 'snakes'; they also cite techniques like stimulus recall using videotapes (Woods 1985), diaries, logs or journals (Warner 1971), illuminative incident analysis (Pope 1981) and self narrative and ethnography (Elbaz 1988).

I have developed my own set of techniques for undertaking this work, in the context of facilitating learning. An example is the use of a set of trigger questions designed to reveal the researcher's real intention in engaging in a piece of behaviour: was the real intent to tell people something? to observe something? to look good? to seek information? to avoid conflict or to win the support of others? Chapter 2 specifically suggests the ways in which the use of trigger questions can be used to drive reflective practice around all three strands of the action research work—the action, knowledge and learning strands.

In order to use these sorts of techniques most effectively, Senge (1990) suggests that most people need the assistance of other people using what he calls the discipline of 'team learning'. Team learning skills include inquiring about people's ideas, assumptions and intentions; suspending judgement while they speak; actively listening to and acknowledging them; checking that the other person has understood properly; avoiding advocating one's own view; respecting differences in personal ideas, values and behaviour; guaranteeing confidentiality; and acting as colleagues not competitors.

These dialogue skills are not only essential for the learning strand of action research, but for the action and knowledge strands.

Chapter 6 explores the use of dialogue in developing and maintaining 'critical subjectivity' for the purposes of generating knowledge through research. In an action sense, working arm-in-arm with a client and maintaining transparency and mutuality of effort is very difficult without the skills of deep dialogue. I explore these skills elsewhere (Cherry, 1995).

Ethical implications of action research

Action research has the potential to raise many questions of ethical practice, both for the researcher and the 'others' engaged in the process. Its origins highlight its power to challenge not only existing practices and behaviours but also the values which underpin them.

Exposing and exploring ethical and other values—for self and others—poses many questions. How far do we challenge? What right have we to do so? How do we balance challenge with respect for the customs and traditions of others? Everyday, we see the philosophical and practical complexity of such challenge; it is particularly evident when crossing national boundaries and coming to terms with issues such as human rights, and the practice of payments which some cultures take for granted and others view as bribery and corruption.

There are no simple or prescriptive ways of answering these questions or of dealing with these issues, and much of the heartache involved in action research can arise from serious attempts to grapple with them. In dealing with any set of issues and dilemmas facing human beings, however, the researcher needs to ask the questions posed by Morgan (1983) about the values implicit in the research paradigm itself. Action research strives for transparency and mutuality in the way human beings work together and, compared with some other paradigms, more obviously 'wears its heart on its sleeve'. While I do not wish to tell others how they should resolve the ethical dilemmas they encounter, I do suggest one practical way of using transparency in the process so as to keep the ethical dialogue bubbling away throughout the life of the research.

I borrow the technique from Argyris (1991). It asks people to note the difference between what is going in their 'right-hand column'—the things they actually say and do—and what is going on in their 'left-hand column' (things they are thinking and feeling, but not communicating or acting upon). Serious accumulation in the lefthand column is often a practical trigger for review of the assumptions and values which are driving actual behaviour. The things left unsaid often guide us to the most fundamental dilemmas of practice, including the ethical ones.

As already noted, it is very challenging to maintain 'critical subjectivity' in our practice and 'keeping ourselves honest'—or even aware—in relation to our ethical stance: the gap between espoused theory and actual behaviour, can be the quintessential test of that subjectivity. Ongoing dialogue with others in the ways alluded to above and described in more detail in chapter 6, is one very practical way to engage with that challenge.

The work of the action researcher

This chapter reviews the three strands of the work involved in action research. For each strand, it offers a series of questions which can encourage the reflective activity involved in the action research cycle.

The action work

The impetus for action research is usually a problem, task, opportunity or challenge which exists independently of the action researcher. A need for action has been created by the aspirations, needs, difficulties, gaps, targets, aims and requirements of others. One or more of those others becomes identified as the 'other' or 'others' with whom we work, whether arm-in-arm, as Lewin (1946) envisaged, or at a little more distance.

Between us, we scope the work that we do together. The scoping might take the form of a specific brief: targets, performance indicators, action plans, terms of reference, timelines, budgets and so on. At other times, the work starts differently: it might have a slow and confused beginning, and then gather in focus and certainty as it continues.

Sometimes we are called to the action, invited, told, persuaded to undertake it. Sometimes we are passionate about doing something and go searching for a client or clients with whom to do it. The clients might be people we know or are close to, or people we have not worked with before. But wherever and however it starts, and with whomever it starts, action research addresses issues and situations which are by definition 'tricky'.

The action work on offer is by no means assured and is never a matter of simply following the program, rolling out the plan or joining up the dots. Somewhere, sometime there is going to be uncertainty, fuzziness, risk, ambiguity, conflict, surprise. There are going to

be times when we are stuck and our clients and stakeholders are stuck, and we are going to experience the challenge, individually and collectively, of not knowing what to do, or of trying things and finding that they don't work, even though they 'should have' or we 'meant well'. Our sense of what we are doing, how we do it, even why we are doing it, can and will change in the course of the work. If it doesn't, then it is questionable whether we are actually engaged in action research.

The tools for focusing our action

What are the questions which can guide us through the times of both clarity and the times of uncertainty? The use of the term 'client' suggests that there is much to be learned from the world of consulting which will help us to manage the work 'out there' which we must tackle together. While consulting offers a general framework, the particular professional, technical or academic disciplines of the action researcher and of the client will provide 'diagnostic guidelines', or frameworks, that will help to get to grips with what will be attempted and how. Whatever framework is used, it must be used consistently.

The biggest requirement of action research is that we continue to revisit our answers to our questions. The action discovery process stops when we cease to recycle the questions and the answers we give to them. Noticing how our answers change as we proceed is what drives the action research process.

A good piece of action research is one in which, firstly, the critical choices about the action taken at every step in the journey can be identified, and secondly, the factors which drove those choices can be identified. The choices might be conscious or unconscious at the time, but they represent the crossroads on the map. Anyone undertaking the same or a similar journey in the future—whether it is the action researcher or their client or the future reader of the action research report—will learn most when the signposts in the journey are identified and written boldly.

Here are some questions to guide the action work.

Where we start:

- who is the client or 'other'?
- what is the task?
- what's the point of it? how will it add value?
- what do we think we are trying to do?
- do we (the researcher and client) have the same understanding?

and the same level of understanding?

- why are we doing it? what triggered our involvement or interest?
- what are the drivers of the work: scientific curiosity? political or business necessity? ethical imperative?
- how did we get involved? did we initiate it? or was it already on the agenda? are we 'volunteering' or 'conscripted'?
- what's in it for us? what are our intentions?
 - to accomplish something for the pleasure of it?
 - to achieve status or recognition? to influence someone or something?
 - to be stretched and learn something?
 - to change something?
 - to 'do good'?
 - to challenge existing practices and mind-sets?
 - to please somebody?
 - to justify something?
- how did this piece of work get to be on the agenda?
- why are we doing it **now**?
- who has initiated or endorsed the work?
- who has authorised us? to do what?
- what values underpin the way the work is being framed and the techniques we will use to accomplish it?
- what ethical and political issues are implicated by the work? what stance will we take—privately? publicly?
- can we get a result?
- what resources and costs are involved? is it worth it?

Initial 'contracting'

- how are we framing or scoping the task or problem?
- can we describe the gap between where we are now and where we need to be?
- is it a gap in data? are there things we need to find out or clarify before we can proceed? or is there a gap in practice—things that need to be done 'better' somehow?
- what has been done or tried already?

- what can be learned from that?
- what new things will we do?
- how will this intervention make a difference? to whom?
 - can we get a result?
- what value will we add?
- what specific contributions will we each make and do make?
- what specific roles will we take and do take?
- what are our mutual expectations?
- what constraints and resources are available to us?
- what yardsticks will we use to evaluate the success of our efforts and which do we use?
- what levels of commitment and energy for the task do we all bring?

Stakeholder analysis:

- who else thinks this is important? why?
- who else is likely to be affected? or get involved?
- whose help and endorsement do we need?
- how will we get it?
- what are the needs and agendas of all these stakeholders?
- what level of energy or commitment will and do they bring?
- what is the level of our own energy and commitment?
- at what point do we also want to walk away? take shortcuts?
- how will this experience change us?

Relationship management:

- how close do we want to be with these clients and stakeholders?
- what style of working will we adopt?
- how do we handle authority and power relationships?
- how do we deal with conflict?
- how do we communicate?
- how are these issues enriching or limiting the progress of the work we are doing together?
- what influence strategies will we regard as legitimate to use?

Understanding the context:

• what is our understanding of the context in which we are working?

- what's the lived history of the client system?
- do we understand it deeply in terms of its vision? its aspirations?
 - its culture? history? social, political and psycho-dynamics? what is valued? its prevailing ethics?
- what are the prevailing paradigms?
- how do these paradigms impact on the way our task is defined?
 - the people who are 'experts' or whose opinion matters? the rules for doing things?
- what are the key assumptions the paradigm is based on? are these changing?
 - is that change recognised within the system?
- what is discussable in this context?
- what is unacknowledged?
- what is the larger system in which we are placed as we do this work?
 - is it local? global?
 - how does it work?
- can I make our answers to these questions explicit?

Kinds of interventions:

- what specific techniques will we use to accomplish this work?
- how else could we go about it?
- what professional and other perspectives and standards will govern the timing and choice of interventions?
- why are we choosing some techniques and not others?
- is the role of the action researcher changing with the use of different techniques?

is he or she highly visible and highly interventionist—a teacher, expert, advocate and 'doer'?

or is the role one of process observer, active listener, coach or sounding board?

- what critical choices are being made as we go along about what we are doing and how we do it?
- what assumptions are driving those choices?
- who else is involved in making them?
- what might be the unintended consequences of our involvement?

- how will we know?
- what ethical principles will guide our actions?

The evaluation:

- who will evaluate the success of the action?
- what criteria will they use?

Focusing the knowledge work

In this part of the work, the researcher confronts the challenge and the joy of extending and enriching our collective understanding of the way things and people work in the world. Since there are many ways of knowing or understanding phenomena, it is here that the researcher is most likely to engage with the great practical and philosophical questions of ontology (the varieties and validity of knowledge) and epistemology (the ways in which knowledge is formed). These questions have significant implications for all researchers, whether engaged in action research or not. The action researcher needs to be clear about where the knowledge contribution of action research sits in the spectrum of ways of knowing. Chapter 4 explores the ontological and epistemological status of action research.

Here, it is important to recognise that there are many ways of studying a frog: we can dissect it, watch it in the frog pond, watch it in a simulated pond in a laboratory, listen to a frog, look at frogs in art, read about frogs in stories or act like a frog. All these ways allow us to find out aspects of frogs: which method we use depends on the sort of knowledge we seek. Finding the appropriate tools of research—of knowledge accumulation fit for our purpose—is one of the first questions which any researcher confronts.

The challenge for the action researcher, who is engaged in helping to make practical differences to what is done and how well it is done in the world, is that both researcher and client may, unknowingly, be wearing blinkers which limit their understanding. This is the stage of unconscious incompetence: we don't even know that we don't know!

The path of action research is frequently one of revelation, revelation of the limits to what we know how to do, rather than illumination of what we should do. Our action steps inevitably take us into the unknown to places of uncertainty. We find out more about the limits to our practice by making the action experiments described earlier. The mistakes we make are often the things which generate inquiry, but we might also have a genuine curiosity about something—an urge to keep finding out more about something, no matter how much we already know.

When we feel stuck for an answer or stuck for a technique, there are many people and places to turn to: we explore what is already known and practised by others. 'Benchmarking' is a common word for learning from the practice of others; 'literature review' is a scholarly phrase for exploring systematically what is known or thought by others and written down.

Out of these processes of exploration comes several ways of knowing. We can simply validate the knowledge and practice of others: apply it in a place and time and context that is not significantly different from the way they did it. And that is a useful thing to do: much of the value of the positivist approach to research is to provide us with medicines and bridges and technologies that are reliable. We can be confident that they will work, provided we don't ignore the user instructions on the packet.

Action researchers often find themselves in situations where the conditions specified on the packet don't exist, or vary significantly from the ones described by the inventor or manufacturer. This creates the opportunity for a different kind of knowledge-making: the creation of knowledge by taking what is already known and applying it in conditions which are different. When we can say 'I took the risk of applying the technique or knowledge in a different context, and it works here too!', we have added to our sum total of knowing. That's why it is so important for action researchers to specify the conditions and context in which they worked so that the next person knows exactly 'where they were coming from'.

Sometimes the action researcher creates new knowledge and practice. It is the nature of action research that these new approaches are likely to be grounded in experience, to have arisen from trying to make a practical difference to something or someone. In the process, it is possible to generate insight and methods which challenge existing ways of thinking and acting. These challenges often constitute a reframing of old issues and problems in ways which make them more accessible and manageable. Sometimes, the challenge represents a whole paradigm shift, an entirely new way of seeing the world which creates new issues, opportunities and problems, and new 'rules' for dealing with them.

Sometimes the world is grateful for this newness and sometimes the action researcher is confronted with resistance from clients, colleagues and other stakeholders. The learning work then becomes one of knowledge-sharing and creating the environments in which learning for self and others can happen. Single-, double-, and triple-loop learning represent varying degrees of challenge for both the researcher and those who participate in, or are affected by, the research journey.

The next chapter takes up some of those challenges. For the moment, we can list some of the questions which the action researcher pursues in the course of the knowledge work.

Finding out what we know or can do already:

- what do I (and my client) think we already know about this? what critical constructs, mental models, theories or biases do we bring to the work?
- what questions are we asking? and what propositions or positions are we advocating?
- what are we really confident about doing or knowing?
- what critical assumptions does our knowledge depend on?
- what sorts of things would shake our confidence in what we think we know or can do?
- what counts as existing wisdom?
- where did our knowledge come from? who else believes it?
- how could we find out how ignorant we are? who or what could inform us about the extent of our ignorance?
- how will existing wisdom block or limit the development of new insight?

Focusing our knowledge work:

- what do we want to find out? or do better? why?
- what do we want to do with our knowledge?
 - to describe or map things?
 - to explain things?
 - to evaluate things?
 - to help change things?
 - to do things better?
- are we clear, as a result, about the epistemological significance of anything we find out?

Learning from others:

• who else knows about this? has written about it?

talks about it? does it? can be observed doing it?

- how does the experience of others help us to understand our own experience?
- how can we tap into their wisdom? is their wisdom tacit or explicit?
- is it likely to be captured in the scholarly literature? heard on TV?
 - read in the popular press?
 - available through the Internet?
- what are the strengths and limitations of the frameworks and constructs used by others?
- how do we decide which benchmark is relevant to our organisation?
 - our immediate problem? our people?
- how does our experience and thinking compare with that of others?
- what do we make of the differences of opinion out there? will we pretend they don't exist? make an effort to integrate or learn from all of them?

Choosing a research approach:

- what research paradigm will we use? is it the right tool for our purpose? and what specific techniques will we use for extending and generating our collective knowledge base?
- what assumptions are associated with the paradigm? and with the specific research techniques being used? what other conditions must be satisfied for them to be appropriate and effective?
- to what extent have our personal preferences driven our choices in relation to methodology?
- what sort of data will we pay attention to? regard as relevant? ignore? dismiss? simply not see because it doesn't fit our paradigm?
- what will we do when we don't understand what we encounter? or like what we find?

• does our research method see data as something 'out there', existing independently of me, waiting to be 'found' or 'revealed'?

or does it acknowledge data as the experiences, ideas and other phenomena that we create?

- how relevant is our own internal data? the feelings, thoughts and imaginings generated from our current experience? or the gifts and baggage we bring from our specific history and shared cultural and social context?
- how much data will we need before we are prepared to let it inform our action experiments?
 or share it with others?
- how will we 'reality test' our observations and experience?
- how will we sustain a state of 'critical subjectivity?'
- how will we keep open the possibility that we will be 'surprised' by our data?
- what ethical, ideological and political issues are involved in our selection and use of research strategies?

Linking knowledge and action proactively and retrospectively:

- how will we keep track of the way we use knowledge and action together?
- when are we proactive?
- when do we go to the literature or the knowledge of others for advice?

to inform and guide our actions?

- when are we retrospective?
- when do we go to the literature or to others to help us understand what has already happened?

to make sense of our experience?

Creating and sourcing our new knowledge:

• did our insights come from thinking grounded in the data generated by our own actions?

from watching or listening to others?

from our logical thinking process?

from imagination?

from emotional connections we made?

from the meticulous collection of external data?

• do we have a range of ways of reframing our individual and

collective experience and data so that we get the richest possible understanding of it?

is our sense-making limited by our preferences for working with 'hard' data, with intuition, with logic, with values or with emotion?

Sharing knowledge:

- are we able to replicate existing knowledge?
- can we extend its application?
- have we clearly described the context and the players involved in our action piece so that future readers and practitioners can decide on its relevance to them?
- have we put clear instructions on the packet?
- can we place ourselves accurately on the knowledge map?
- do we know where our contribution sits relative to that of others?

relative to what is already known?

• how can our knowledge be made accessible to others?

Focusing the learning work

Chapter 1, and also chapter 3, cover many of the learning opportunities and challenges involved in action research and that material won't be repeated here. One obvious but key point that does need to be highlighted here is that the action researcher—and the client or 'other' —are learning through the process of research. In the physical sciences, it is common to talk of a catalyst for change: a substance which triggers change in others substances but is not changed itself. In action research there is no place for the notion of catalyst: engagement in the research process substantially changes the researcher's practice.

Some of the questions which can trigger learning during action research are set out below.

Creating the learning agenda:

- what skills do we (researcher and client) want and need to acquire through this work?
- what shifts in our practice do we anticipate?
- how will this work challenge our comfort zone? our competence?

Developing learning challenges:

- how well articulated and consistently enacted is our existing praxis?
- how will we draw out our existing but tacit or unconscious competence?
- how do we ask 'dumb-smart questions'?
- how do we admit to ignorance?
- what are the opportunities for single- and double-loop learning for the researcher and for others?
- how far—and how persistently—are we prepared to challenge our own and others' paradigms?
 - at what point will we simply 'walk away'?
- what is our responsibility for others? how far should we 'protect' them? shelter them from ambiguity and complexity? or expose and challenge them?
- how much are we expected to 'know' things? to be expert?
- how will we deal with anxiety and uncertainty in ourselves and others?
- how far will we try to contain or limit it? control it? 'manage' it?

Learning to learn:

- what specific learning strategies will we use?
- how will we sustain 'playful' curiosity? keep an open mind? suspend judgement?
- how will we tackle team learning?
- how will we build a learning community?
- how can learning be facilitated across groups and the organisation?
- how do our preferences impact on our learning?
- how will we keep track of our learning? what will be the signs of effective learning?
- what else can we do with our learning? how can it be leveraged? shared?

Facilitating and leading change:

- what change processes and strategies will we offer to others?
- what will be our role in leading or facilitating change?
- what are we finding out about the psychology of individual and group change?

about systemic change?

Using the questions

The number and range of questions posed in this chapter might look overwhelming at first glance. Not every action researcher will ask all of these questions. However, most will end up asking a reasonable proportion of them and will add many of their own. The point is that action research is, by its nature, a process of sustained and critical inquiry, and it is the failure to sustain inquiry which ultimately limits the quality and depth of the action, knowledge and learning work. These questions sustain that inquiry. What may, at first glance, appear formidable is a natural part of the process and becomes 'second nature' to those involved.

The questions do, however, underscore the potential challenge of getting the 'others' involved in action research to ask and answer the same range of questions. The next chapter takes up that theme.

Action research and the transformation of practice

The contribution of reflective practice

This chapter returns to the learning strand of the work of the action researcher. This is not because the action and knowledge strands are less important, but because, in a sense, the learning strand integrates the other two. In the learning work, our practice—what we actively do—is informed by knowledge and vice versa.

As discussed in chapter 1, learning of a particular kind is central to the action research paradigm: learning which has the capacity to challenge and fundamentally transform the way those who engage in it understand, experience and do things.

The challenges in this kind of learning are sometimes formidable: initiating and facilitating deep individual and collective learning in complex and rapidly changing work and social settings is no easy task. Action researchers have the potential to make major contributions to our capacity to engage with that sort of change.

There are many ways in which learning, in the sense of changes in practice, can occur during the course of action research. As with all human learning, some of that learning is spontaneous and unplanned, while some emerges from calculated strategies. Moreover, since learning may involve the head, the heart, the senses and the imagination, the learning work involved in action research may be equally varied. Furthermore, learning can occur at a number of levels: at relatively superficial and easily acquired shifts in routine through to 'frame breaking' changes in the way we think, feel and do things. Since action research applies itself to situations and tasks which by definition (see chapter 1) are ambiguous and complex, then the possibilities for learning in and from the research become a voyage of discovery, with all the attendant pleasures and discomforts of significant travel and of fellow travellers.

It is not merely the action researcher who does the learning work. The aim in action research is to accomplish useful change for and with others. The learning work the action researcher undertakes goes beyond their own learning to encompass, and facilitate, learning or change in the practices of others, whether these are a few people or the players involved in very large systems.

This chapter explores some of the challenges involved in all these aspects of the learning work.

The overarching significance of the learning work

It is interesting to note that the word *learn* derives from Middle Higher German *lesa* meaning 'to follow or find the track, to follow, to go after.' The Latin *lira* means 'the earth thrown up between two furrows' (Klein 1971).

These definitions seem very apt in the context of action research. Braun's definition of action research, quoted earlier, implies the importance of learning. Action research uses changes in practice as a way of inducing improvement in the practice itself, as well as in the situation in which it occurs, the rationale for the work, and in the understanding of all of these. As Braun et al. (1988) note, action research uses strategic—that is, purposeful—action as a stimulus for improvement and understanding.

Many definitions of organisational learning capture Braun's emphasis on both doing and reflecting. The significance of learning as a skill for individuals, organisations and societies cannot be overstated. Freed (1992) uses the term 'relentless innovation' to describe humankind's capacity to invent, and effectively implement, new ideas and possibilities affecting almost every facet of human life and behaviour. This capacity for innovation is 'relentless' in that no society or political regime can successfully stifle it; increasingly, it is global enterprise or community which owns and spreads the fruits of innovation; and technology itself is now harnessed for the process of invention and implementation, most spectacularly in the use of computers to 'invent' their own descendants.

Freed notes that the result is a global age characterised by generic uncertainty and deep instability, in which the critical commodity is knowledge; the critical skill is creating, identifying and applying the right knowledge; and competitive advantage rests almost solely on the ability to learn, and to act on the learning.

This is the so-called 'post-industrial age', the age of information and information technology, characterised by interactive multimedia; global knowledge networks and information 'super-highways'; and a rate of innovation which means that most of the knowledge which organisations will use in the first decade of the millennium has not yet been invented (Lepani 1994).

It is in this vein that McGill et al. write about the need for organisations to reinvent themselves through the process of generative learning and transformative change:

> 'Generative' (double-loop) learning emphasises continuous experimentation and feedback in an ongoing examination of the very way organisations go about defining and solving problems. Managers in the companies demonstrate behaviours of openness, systemic thinking, creativity, self-efficacy and empathy. By contrast, adaptive or single-loop learning focuses on solving problems in the present without examining the appropriateness of current learning behaviours (McGill et al. 1992, p. 5).

Similarly, Goss et al. write about companies whose need and skill is not simply to improve themselves but to reinvent themselves, to create a powerful new vision and then to manage the present from the future, to use the new vision to create a new self or *being*:

> we Westerners have few mental hooks or even words for excursions into being. They (the Japanese) call it *kokoro* (Nonaka, 1991). In contrast, Westerners typically assess their progression through adulthood in terms of personal wealth or levels of accomplishments. To the Japanese, merely *doing* these things is meaningless unless one is able to become deeper and wiser along the way (Goss et al. 1993, p. 101).

I believe that action researchers need to explore and add to what is known about how these processes of generative learning and reinvention can be made to happen, both for individuals and for larger collectives of people.

Facilitating deeper layers of collective learning

There is a huge literature on organisational learning and change management which cannot be effectively reviewed here. Further, as Sharratt and Field note, the capacity of organisations to engage in collective learning—either right across the organisation entity or in substantial bits of it—has been the subject of a 'substantial and rapidly growing body of rhetoric' (1993 p. 129). However, Goss et al. (1993) examine organisations, some of them very large multinational corporations, that have gone beyond rhetoric: these organisations have successfully incorporated into their business planning and practice what we can identify as high order learning strategies, including reflective techniques. These organisations were prepared to break, and re-create the mould in which they were doing business: if not the mould for the entire operation, at least for those parts essential to the success of the business mission and strategy. Goss et al. suggest that these companies did a number of things very well; and these suggestions, together with some other key practice issues thrown up by the literature, I believe are key pieces of advice for the action researcher.

The extensive quotations below from Goss et al. illustrate significant global examples of organisational learning. Bold type has been used for those aspects of the commentary that relate to the *reflective* capacity of the organisation concerned. 'Real' action research, in Kurt Lewin's (1946) terms, is about increasing the capacity of systems and the people who comprise them, to undertake precisely this kind of deeply self-reflective activity.

Suggestion 1: These organisations were able to assemble a critical mass of key stakeholders.

Goss et al. comment:

Leading pilgrims on the journey of re-inventing an organisation should never be left to the top eight or ten executives. It is deceptively easy to generate consensus among this group; they usually are a tight fraternity, and it is difficult to spark deep self-examination among them. If there are revelations, they may never extend beyond this circle.

As proven by the experiences of such companies as Ford, British Petroleum, Chase Bank, AT & T, Europcar, Thomas Cook, and Haazen-Dazs, this group must encompass a critical mass of stakeholders—the employees 'who really make things happen around here.' Some hold sway over key resources. Others are central to informal opinion networks. The group may often include critical but seldom-seen people like key technologies and leading process engineers. The goal is a flywheel effect, where enough key players get involved and enrolled that it creates a momentum to carry the process forward (Goss et al. 1993, p. 105). **Suggestion 2:** These organisations undertook a complete organisational audit: a thorough ('third position') investigation designed to reveal and confront the company's true competitive position.

The best approach is through a diagnosis that generates a complete picture of how the organisation really works: what **assumptions** are we making about our strategic position and customer needs that may no longer be valid? Which functions are most influential, and will they be as important in the future as they were in the past? What are the key systems that drive the business? What are the core competencies or skills of the enterprise? What are the shared values and idiosyncrasies that comprise the organisation's being? (Goss et al. 1993, p. 106).

Suggestion 3: They created a sense of urgency, discussing the undiscussable.

There is a code of silence in most corporations that conceals the full extent of a corporation's competitive weakness. But a threat that everyone perceives and no one talks about is far more debilitating to a company than a threat that has been clearly revealed. **Companies, like people, tend to be at least as sick as their secrets** (Goss et al. 1993, p. 106).

Suggestion 4: They effectively harnessed contention.

There is an obscure law of cybernetics—the law of requisite variety—that postulates that any system must encourage and incorporate variety internally if it is to cope with variety externally Almost all significant norm-breaking opinions or behaviour in social systems are synonymous with conflict. **Paradoxically, most organisations suppress contention; many managers, among others, cannot stand to be confronted because they assume they should be 'in charge'. But control kills invention, learning and commitment. Conflict jump-starts the creative process** Contrary to what many Westerners might think about the importance of consensus in Japanese culture, institutionalised conflict is an integral part of Japanese management. At Honda, any employee, however junior, can call for a *waigaya* session. The rules are that people lay their cards on the table and speak directly about problems. Nothing is out of bounds. Waigaya legitimises tension so that learning can take place. The Japanese have learned to disagree without being disagreeable and to harness conflict in a wide variety of ingenious ways (Goss et al. 1993, p. 107).

Suggestion 5: They engineer organisational breakdowns.

It's clear that re-invention is a rocky path and that there will be many breakdowns along the way: systems that threaten to fall apart, deadlines that can't be met, schisms that seem impossible to mend. But just as contention in an organisation can be highly productive, **these breakdowns make it possible for organisations to take a hard look at themselves and confront the work of reinvention.** When an organisation sets out to reinvent itself, breakdowns should happen by design rather than accident The executive teams must identify the core competencies they wish to build, the soft spots in existing capabilities, and the projects that, if undertaken, will build new muscles (Goss et al. 1993, p. 108).

McGill et al. (1992) also offer some striking examples of organisations that seem to have successfully engaged in what the authors describe as generative learning, including Arthur Andersen (USA), Taco Bell, Whirlpool and BP (UK). McGill et al. draw some conclusions about the management practices in these learning organisations:

> The key ingredient lies in how organisations process their managerial experiences. Learning organisations/managers *learn* from their experiences rather than being *bound* by their past experiences. What does it mean to learn from experience? William Tolbert, in Learning from Experience, writes 'Learning involves becoming aware of the qualities, patterns, and consequences of one's own experience as one experiences it.' Drawing upon Tolbert, one can define four different but related levels of organisation experience: (1) the external world—environment, competitors, customers, and the like; (2) the organisation's/manager's own actions-strategy, policies and procedures, management practices and so on; (3) the organisation's/manager's own problem-identification, problem-definition and problem-solving processes—culture, expertise, and functional orientation, for example; and (4) organisational consciousness—the experience of all of the above.

Adaptive organisations experience events *only one level at a time*, and this exclusive focus limits learning to that level . . . What are the managerial practices found in generative learning organisations?. . . Management practices encourage, recognise, and reward those managers whose behaviours reflect five dimensions: openness, systemic thinking, creativity, a sense of efficacy and empathy (McGill et al. 1992, p. 10).

Finally, Sharratt and Field's (1993) review of the organisational learning literature notes a number of recurring themes, each of which has some interesting implications for what an organisation's, and an individual's reflective capabilities need to be.

The first theme is the need for organisations to develop a brain-like culture. Morgan (1986) contrasts the traditional organisation with the learning organisation. In the traditional organisation thinking and doing are split, each section and division is a well-defined subject of the whole, the structure is bureaucratic and processes are algorithmic. In the learning organisation, each part of the organisation encapsulates the whole, there is an emphasis on holistic thinking and planning, structures tend to be more fluid and interlacing, and processes rely more heavily on intuition and guesstimates when data is unavailable. This suggests that reflection needs to be a process that brings thinking and action close together (both in time and space), that it is something which transcends organisational structures, and that it incorporates holistic and intuitive thinking as well as fact-based logic.

A second theme is the **need for learning to take place at all levels of the organisation as a whole.** From this perspective, organisational learning cannot be treated as a discrete event or technique as can structured training sessions with discrete groups of individuals from particular levels or sections of the organisation. **Reflection emerges as a collective, social act which brings together people** from all levels and functions.

A third theme is the **importance of the organisation's absorptive capacity** (Cohen and Levinthal 1990): the capacity of an organisation to process and exploit valuable information without getting overwhelmed. While this concept includes relatively straightforward ideas, such as the extent to which managers know their market, it generally includes mechanisms and responsive patterns which go beyond the capacity of any one category or employee to implement. It suggests that sense-making involves interdisciplinary or cross-functional effort in which information and ideas are regularly shared, distilled, and collectively brought to bear on complex or important organisational issues.

A fourth theme is the **importance of recognising the learning potential of planning.** Mintzberg's (1987) description of the crafting of corporate strategy cited earlier, balances the notions of *deliberate* (planned) strategy with *emergent* (flexible) strategy; balances the time of 'quantum leaps' with periods of consolidation; balances cycles of convergence and divergence; balances thinking and action. For Mintzberg, the learning organisation is one in which planning enables the organisation to transform its understanding of its past, experiment with new behaviours, and create new visions and options for the future. It is an organisation in which distinguished 'craftspeople' are both inspired visionaries and inventors, *and* masters of detail—noticing and finding strategies, patterns and visions for the future that form from their own behaviour, as well as from sudden flashes of illumination.

For Mintzberg, as for Ansoff (1985), effective planning and learning are about dealing successfully with today's world while creating the world one wants for tomorrow. These are very important concepts, given my observation that much of the literature tends to imply that change is something to be reacted to, that living in the age of discontinuity is a bit like riding a bucking horse, and that all one can do is hold on tight. Indeed the very definition of discontinuity (cited earlier) suggests that experience counts for nothing when faced with such change.

Both Mintzberg and Ansoff have been at the forefront in suggesting that effective change management and learning (and by implication, reflection itself) contain both reactive and creative elements, for which both experience and vision are essential. Their thinking here is reflected in McGill et al.'s (1992) and Goss et al.'s (1993) comments, cited earlier. De Gues (1988), formerly with Shell, also examined the learning potential of planning processes especially where there are opportunities to explore and reflect on different scenarios in a non-judgemental environment, and to value the personal experience of contributors.

The fifth theme which Sharratt and Field identify—as do McGill et al. (1992) mentioned earlier— is the **need to go beyond 'single-loop learning'**.

These comments suggest that learning is a skill in its own right possibly a 'meta-skill' which generates other skills—and that doubleloop learning is potentially the most important, since it unlocks the other learning skills, both for organisations and individuals.

The challenges of developing individual and collective practice

The previous section highlighted some rich possibilities for ways in which action researchers can seek to extend their own learning capacities as well as that of the 'others' with whom they work.

It is also useful to consider the challenges this involves for individuals and organisations who take seriously the task of developing individual and collective learning, including the capacity for sustained and deep reflection.

> ... learning and changing ... are two of the most basic yet least effectively performed human activities. Learning has been defined as 'the process by which behaviour is modified as the result of education and experience' (Mussen et al. 1969). Attempts to understand how learning occurs, and how the continuing interaction between individuals and their environment leads to changes in people's capacity to perform, have been the pre-occupation of behavioural scientists for many decades. Yet it is still not possible to present a complete set of theoretical learning principles which are applicable to all circumstances (Lansbury 1992, p. 16).

There have been numerous attempts to identify these learning principles—and it is well beyond the scope of this work to summarise them or to review them helpfully. However, in the field of adult learning, the seminal work of Reg Revans (1982) and Malcolm Knowles (1984) needs acknowledging.

In *The Adult Learner: A Neglected Species* (1984, first published 1978), Knowles provides a comprehensive overview of learning theory; he distinguishes the 'propounders' from the 'interpreters' of theory, and divides learning theories into mechanistic and organismic models or world views.

The mechanistic model offers a view of humankind that is reactive, passive and robot-like: it sees activity as the result of external forces. The organismic model sees humankind as active and *self-reflective*: it emphasises the significance of the role of experience in facilitating or inhibiting the course of development. It is the organismic model of learning that sits most comfortably with the aspirations of action research (see chapter 1) and its ontological status (see chapter 4).

Long before Knowles published these ideas, Reg Revans was doing pioneering work in the United Kingdom. The Origins and

Growth of Action Learning (1982) gives a comprehensive account of Revans' thinking over the last fifty years. As Lessem notes in the introduction, Revans faced continuous scepticism and hostility—particularly in the UK—to his ideas. Yet Revans persisted in finding practical ways to help individuals in organisational settings to learn from, and in, action; he also tried to develop theoretical explanations for the practices he espoused. 'The paradigm of system beta', 'the psychology of the deliberated random' and 'action learning and epistemology' are all attempts to ground his practice in well-reasoned constructs. Whatever the value of Revans' theories, his practice has inspired many who have since tried to develop their understanding, and particularly their practice in this field.

The complexity and emotional cost of learning

Anyone who has idly dipped into the massive literature on facilitating, leading and managing change in the behaviour of people in organisations, could easily be overwhelmed by the sheer complexity of those activities. Indeed, the literature's message is so powerful that it has led a number of Australian commentators to observe that the single biggest leadership challenge facing organisations today is how to make change a trigger to positive learning and development at all levels of the organisation, rather than the beginning of widespread anxiety, resistance and cynicism (see, for example, Dunphy & Stace 1990).

Robin Snell (1988, 1989), among others (for example, Burgoyne 1976; Mumford 1980; Kolb 1984; McCall et al. 1988), has researched on-the-job managerial learning and development. Snell suggests that for managers most of this learning is triggered in response to problems or situations which others thrust upon them rather than through their deliberately searching out problems and learning opportunities. He was struck by the levels of what he calls 'distress' embodied in managers' learning practices: distress he defined as 'mental pain, severe pressure of want or danger or fatigue' (Snell 1989, p. 23). Common triggers for learning include negative feedback, 'big mistakes', being overstretched, being under threat, impasse, injustice, losing out, being on the receiving end of poor role modelling and being under personal attack. As Snell points out, these are not the only things that trigger learning: the alternatives can be very positive and pleasant experiences: such as learning from others or being presented with challenging but essentially enjoyable tasks. Some individuals display high levels of what he calls 'natural curiosity', actively seeking

out new experiences and seeing almost every experience, new or not, as an opportunity for learning.

Nonetheless, Snell's overriding conclusion was that these managers:

had not used the full range of possible learning patterns and had undergone unnecessary pain and discomfort in their learning . . . the implications are that managers need help in combining productivity, elegance and opportunism in their choice and use of learning patterns (Snell 1988, p. 322).

Snell suggests that managers should be taught to turn 'hard knocks' to advantage, so that such experiences are the trigger for positive rather than negative learning and experience. He also believes that a small amount of planned uncertainty and discomfort, here and now, could yield crucial learning and spare much unexpected pain at a later date. Along with Honey (1989), he advocates that managers need to be taught to be opportunistic learners, to learn when they can not when they must. Thus Snell's work goes beyond Knowles's observations. The reality of adult learning, and what seems to trigger it in practice, appears to be complex in ways that Knowles does not directly acknowledge.

In a later article, Snell (1990) describes a number of 'psychological-cultural' and 'structural' blockages to learning.

Psychological-cultural blocks he sees as resistances within an individual which are also rooted in the systems of values and beliefs within groups and societies. One such blockage is a **failure to learn from 'hard knock'**, where the person sinks into psychological with-drawal, burnout, cynicism or chronic disillusionment, drawing on bad feelings rather than focusing on improvement. People experiencing the blockage may put all their energies into blame and a desire for retribution, or cling obsessively to old plans, ignoring both their own feelings and those of others.

Another barrier is 'fear of perturbation' (Snell 1990 p. 18). Opening out to perturbation requires one to accept the risks attached to confusion and self-discovery. Casey (1987) suggests that the prospect of self-discovery is frightening to many managers who have coped for years by denying areas of ignorance or incompetence. Snell remarks:

My hunch is that the strongest defences stem from *bitter* experiences. The prospect of learning through 'live' experience is

daunting because we are most aware of the need for experiential learning when we face threat or adversity; confusion is associated with set-backs and worry rather than with excitement, and self-discovery with horrific bad news about oneself. I see a parallel between emotional blockage to experiential learning opportunities and the way formal learning occasions have for some managers become associated with distressing memories of sarcasm, boredom and intimidation in the school classroom (Snell, 1990 p. 18).

Obsession with short term results and an unwillingness to take time out for adventure and reflection can be a significant barrier. In organisations fixated on results achieved in short time spans—which could be most organisations—being 'open to perturbation' can seem like a waste of valuable time which would be better spent in delivering on the bottom line. Goss et al. (1993) among others notes the 'doing trap'—the sense that many organisations and individuals have: that if they are not engaged in continual activity, they are not working: taking time out to sit and think or read, while revered in Japan, would be seen as 'opting out' or 'resting' in Australia. The 'doing trap' can result in a situation where the individual or organisation does the same thing over and over again, but expects different results. When engaged in frantic activity, it can be difficult to accept that if you want a different result, you will have to do something different.

Lack of an appropriate world view is another barrier, says Snell. He suggests that 'Freebie learning opportunities are legion':

> but taking them demands at least a recognition that it is worth paying attention to the special concerns of other people, and ideally a combination of independence of mind and curiosity about and respect for other people. . . It entails a 'worldview' that . . . brings with it an awareness of multiple ways of perceiving, valuing and acting in social settings . . . [one which] . . . delights in paradox, ambiguity and the exploration of differences in order to resolve complex and disparate social, political or aesthetic problems (Snell 1990, p. 19).

Snell (1990), Honey (1989) and Argyris (1982, 1990) have all reported pessimism about this. Argyris has regularly argued that nearly every organisational context induces distorted information,

reinforces mistrust and deception and encourages games of coercion, resistance, protection and attack.

Argyris (1990) has explored some of the structural barriers that seem to limit the capacity of individuals and teams to process information. There are tendencies to engage in games of covering up, work to rule, control and self-defence; in most organisations above a certain size where the structures are pyramidal and authoritarian, such tendencies are exacerbated. He believes that such covering up is endemic, and that covering up the cover-up becomes a well-practised skill carried out to prevent embarrassment or threat, thereby creating 'undiscussables' and high levels of self-deception. Argyris suggests that even highly educated professionals engage in what he calls organisational defensive routines so as to preserve their status and sense of security.

Argyris advocates 'Model II' learning, which invites people to deal with incongruence, inconsistency, lack of clarity and ambiguity by confronting them constructively. He concludes, however, that this requires people to learn new ways of collaborative learning; Argyris is pessimistic about the prospects for such learning while organisations reward competitive win–lose, low-risk-taking interactions and suppress cooperative problem-solving, high-risk-taking interventions.

Similarly, Martin (1993) describes how, in searching for the source of problems, people often want to look outside themselves, and often outside the company, blaming the stupidity of the customer or client, the vagueness of strategic goals, or the unpredictability of the environment.

However, in Martin's view, organisations defend against change not because they mimic insecure individuals, but because they consist of individuals (many of whom may be insecure!) who are working at what has always worked. An organisation's practices (one aspect of its 'scripts') may provide a powerful context for inertia. To understand and break out of that inertia, it must be capable of 'third position' thinking at an organisational level, be able to understand its own life story, how it got to be where it is, and what 'where it is' truly looks like.

Martin then describes how the articulation of a founder's vision, the consolidation of steering and control mechanisms, the deterioration in necessary feedback and the proliferation of organisational defensive routines, combine to provide what Snell (1990) calls structural barriers to reflection on why people have come to act the way they do. Why is this?

> Because people are not at their best when faced with a largely uncertain future. Traumatised by past events, they determine

never, never to make the same mistake again—and wind up mistaking the old crisis for the new one. They fear for their jobs or even for the jobs of the people who have been counting on their judgement. They fear their bosses or their boards. They avert their eyes from quantitative evidence contradicting their expectation. They snap at people who give voice to their repressed doubts. They demonise the competition, scoff at customers, infantilise themselves, and parentalise the CEO . . . corruption begins when people start saying one thing and thinking another (Martin 1993, p. 83).

None of this is good news for those who must live successfully in the age of discontinuity. Is there anything to be done about it? The rest of this chapter explores those issues of working with discontinuity, ambiguity and the kinds of cultural practices that are appropriate at such times.

Reflection-in-action: a 'kind of knowing'

The previous discussion highlighted some of the challenges associated with learning and the reflection that makes up one of the tools of learning. Arguably, however, the kind of reflection that leads to insight and learning is made difficult by another aspect of the human condition. In *Educating the Reflective Practitioner*, Schon (1987) describes this issue in ways I've found helpful.

In the Preface, Schon remarks that the book attempts to answer the question: 'What kind of professional education would be appropriate to an epistemology of practice based on reflection-in-action?' He suggests that:

university-based professional schools should learn from such deviant traditions of education practice as studies of art and design, conservatories of music and dance, athletics coaching, and apprenticeship in the crafts, all of which emphasise coaching and learning by doing. Professional education should be redesigned to combine the teaching of applied science with coaching in the artistry of reflection-in-action. . . The generalised educational setting, derived from the design studio, is a *reflective practicum*. Here students mainly learn by doing, with the help of coaching. Their practicum is 'reflective' in two senses: it is intended to help students become proficient in a kind of reflection-in-action; and, when it works well,

it involves a dialogue of coach and student that takes the form of reciprocal reflection-in-action (Schon 1987, p. xii).

A major point of departure for Schon is his observation that:

in the varied topography of professional practice, there is a high hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution. The irony of the situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however great their technical interest may be, while in the swamp lie the problems of greatest human concern (Schon 1987, p. 3).

Such messy, problematic situations arise when the task or issue falls outside the categories of existing theory and technique, when there are serious conflicts among the values that are being brought to bear on the situation, or when there are varying multi-disciplinary perspectives available to us. These indeterminate zones of practice—characterised by uncertainty, uniqueness, conflict and confusion—sit apart from the canons of technical rationality. Yet, in an age of discontinuity, arguably these are precisely the sorts of situations which become central to professional, and certainly managerial, practice. Schon argues that this has caused crises of confidence: in society, in some of its most time-honoured professions, such as medicine and the law, and in the professional schools which have produced these practitioners.

He suggests that one solution is to reverse the traditional relationship between education and competent practice. Instead of making the assumption that competent practice is drawn from the 'high ground' of professional educational preparation, he invites us to ask what we can learn from a careful examination of artistry—that is, the competence by which practitioners actually handle indeterminate zones of practice.

Artistry he defines as:

an exercise of intelligence, a kind of knowing, though different in crucial respects from a standard model of professional knowledge. It is not inherently mysterious; it is rigorous in its own terms; and we can learn a great deal about it . . . by carefully studying the performance of unusually competent performers (Schon 1987, p.5).

Schon uses the term professional artistry to refer to the kinds of competence practitioners sometimes display in unique, uncertain and conflictive situations. He observes, however, that their artistry is a high-powered, esoteric variant of the more familiar sort of competence all of us exhibit every day in countless acts of recognition, judgement and skilled performance.

What is striking about both kinds of competence is that they do not depend on our being able to describe what we know how to do, or even to entertain in conscious thought the knowledge our actions reveal. We know the 'feel of things'—the feel of 'hitting the ball right', and we can readily detect when something is wrong. But we often find it easier to describe deviations from 'normal' performance or experience than to describe the norm itself. Schon uses the term 'knowingin-action' to describe spontaneous skilful performance which we are unable to articulate.

Schon's thinking poses some interesting questions: what forms does learning—and reflective learning—take when neither learner nor coach can readily articulate the current state of 'knowingness' or competence and what it consists of (in other words, the whole range of mental models, habits and unconscious skills and other personal scripts that sit behind it), nor what is involved in developing it, enriching it or sharing it?

If reflection is about sense-making, how can sense-making happen when words don't come easily and concepts elude us? What forms of communication are available to coach and student under these circumstances? On what factors does effective communication depend? In the design studio, when both coach and student are working as practitioners, what will their interaction be like? What will help and hinder it?

Schon suggests that skilled practitioners often effect learning tacitly through what he calls 'reflection-in-action'. The process he describes is very similar to the action-learning cycle described in chapter 1. We begin by bringing to a situation spontaneous, routinised responses (what I've described as 'first position' behaviour), which produces an unexpected outcome—a 'surprise', whether pleasant or unpleasant—that is outside our categories of knowing-in-action. Surprise leads to reflection within an action-present ('second position' behaviour) in which we ask ourselves, 'What's happened? What do I need to do differently?' Reflection then triggers 'on-the-spot' experimentation which leads to adjustment of the behaviour. This whole process might occur very quickly, appear very skilled to an independent observer, and might not be articulated at a conscious level by the person involved (in other words, there might be no 'third position' reflection at all). It is epitomised by the skilled improvisation displayed by jazz musicians or dancers, who must 'feel' where the music or steps are going, rather than 'thinking it through'.

Schon's ideas here pose an entirely different set of challenges for those who wish to use reflection to facilitate their own or others' learning. What happens when we don't have the words to say it?

Using metaphor when the words don't come easily

Nonaka (1991) asks this question from an organisation perspective and the perspective of organisations whose need in the information age is for 'knowledge-creating'. He suggests that creating and implementing new knowledge (that is, innovating) is not simply a matter of 'processing' objective information; rather, it depends, firstly, on tapping an individual's (or individuals') tacit and often highly subjective insights, intuitions and hunches, and then on making those insights available for learning and use by the company as a whole. Nonaka says this requires personal commitment and trust, based on shared understanding and accurate collective insight into what the organisation stands for, where it is going, what kind of world it wants to live in, and how to make that world a reality. It also implies the commitment and energy to go on re-creating and renewing the organisation and everyone in it.

In this process, tacit knowledge and understanding needs to be made explicit, in order to be shared and for innovation to happen. While explicit knowledge is formal and systematic, and can be communicated in product specifications or in a scientific formula or in a computer program, the tacit knowledge which is the source of innovation can be highly personal and hard to formulate. In the words of the philosopher Michael Polanyi (1958), we know more than we can tell. Nonaka writes:

> Tacit knowledge is deeply rooted in action and in an individual's commitment to a specific context—a craft or profession, a particular technology or product market, or the activities of a work group or team. Tacit knowledge consists partly of technical skills—the kind of informal, hard-to-pin-down skills captured in the term 'know how'. A master craftsman after

years of experience develops a wealth of expertise 'at his fingertips'. But he is often unable to articulate the scientific or technical principles behind what he knows. At the same time, tacit knowledge has an important cognitive dimension. It consists of mental models, beliefs and perspectives so ingrained that we take them for granted, and therefore cannot easily articulate them (Nonaka 1991, p. 98).

Nonaka goes on to suggest four basic patterns for creating knowledge or learning in any organisation:

• from tacit to tacit (through observation, imitation and practice, as in 'apprenticeship');

In this pattern, neither the apprentice nor the master gains any systematic (that is, shareable) insight into their craft knowledge and so it cannot easily be leveraged by the organisation as a whole;

• from explicit to explicit (collecting, combining and synthesising many existing pieces of explicit knowledge from different parts of the organisation);

This combination does not really extend the organisation's knowledge base, although it might make it more accessible and thus more likely to be used;

- from tacit to explicit (the conversion of local knowledge into explicit knowledge that can be accessed, used and enhanced by others);
- from explicit to tacit (the internalisation of knowledge by others, so that their own 'artistry', to use Schon's term, is broadened, extended and reframed).

These four patterns of learning are vital for the knowledge-creating company, but they all depend on being able, at some point, to articulate that knowledge.

Nonaka acknowledges that this means finding ways to 'express the unexpressible'. He has some suggestions about how to do this, pointing to what he regards as one of the most frequently overlooked management tools: the store of figurative language and symbolism that managers can draw on to articulate their intuitions and insights. He says that this evocative and sometimes highly poetic knowledge figures very prominently in product development in certain Japanese companies.

For Nonaka, metaphor is an important figurative language:

By metaphor, I don't just mean a grammatical structure or allegorical expression. Rather, metaphor is a distinctive method of perception. It is a way for individuals grounded in different contexts and with different experiences to understand something intuitively through the use of imagination and symbols without the need for analysis or generalisation. Through metaphor, people put together what they know in new ways and begin to express what they know and cannot yet say (Nonaka 1991, p. 100).

Metaphors start the dialogue, establish a connection between two things that seem only distantly related, thereby setting up a discrepancy or conflict which suggests multiple meanings: thus metaphor can carry dialogue into truly creative effort.

Applications to the development of praxis

Schon (1987) makes suggestions on the forms reflection might take when the knowledge or skill being developed is initially, or even mainly, tacit. His suggestions flow from using the models of the design studio (as in architecture) and the master class (as in drama or music).

For example, the coach observes as the student makes a 'local' experiment (that is, deals with some small component of the whole task), and then asks the student to observe the effect of what they have done; the coach might then 're-frame' the problem, by asking the student to view the local experiment in the context of the whole, thereby inviting attention to both the whole and the unit; experimentation itself might lead, eventually, to a reframing of the whole.

But what happens when the current situation—brought to light by the student's task or efforts—is unique? How does the skilled coach-practitioner make use of his/her accumulated experience? When familiar categories of theory or technique cannot be applied, how is prior experience brought to bear on the invention of new frames, theories and categories of action?

In some respects, Schon's suggestion approximates the technique suggested by Nonaka: the skilled practitioner has, in fact, built a repertoire of examples, images, understandings and actions, and he or she uses one or more of these: not as templates for the unfamiliar situation which confronts them now—they cannot be templates since they are essentially different from what is at hand—but rather as metaphors. By treating the current unfamiliar situation as if it were something else, the practitioner opens up possibilities for dealing with it.

Schon suggests that both coach and students are better able to deal with the unfamiliar if they engage in 'rigorous experimentation', that is, being fully open to the evidence which the experiment produces, whether it be failure or success. The coach must also have the ability to construct and manipulate 'virtual worlds' for the purposes of experimentation: these constructed worlds are a representation of the real world of practice.

However, the challenge in developing skilled practice is nicely illustrated in Schon's account of the 'paradox of learning to design'. I've quoted Schon's words at length because they seem, at this point, more apt and helpful than a paraphrase:

Initially, the student does not and cannot understand what designing means. He finds the artistry of thinking like an architect to be elusive, obscure, alien, and mysterious. Moreover, even if he were able to give a plausible verbal description of designing—to intellectualise about it—he would still be unable to meet the requirement that he demonstrate an understanding of designing *in the doing*.

From his observation of the students' performance, the studio master realises that they do not at first understand the essential things. He sees, further, that he cannot explain these things with any hope of being understood, at least at the outset, because they can be grasped only through the experience of actual designing. Indeed, many studio masters believe, along with Leftwich, that there are essential 'covert things' that can never be explained; either the student gets them in the doing, or he does not get them at all. Hence the Kafkaesque situation in which the student must 'hang on to the inflection of the tone of voice . . . to discover if something is really wrong.'

The design studio shares in a general paradox attendant on the teaching and learning of any really new competence or understanding: for the student seeks to learn things whose meaning and importance she cannot grasp ahead of time. She is caught in the paradox Plato describes so vividly in his dialogue the *Meno*. There, just as Socrates induces Meno to admit that he hasn't the least idea what virtue is, Meno bursts out with this question:

But how will you look for something when you don't in the least know what it is? How on earth are you going to set up something you don't know as the object of your search? To put it another way, even if you come right up against it, how will you know that what you have found is the thing you didn't know? (Plato 1956, p. 128).

Like Meno, the design student knows she needs to look for something but does not know what the something is. She seeks to learn it, moreover, in the sense of coming to know it *in action*. Yet, at the beginning, she can neither do it nor recognise it when she sees it. Hence, she is caught up in a self-contradiction: 'looking for something' implies a capacity to recognise the thing one looks for, but the student lacks at first the capacity to recognise the object of her search. The instructor is caught up in the same paradox: he cannot tell the student what she needs to know, even if he has words for it, because the student would not at that point understand him.

The logical paradox of the *Meno* accurately describes the experience of learning to design. It captures the very feelings of mystery, confusion, frustration, and futility that many students experience in their early months or years of architectural study. Yet most students do attempt to carry out the paradoxical task.

The student discovers that she is expected to learn, by doing, both what designing is and how to do it. The studio seems to rest on the assumption that it is only in this way that she can learn. Others may help her, but they can do so only as she begins to understand for herself the process she finds initially mysterious. And although they may help her, *she* is the essential self-educator. In this respect, the studio tradition of design education is consistent with an older and broader tradition of educational thought and practice, according to which the most important things—artistry, wisdom, virtue—can only be learned for oneself (Schon 1987, pp. 82–4).

Given Nonaka 's views (cited earlier) on the urgency for finding ways of speeding up and making more effective the transfer and creation of knowledge, Schon's message introduces more complexity.

None of this means, of course, that the facilitator is irrelevant and can do nothing to enhance the quality of learning, including reflective learning. Nor does it mean that there are not ways of working with oneself to enhance one's own learning and reflective capabilities. It does suggest, however, that the behaviours to be used are much more subtle and complex than a glance at the literature on the learning organisation would suggest.

And it is fitting that it should be so. As human beings are 'infinite in their variety' (to misquote Shakespeare), their behaviour and the tasks they set for themselves both inside and outside of occupational settings are only as limited as the human imagination itself.

If an individual wants growth in the deepest sense, then one must agree with Brouwer (1964), that deep growth is required, one that may entail a change in self-concept—certainly in self-understanding.

Growth in this sense brings observable changes in outward behaviour, because each person is now inwardly different different, for example, in his perception of himself, in his attitude toward his job and his company as both relate to his own life, or his feeling of responsibility for others.

But experience shows that such growth is as difficult to achieve as it is desirable. It demands the full-fledged participation of the (person). . . He does not change because he is told to, exhorted to, or because it is the thing to do.

Such growth implies changes in the man himself—in how he uses his knowledge, in the ends to which he applies his skills, and, in short, in his view of himself. The point is clear that the growing person examines himself; and as he does do, he emerges with new depths of motivation, a sharper sense of direction, and a more vital awareness of how he wants to live on the job. Growth in this sense is personalised and vital (Brouwer 1964, p. 38).

In accepting the complexity and individuality of the individual, and the challenges this poses for the practitioner in the field of learning, the practitioner must attempt to craft a praxis that is fit for the task.

The status of action research as a research methodology

This chapter begins with a review of the ontological and epistemological issues involved in selecting a research methodology; it then considers the ontological and epistemological status of action research itself.

Blaikie (1993) offers a series of key questions to guide what he calls 'professional practice and inquiry'. The questions are intended to help structure any systematic piece of investigation or inquiry, in any discipline:

- What do I want to know?
- What counts as data?
- What do I want to do with the answers?
- How do I collect data?
- How do I make sense of it when I've collected it?

These questions, supported by appropriate controls and rigour in generating, collecting and analysing data, become the basis for planning and implementing a research strategy.

They are deceptively simple questions. The first two require the researcher not only to frame the subject matter of the research, but to think about the subject matter in ontological and epistemological terms—in other words, to ask: 'What sort of subject matter am I dealing with?', 'What sort of knowledge am I after?' Unless these questions and their answers are carefully considered, it is arguable that the choice of a research paradigm becomes a matter of whim and happenstance:

The selection of method implies some view of the situation being studied, for any decision on how to study a phenomenon carries with it certain assumptions, or explicit answers to the question, 'What is being studied?'. Just as we select a tennis racquet rather than a golf club to play tennis because we have a prior conception as to what the game of tennis involves, so too in relation to the process of social research, we select or favour particular kinds of methodology because we have implicit or explicit conceptions as to what we are trying to do in our research... When we frame understanding of the research process in these terms... we are encouraged to see the engagement entailing different relationships between theory and method, concept and object, and researcher and researched, rather than simply a choice about method alone (Morgan 1983, pp. 19–20).

Choosing the right paradigm

Ontological and epistemological issues

In acknowledging that we have some choice about research paradigms we enter significant ontological and epistemological debates—that is, debates about the nature of reality and how knowledge about reality is created.

A fundamental **ontological** question is whether 'truth' or 'reality' is something waiting 'out there' to be found or revealed by investigative effort (**realism**), or whether human consciousness 'creates' its own reality (**nominalism**) (see Hughes 1980).

A related **epistemological** question is whether knowledge is something **objective**, to be accumulated independently of the perceptions of any particular observer (as suggested by **logical positivism**, Comte 1864) or something **subjective**, a product created by the observer. The latter view is the perspective of **anti-positivists**, including those who take the **interpretative** viewpoint (see, for example, Lewin 1946 and Schutz 1967).

There are many variations at each 'end' of these ontological and epistemological spectra. Each variant has practical as well as theoretical significance. This is because different ontological and epistemological assumptions will suggest different paradigms and methodologies for the process of research. Logical positivism uses *inductive logic* in its methods of inquiry; typically, this involves the collection and classification of observations, the development of concepts and generalisations which would account for the observations and then the testing of those concepts. Critical rationalism, a later development of positivism, works in the opposite direction, so to speak. It employs *deductive logic*: the hypothetico-deductive-approach which begins with a theory, question or idea, draws some conclusions from the theory which can be tested, and conducts those tests by gathering data and observing outcomes. If the test fails, the theory is rejected. If it succeeds, the theory is supported but not 'proven' (for a fuller account, see Blaikie 1991).

When the subject of research is human behaviour, the debate becomes even more interesting. The positivist view of the world is that social and psychological phenomena can be defined and discovered in the same way as events in the natural world. 'Reality consists essentially in what is available to the senses' (Hughes 1980, p. 20), and is seen as having an existence external to and independent of the individual's view of it. Exploration of that reality requires objectivity and a process of scientific inquiry which is uncontaminated by the biases, values and perceptions of the observer. Only factors that can be directly observed and objectively measured form acceptable data. **Structural functionalism is the research paradigm which meets the positivist's criteria for scientific inquiry and it is arguably the one which has dominated sociological and psychological inquiry in the first half of the twentieth century (Hughes 1980).**

As Jones (1985) points out, the desire to use positivist procedures in sociology has a long history. Comte (1864), who was the first to call the subject sociology, believed that the scientific method which had enabled humans to understand the laws governing nature would also reveal the laws of social behaviour. He considered that social structures are as given and predetermined as any phenomenon in nature:

> Daffodils do not choose to be yellow, frogs do not choose to croak and have bulging eyes, water does not choose to freeze. They do nevertheless. This is just 'how things are'. . . For (positivists) the same is true of society. We do not choose to believe the things we believe or to act in the way we act. . . Preexisting cultural rules *determine* our ideas and behaviour through socialisation. Thus, in the same way as natural phenomena are the product of laws of nature, so people's ideas and actions are caused by those external social forces which make up social structures. Because of this similarity between the two kinds of subject matter—nature and society—the consensus theorist argues that the means by which they are investigated should be similar too (Jones 1985, p. 83).

Comte's successor, Durkheim (1858–1917), extended this thinking by suggesting that society is a normative structure of 'social factors' which exists external to individuals and which constrains their behaviour:

the social world is a pre-existing cultural entity for its members. . . .(and) since social facts exist independently of people's minds, they should be capable of being investigated independently of their minds too. That is, as factual, objective phenomena, they should be as capable of being observed empirically as are the equally objective and external phenomena which make up the natural world. . . Since behaviour and belief are determined by external structural forces, all we have to do is discover the number of times people do or say they think things. What we then have is empirical evidence of the forces that have produced this behaviour and belief. A social science can proceed just like a natural one. Hypotheses can be tested against empirical evidence. . . (Jones 1985, p. 84).

The interpretivist view of the world is rather different. It sees 'social reality' as fundamentally different to 'reality' in the natural world. Social reality is thought to be constructed by the actors in the situation. In *The Social Construction of Reality*, Berger and Luckmann provide a powerful description of this process of construction.

From this perspective, the task of the researcher is to discover the processes or mechanisms through which social actors develop and negotiate the meanings that guide their behaviour and make sense of their actions. Instead of the researcher approaching the subject with pre-determined theories about reality, 'reality' is 'pre-interpreted' and constructed by those one is observing (Blaikie 1991). The researcher must immerse him or herself in the actors' world (as a participant observer), to attempt to get 'inside' reality as they define it. Once inside that reality, the researcher can identify and describe the actors' interpretations of reality and the processes by which they are constructed.

The logic employed here is *abductive* or *dialogic*. It involves listening for and reconstructing the theories and constructs used by the actors, instead of imposing one's own theories or borrowing and applying the theories of others developed in other situations (Blaikie 1980). The researcher begins by identifying the language used by the actors in ordinary day-to-day situations to describe and explain their experiences and concerns.

It might involve explaining what the actors seem to take for granted, that is, their assumptions and beliefs. The researcher attends to the differences between his or her own way of seeing the world and the actors', and might ask: 'What behaviour of theirs is challenging or at odds with my own?' Blaikie (1980) describes the actors' construct

as first level (descriptive) constructs which the researcher uses to generate second level (explanatory) constructs: these have meaning and value within a technical framework or discipline area, such as sociology, to explain the 'everyday life' of the actors.

Schutz (1967) calls these second level constructs 'ideal types', and suggests that to be validated, they must meet the 'postulate of adequacy'—that is, they must be **recognisable**, acceptable and owned by the people or situations from which they are derived. The researcher must then check back to establish this adequacy; in doing so, the researcher generally discovers new elements which must be incorporated into first and second level constructs. This happens both because the researcher has left something out or has misunderstood the actors, and because—as in the construction of grounded theory and in action research—the dialogue with the researcher deepens, challenges and changes the understanding which actors have of their own thoughts, words and actions. The dialogic is thus iterative in nature.

Within the interpretivist paradigm, there are a number of cultures of inquiry. They include pure description (phenomenology), description and interpretation (hermeneutics), and description, interpretation, explanation and action (action research).

Criteria for choosing a research paradigm

In choosing between alternative research paradigms, it is conventional to use criteria like these:

• reliability:

can the findings it generates be replicated? will it generate enough 'useable' data? are the data representative?;

- internal validity:
 - are the conclusions warranted by the observations and data collected?
 - is the logic involved systematic and vigorous?;
- face validity:

is it a credible paradigm to use in the circumstances—in the eyes of the communities which judge the result of the research effort?; and

• generalisability:

are the findings or conclusions drawn from this piece of research applicable anywhere else?

do they help us to understand other situations?

Using those criteria, positivism and the structural functionalist research paradigm have appealed widely to the scientific community. This includes scientists in the field of psychology, where, in all but the European tradition of psychodynamic psychology, the American behaviourist tradition (Watson 1925) has led to a reliance on the hypothetico-deductive method as the major research paradigm.

However, these criteria omit the one attributed to Morgan (1983) at the start of the chapter: does the tool fit the job? In other words, does the research paradigm fit the phenomena being investigated? and is it consistent with the researcher's understanding of the 'reality' to be investigated?

Here, Georgi's (1993) comment on the behaviourist approach is interesting. He calls it the ultimate contradiction: a theoretical model that, in principle, excludes the phenomenon of consciousness is being used to study persons with consciousness. In its original form (Watson 1925), the behaviourist tradition firmly discounted mental phenomena as having any relevance to the subject of human psychology—a view, ironically, that is contradicted by the very elaborate lengths to which experimental psychology goes to eliminate, or control for, the effects of the human experimenter.

For this writer, Georgi put it very well when he said:

It is significant to note that psychology dates its beginning with the founding of a laboratory by Wilhelm Wundt in Leipzig, Germany in 1879. The laboratory, after all, is the most potent symbol of the natural sciences. To most contemporary practitioners of the field, psychology came of age when it brought the 'study of consciousness' into the laboratory. From the perspective of this writer, it was precisely such a move that has saddled psychology with an albatross that will hinder its development until it is discarded. A psychology that deals with humans ought to be a human science.

Studying consciousness adequately in the laboratory implies that consciousness presents itself to us in everyday experience like a thing. Clearly this is not the case. Consciousness does not hold still for one to study and is better characterised as a stream, a flow, or a lived flux. It is precisely its 'non-thing-like' character that impresses one. But since the laboratory was built in order to investigate nature more thoroughly, and is best suited for phenomena that fit the 'thing-model', how could it also be the best place to study a phenomenon like consciousness which is essentially characterised as being the opposite of a thing? Part of the meaning of a thing, it should be noted, is that it is conceived to be without consciousness . . . Of course, the issue can be forced, and that indeed is what has been happening in mainstream psychology. A researcher will set up constant conditions with the assumption that consciousness, as a dependent variable, will respond to the conditions in a systematic and predictable way, as though it were merely a product of its conditions and externally dependent on them. What is captured by such a procedure is deemed to be psychological data and it is not realised that more has escaped the procedures than has been captured by them. This is the basis of reductionism in psychology.

What needs to be added here is the fact that none of the historical definitions of psychology, experience, behaviour, or the unconscious behave differently from consciousness in such a setting. These phenomena do not manifest themselves like things: they would all demand descriptive properties quite different from the inertness of a thing. All of the above phenomena have to be understood in terms of intentionality, ie. a directedness to events outside themselves that make them essentially different from things. Thus, what is demanded by the subject matter of psychology is rather an expansion of the conception of science that can appropriate such phenomena faithfully as well as a philosophy that can give legitimacy to such an expansion (Georgi 1993, pp. 3–4).

As a final point, it is interesting to consider the emergence of what D'Avis (1984) calls a 'new unity of science'. The contention here is that the sciences have moved a long way since the great epistemological and ontological debates began:

New findings and developments in natural sciences altered the image of its subject in such a way that it is necessary to revise its methodology. Strikingly enough, these changes acknowledge features of the subject which have previously been thought to be typical for social phenomena. Thus, the opportunity for a new unity of sciences emerges . . . Once it is acknowledged that there are processes in nature which are self-organising, unpredictable, complex, systemic, specific and unique, a range of new themes is introduced into natural sciences which have been thought before to belong exclusively to social sciences (Altrichter 1992, pp. 85–86) (italics in original).

This has prompted Altrichter to speculate about what a new unity of sciences would mean for methodology. He suggests that an alternative methodology would include the following features:

• No general guiding rules for research: The methodology does not include a limited set of general rules by the help of which we can distinguish scientific from unscientific research, nor a firm foundation by the appeal to which we can secure the decency of our research even from the outset. The main intention of the methodology is . . . to keep the space of research and insight open since it is aware of the fact that useful procedures and methods may be developed we cannot foresee, and also of the fact that procedures which we know to be problematic on a general level may be of limited worth in specific settings (Altrichter 1992, p. 89).

This idea seems to be consistent with Morgan's (1983) concept of 'fitness for purpose' mentioned earlier.

• Continuing research (or inquiry) into one's research methodology: Research is not the application of pre-specified methods, but it is methodological in itself, is essentially a reflexive endeavour . . . the methods (chosen) are to be tested as much as the hypotheses offered and the conclusions reached (Altrichter 1992, p. 89).

This way of thinking shifts to the researcher the burden of not only carefully selecting the research methodologies and techniques used, but of continually evaluating their effectiveness as the research proceeds. This form of iterative inquiry sits very comfortably with the action research approach.

The capacity of action research to generate useful knowledge

This section discusses the ontological and epistemological status of action research.

As a research paradigm, action research has appeal because it allows investigation to commence exactly like a fishing trip: with a hunch that the waters were worth fishing. Given that it frequently begins with a fuzzy or ill-defined issue, it is important to comment on the capacity of action research to generate useful knowledge. There are at least two important issues to be considered here:

- one is the capacity of the paradigm to generate an understanding or knowledge of a situation which is helpful in enabling the researcher and other players to take effective action;
- the other is the capacity of the paradigm to generate understanding or knowledge which is useful to others, in different situations.

By 'understanding or knowledge', I mean both the capacity to describe what is happening and the capacity to explain it: that is, construct a theory about why it is happening. Both involve the construction of meaning or 'sense-making'.

Action research falls within the framework. So it needs to be acknowledged that the findings or conclusions drawn from action research are not necessarily easy to generate and apply to other situations—that it produces 'local knowledge'. (It could also, and ironically, be argued that, in its efforts to maintain scientific rigour from the positivist perspective, psychological research has produced research results that are so narrowly focused and fragmented as to be of little practical value (Westland 1978).)

Nonetheless, the issue is an important one. For the researcher, the issue is: 'Will I be able to make this technique work again with a different person? in a different situation?' For the other players in the situation, the issue is: 'Will we able to do this again, by ourselves?' For 'outsiders', the issue is: 'Will it work for us? in a different organisation, industry, culture, etc?'

For the practitioner engaged in action research, the importance of understanding and impacting on a particular or local situation can be so great that the consideration of producing more broadly applicable knowledge is almost a luxury. For the researcher, however, the need to do both creates a potential tension between the need for me or us to understand it and 'get it right this time', and the need to prove that how I/we got it right can be replicated.

There are at least two ways in which researchers are encouraged to handle this tension (see, for example, Dick 1992):

- one is by the use of cyclical or iterative processes which encourage the researcher to continually test his/her ideas in action;
- the second is the use of what Dick (1992) calls the dialectic working with multiple information sources, which are

preferably independent of one another, and ensuring that other people engage with and check the researcher's thinking and action.

Carr and Kemmis (1986) emphasise the former, as do Kemmis and McTaggart (1988) in *The Action Research Methodology*. This is a methodology which Kemmis and McTaggart have applied extensively in their teaching at Deakin University, in Victoria.

The essence of their approach is to use a defined cycle of research consisting of four steps: plan, act, observe and reflect. The cycle is carried out by the participants or clients of the intervention; it is not something done to the clients by the researcher. It is called an 'emancipating' approach because it is said to 'liberate' those who are researched from the prevailing value-sets of the contexts in which they work. The researcher works 'arm-in-arm' with the client (Prideaux 1990), in a collaborative relationship.

Dick's (1992) 'dialectic' is really a variation on what is known as 'triangulation' (Jick 1979). The idea is to use similarities and differences in the data from different sources to increase the rigour of the progress; for example, by using:

- different informants or participants, or different samples of informants or participants;
- different research settings;
- using various perspectives, theories and disciplines to pose differing questions on one topic which are then posed to the one informant or participant;
- information collected at different times;
- different researchers;
- different research methods.

The aim here is to maximise both the internal validity of the process (the rigour of the conclusions reached) and its generalisability. Dialectical methodologies go beyond replication in aiming to create rigorous checks on the logic and the application of convergent techniques so as to reduce the reliance of the process on any one individual.

At this point, It is perhaps useful to comment on the logic and processes which are involved in action research. Action research has the potential to combine the inductive, deductive and abductive logic processes described earlier, although—as already acknowledged—it does not meet the criteria of positivist science. The deductive approach is a 'top-down' one: it assumes that we have a theory, an idea, a vision, a proposition or a hypothesis which we test against what is actually observed. Apart from being the logical thing to do when we have an idea which we want to try out, this approach focuses the investigation and usually sets limits around what's relevant and what's not. It allows us to test descriptions and explanations against some form of experience.

The inductive—or 'bottom-up'—approach invites us to start out with a set of observations and then find constructs or theories which will describe or explain the phenomena observed. It is the equivalent of going on a fishing trip when all we have is a 'tip-off' that some waters may be more fertile than others. It has the advantage that it may limit the temptation to make premature and unwarranted assumptions about what is being dealt with. It encourages us to go looking for the right questions, instead of the right answers, and increases the likelihood that we will be 'surprised' by what we experience since we deliberately try to limit the extent to which we impose limits on our potential experience.

Compared with a 'top-down' approach, the inductive approach has the decided disadvantage of being 'messy', unfocused, potentially time-consuming and expensive. Potentially, everything is relevant data and 'grist to the mill'.

Real-life social research arguably, and generally, combines these two approaches—leaving aside the rigid hypothetico-deductive methodology beloved of experimental psychology.

As a paradigm that falls within the interpretivist framework, it is hardly surprising that the abductive logic or dialogic approach can also be easily incorporated in action research. The iterative nature of that logic process is particularly apt. Because action research is an iterative, cyclical process, it provides focus but has the potential to keep presenting us with richer and more extensive data, with all the attendant possibilities of surprise. The researcher can literally go on engaging with the data—in the form of conversations, dialogue, listening, observing, reading—for as long as needed, until there are no more useful possibilities or meanings to be created. Experience is continually recycled; earlier experiences and data are revisited with the wisdom of accumulated learning; further and new experience is planned in light of what went on before, but whatever happens on the journey, whether planned or unplanned, it will be systematically reviewed and evaluated.

Checkland's (1981) 'Soft Systems Methodology' is an example of abduction which uses dialectics to generate the 'ideal types' mentioned earlier in this chapter (Schutz 1967).

Baburoglu and Raun (1992) take the logic one step further by adding what they call the 'constructivist epistemological argument': the contention that action research can be based on, and devoted to the construction of, images of desirable futures, so-called 'future theories' and not focused solely on the solution of current or pre-existing problems and issues. 'Future theories' identify ends and means for both individual and organisational development. Baburoglu and Raun see these as being generated jointly by the stakeholders in a system and the involved action researcher, and as being tested every time the stakeholders follow that theory's prescriptions for action.

In the next chapter we consider in more detail the question of subjectivity in action research and the impact it has on the usefulness of action research methodology.

Individuality and subjectivity in action research

Its implications for generating data, knowledge and learning: An exploration of subjectivity

Action Research for Change and Development (Zuber-Skerritt 1991) is a collection of papers which includes contributions by Australian researchers and academics. It integrates and critiques recent thinking and practice in the application of action research in higher education settings; and the issues and conclusions are also relevant in many other settings. It contains sophisticated thinking about the epistemological and ontological significance of action research (see, for example, Altrichter's discussion of validation: 1992, pp. 82–4).

Aside from Zuber-Skerritt's book, I have become increasingly concerned about the way in which the literature sometimes treats subjectivity and the individual's own search for meaning and understanding. For example, in illustrating dialectic processes in action, Dick describes convergent interviewing which uses paired interviews to create a dialectic:

So for example, if two interviewees disagree about x, whatever x is, look for exceptions in later interviews. If the interviewees disagree about x, try in later interviews to explain the disagreement. If only one person mentions x, ignore it (Dick 1992, p. 14).

This comment I found surprising since it suggests that the reaction of one individual is to be ignored if it doesn't fit with the views of others. Such a statement is potentially influential because it appears in a document specifically prepared for the purpose of advising Australian postgraduate students on how to conduct action research.

While acknowledging the need to balance individual knowledge and understanding with the generation of collective wisdom, I agree with Georgi's (1993) comment: that, almost without knowing it, people with an anti-positivist interpretivist perspective can put themselves back into a positivist view of the world, in which personal, particular and local understanding and wisdom is potentially both undervalued and even actively discouraged in the research context.

Perhaps, at heart, we are all realists. By contrast, the *solipsistic* perspective is a very challenging one for human beings, including researchers, to accept: the solipsistic perspective is an extreme nominalist view of the world which sees each of us trapped in individual realities of our own making with no way of ever knowing whether it is shared by anyone else (see Hughes 1980). We reach out, in many different ways, for reassurance that there are other human beings out there, that there are things which have solid shape and real existence independent of our own existence.

We also, at times, reach out for 'truth' and knowledge in various forms, for the comfort that comes from shared understanding. The existential anxiety associated with any other conception of the universe is perhaps too daunting to contemplate. Even the interpretivist who seeks explanation within the realm of individual consciousness and subjectivity—within the frame of reference of the participant as opposed to the observer of action—may have trouble with the solipsistic proposition, and take shelter in a realist view of the world.

Reanney makes the point well:

I want to stress how axiomatic this (realist) assumption is and how deeply it colours our thinking; the idea that a human mind can experiment with Nature in such a way that the experimenter does not influence the outcome of the experiment lies at the core of the scientific method; it is the basis for the doctrine of 'objectivity'. This doctrine has paramount status in our culture, not just in physics but in the so-called 'social sciences' that look to 'hard' science for their validation. This assumption is pervasive, powerful, accepted, compelling—and *wrong*.

The insight that has restructured our vision comes from a branch of physics called *quantum mechanics*. Stripped of its complexities, the insight is simply this, that the act of observation changes the nature of the thing observed, that the observer and the observed, far from being separate, are coupled in the most intimate of ways.

Physicist John Wheeler summed up this radical refocussing in these words:

Nothing is more important about the quantum principle than this, that it destroys the concept of the world as 'sitting out there', with the observer safely separated from it by a 20cm slab of plate glass. Even to observe so minuscule an object as an electron he must shatter the glass. He must reach in. . . Moreover the measurement changes the state of the electron. The universe will never afterwards be the same. To describe what has happened one has to cross out that old word 'observer' and put in its place the new word 'participator'.

Precisely because it comes from the direction they least expect it, namely science itself, the quantum message is very threatening to people who still live within the subject/object duality, so let me try and explain it in my own language.

By its own terms of reference, science attempted to set itself apart from the mental processes that made its successes possible. But this separation was never achievable, even in principle. Facts, items of awareness, only gain meaning if they are brought together into statements or theories. Yet the very act of integration that produces a theory draws on an invisible software of shared presuppositions and unconsciously accepted value judgements and this subliminal software creates the mindset we inhabit. This mindset, this neural programming, was written by natural selection and by our own past experience. It is thus not, in any sense, 'absolute', it can and must and does reflect 'where we come from'.

This is the often-said but seldom understood message of quantum physics—simple and shattering—that the data has no meaning apart from the software that organises it, that there is no such thing as an 'uninterpreted fact' (Reanney 1993).

The quantum revolution affects our whole concept of reality. Because of the way we are made, biologically, we see things as external to us—'before our eyes', in our field of vision, 'out there'—on a sheet of paper or at the end of a microscope. Yet the real act of seeing that allows us to make sense of the world goes on *behind* our eyes. It is the mental program that integrates the data we receive, not the receiving organ (eye) which permits us to see. We see with our software. Which means that *our reality can only be as good as the software we bring to it* (Reanney 1993, pp. 2–3).

Despite the acknowledgment of social reality as being a 'constructed' reality which is different from the natural world, even accepting that pure psycho-social data is made up of the subjective thoughts, feelings and actions of other human beings, interpretivists may perhaps retain an underlying belief that 'out there somewhere' there is such a thing as a 'pure' data. This thinking is nicely illustrated in the work of Percy (one of my graduate students) quoted earlier:

> Raw data is data in its 'purest' form, uncontaminated by the individual researcher's psychological filtering process. The filtering process has two sieves: both are connected to our mental models, or how we make sense of the world. . . One sieve selectively sifts through the available data, so that data which has some significance for us, stands out—what we choose to pay attention to and, conversely what data we block, ignore or miss by selecting it out of awareness. The other sieve acts as a translator, interpreting data into our internal language system so that it has meaning. This latter sieve may effectively and unintentionally embellish and change the raw data (Percy 1992, p. 66).

Percy describes herself as an interpretivist and yet does not seem to acknowledge that, in an interpretivist world view, there is no such thing as 'uncontaminated' psycho-social data.

While my view is that data is always 'contaminated', this does not remove efforts at rigour in interpretivist research. Rather, I contend that efforts to eliminate or ignore the efforts of individuals to construct meaning—or subjectivity, as it is more often called—in interpretivist research are misdirected. In my view, it is one thing to challenge, refine and enrich the researcher's thinking through cyclical activity, triangulation and dialogue with others; it is quite another to imply that individual thinking either has no place in the process or in some way contaminates it. I argue that by acknowledging individuality, by respecting it and seeking to understand it, and by placing it carefully in context, we not only help individuals to create meaning for themselves, but to add in important ways to our collective knowledge and understanding.

The *hermeneutic* stream of interpretivist thinking (Reason & Hawkins 1988) seems prepared to confront the methodological implications of a socially constructed universe, if not an individually constructed one. Defined as 'the science of interpretation', it suggests that no amount of analytic-empirical data can totally establish

meaning, since meaning is not established by sensory data but by unrestrained communicative inquiry and interpretation.

In the hermeneutic approach, in contrast to the positivistic perspective, the researcher's attention is not focused solely around theories and observed problems, but rather is allowed to float more widely: 'tacit' knowledge (the kind of understanding that cannot be articulated in words or is not entirely conscious) is given an important role; researchers accept influence from both science and personal experience; they can use their personality and values as instruments; they allow both feelings and reason to govern their actions; and they partially, and sometimes wholly, create what they study: for example, the meaning of a process or document (Reason 1988).

As major advocates of the hermeneutic perspective, Reason and Hawkins (1988) are keen to point out that they are not suggesting a return to the confusion and potential error of naive inquiry. Nor do they seek the 'yoga of objectivity': the development (over 10–15 years) of a state of mind which is totally detached, objective, analytical, clinical and pure for, in their view, this creates 'essentially dead knowledge, alienated from its source' (Reason & Hawkins 1988 p. 12).

Reason and Hawkins are interested in what they describe as an emerging new paradigm. It goes beyond the split between objective and subjective data, and achieves what they call 'critical subjectivity', a state in which we see the world as *our* world, rather than *the* world (Reason & Hawkins, 1988, p. 12).

Although hermeneutic tools of inquiry are still regarded with suspicion, even by many who think of themselves as interpretivists (for example, Dick (1992) describes them as 'counter cultural'), these tools challenge us to think about the role and experience of researchers in the process, instead of simply the paradigm, methodologies and techniques a researcher may use. There are several aspects to this role and experience: the potential of the action research process to *change the researcher*; the extent to which the researcher is *part of the product*, as well as the process, of research; and the extent to which the researcher becomes *the subject of the researcher*.

The potential of the research process to change the researcher

This chapter has already acknowledged the capacity of action research to change the researcher. Changes in the researcher's praxis and other kinds of learning are expected and encouraged. This is not confined to a shift in the researcher's knowledge: it may require adjusting the concepts, mental models and implicit theories which the researcher used to generate the data in the first place. As Morgan has noted:

When we engage in action research, thought and interpretation, we are not simply involved in instrumental processes of acquiring knowledge, but in processes through which we actually make and re-make ourselves as human beings (Morgan 1983, p. 373).

The action researcher is not like a catalyst which remains unaltered by the chemical reaction which it influences.

However, Revans believed that although the action researcher is a learner in the research process this did not compromise the scientific value of the process. Rather, as Lessem notes, Revans identifies action learning with the scientific method:

> Action learning is also a personal activity which combines objective analysis ('science') and subjective commitment ('religion'). Its logical foundation is the structural identity of the scientific method, of rational decision making, of the exchange of sound advice and fair criticism, and of the learning of new behaviour. Yet, while talking and argument call only for intelligence or quickness of wit, doing and action call for commitment or true belief. For, in taking action, Revans claims, especially after clearly exposing one's motives to close and critical colleagues, one is obliged to explore that inner self otherwise so often taken for granted. In seeking answers to difficult work-related questions, especially in conditions of risk and confusion, miners, nurses and managers begin to learn who they themselves may be: to answer their 'work-questions' they must, at the same time, explore their 'self-questions'. The fundamental law of industrial behaviour, that Revans was seeking in the 1950s, may well have been discovered by him in the 1970s: knowledge is the consequence of action, and to know is the same as to do (Revans, 1982) or, to elaborate (Revans, 1981): the underlying structures of successful achievement, of learning, of intelligent counselling, and of what we call the scientific method, are logically identical (Lessem 1982, pp. 12-13).

Having identified action learning with the scientific method, Revans (1982, p. 723) sets out a process of learning and scientific inquiry

called the 'System Beta': this combines the inductive and deductive logic processes described earlier. Revans accepted the essentially human character of the process, and the involvement of the researcher or learner. Here is Lessem (1982) again, making a similar point:

Action learning, at its simplest, is an approach to management education. At its most profound it is a form of personal therapy, a means of social and economic transformation, and even a way of life. Let me try to reconstruct Revans' argument, step by step.

We start with the symbolic amalgamation of 'artisan' and 'scribe'. Knowledge, for Revans, can be only the outcome of action. By wrestling (as artisan) with live problems, and subsequently reflecting (as scribe) upon the results of his achievements, the learner acquires knowledge. Revans continues with the symbolic intermingling of 'education' and 'industry'. For the knowledge acquired is not so much the facts or techniques imparted by an educator, but, more appropriately, the reinterpretation of the practitioner's own existing knowledge (Lessem 1982, p. 12).

This is the kind of learning in which we 'shift gears' in the way we behave. To use the metaphor proposed in chapter 1, we shift from first, through second, to third position.

Not all the learning that happens during the process will be double-loop learning from third position. Much of it will be the result of daily incremental changes which we barely notice or acknowledge. We go on operating from our first or second position; nonetheless, over time, differences in what we do might still happen because, without noticing, people or events in the world outside are shaping our responses. This is the process that psychologists call 'conditioning' (Thorndike 1932).

Whether learning is happening at the first, second or third position, the processes involve a continuous, and often complex and subtle, interplay between internal data (the inner world of experience which includes ideas, thoughts, feelings, fantasies, dreams and imaginings) and the external data, delivered to us through our senses, which gives us information about what is happening in the world beyond ourselves. There is a constant intermingling of the two sets of data, each partly creating, certainly modifying and often filtering the other. This process equates with Kemmis's (1992) 'first-person' or 'critical' research method.

The researcher as part of the product and the process of research

Heidegger (1962) and others view research as a specific form of *human* action because human minds are the research instruments through which all data is initially generated and ultimately interpreted. From that perspective, the concepts, filters, blind spots, assumptions, values, stereotypes, projections and implicit theories which are in the investigator's mind must inevitably be part of the product in any attempt at description and explanation. Again, Berger and Luckmann's *The Social Construction of Reality* clarifies how the description as well as the explanation is inevitably the product of the researcher.

Thus the research not only bears the stamp of the researcher: the research process and its product emerge from *individual creative* human action, in much the same way that we speak of Van Gogh's painting as being 'a Van Gogh'. What is being created are not paintings but meaning (Smith, 1992). Like paintings, those meanings can be held up for examination by others, and with the intention of sharing them.

From the hermeneutic interpretivist perspective, even the acts of noticing and selecting data (though not all data selection is consciously reflected upon) can be seen as essentially *individual* and *creative* acts. Hence, it becomes an important research activity for the researcher to ask: 'Why did I attend to that particular event or idea?', 'Why did I notice it?', What makes it 'count' for me as data?', 'What meaning do I attach to it?', 'What significance did it have for me that made me 'notice' it even before I understood it?'

This point underlies the difficulty I've experienced in differentiating between the act (and the techniques) of data collection and the act (and the techniques) used for data analysis. In a functionalist research paradigm, the distinction is generally clear: a researcher interviews people, or conducts a controlled social experiment, or administers a questionnaire; later, the researcher applies to that data techniques of classification, interpretation and analysis (such as coding and statistical analysis).

The interpretive perspective directly acknowledges that, in the moment of asking a question and listening to the answer, the researcher has created, collected and already commenced the process of interpreting the data, and may even be in the process of developing a theory about it. As well as blurring the boundaries of the process of data generation, the hermeneutic view also potentially complicates our conception of what constitutes 'data'. Thus Jones (1985) speaks of

'talk' (meaning 'casual' conversations as well as 'planned' interviews) and Cunningham (1988) of 'contextual locating' (meaning attending and speaking at conferences, the discussions academics have at staff meetings, and the kind of experience that comes from simply 'hanging around' a particular group of people over a period of time). They see these activities as more than locations in which data are collected: they are ways in which data are created. In the hermeneutic view, there is no aspect of the researcher's experience which is not potentially 'grist for the mill'.

Which leads to the interesting question of what is happening when the data is extended to include the researcher's experience of reflecting on him or herself.

The researcher as the subject of research

In action learning, it is easy to see the processes of double-loop learning, third position thinking and critical incident analysis: the **subject of reflection is the behaviour of the learner**: this includes both the actions the learner takes in the external world—actions which others can see and evaluate—and the feelings and thoughts that the learner experiences directly 'on the inside'—which can only be described to others.

In action research, the researcher is also encouraged to reflect on their own behaviour, both external and internal. External behaviour is evaluated for its impact and effectiveness on others; internal behaviour is also examined by using the dialectic approaches described earlier (Dick, 1992) and the analysis of logic (whether inductive, deductive or abductive) which Revans (1982) prescribed in System Beta.

However, as already mentioned, I am wary of the attention given to the researcher's behaviour in action research in that it may be driven by a perceived need to control and contain it.

I would assert that many of whose who write about action research and who practise it, would find it difficult to concede that there are many times when the researcher is, for all practical purposes, the subject of their own research.

We've noted that the researcher's experience, feelings, thoughts and behaviour are relevant and admissible data. We've also acknowledged that the researcher both selects and creates the data which are studied. Further, we need to acknowledge that the researcher is engaged in self-examination and that this is a legitimate part of the research process. In interpretivist terms, this involves constructing and/or developing understanding of oneself, and developing *meaning* in relation to oneself. This kind of thinking leads to the hermeneutic research techniques of storytelling (Reason & Hawkins, 1988), narrative (Yin, 1987) and biography (Ferrarotti, 1981).

There are some famous procedures for the 'researcher-as-subjectof-own-research': Freud's analysis of his own dreams is a case in point (see Jones, 1962). Morgan (1983) has suggested that we need research strategies that acknowledge and allow us to deal constructively with the relativism that flows from the notion of researcher-as-learner, researcher-as-creator, researcher-as-end-product, and researcher-assubject-of-own-research:

Or to put the matter in a more positive way, we need to find a way of dealing with the *possibilities* that relativism signifies. In order to find such an approach, it is necessary to reframe our view of knowledge in a way that gets beyond the idea that knowledge is in some sense foundational and can be evaluated in an absolute way, for it is this idea that ultimately leads us to try and banish the uncertainty associated with relativism, rather than simply to deal with it as an inevitable process through which knowledge is gathered (Morgan 1983, pp. 372–3).

Among writers who discuss the subject of researcher-as-the-subject-ofresearch, some in Zuber-Skerritt (1992) (as in Kemmis' description of critical research and critical learning alluded to earlier) have explored the notion that the researcher should explicitly be the research subject. McTaggart's work is relevant here:

We know too little about how people make use of their own experience and the experience of others to inform their work, and still less about how tacit knowledge and the subconscious interact with interpretation of experience in real work situations (McTaggart 1992, p. 15).

Cunningham (1988) has also written on researching self-managed learning, coining the term 'wholistic interactive research' to cover five interconnecting methodologies: collaborative research, dialogic research, experiential research, action research and contextual locating. These are as follows.

Collaborative research involves a group of people who together investigate a topic. The initiating researcher does not dictate the process of the research activity. There are two types of collaborative research: Type I (consonant with cooperative inquiry) where researchers study their own experience in the group to which they all belong. In Type II people come together to study experience that has occurred *outside* the group.

Dialogic research centres around two-person interaction and uses the dialogue as a mode of 'finding out'. It is a special case of collaborative research, in that there is no group process to attend to, only the interpersonal relationship of two people.

Experiential research focuses on the direct experience of the person/researcher. Cunningham sees experiential research as an essential feature of human science activity, arguing that researchers should learn to be effective researchers of their own experience. Personal experiential research 'is not old-fashioned introspectionism, as it is based on experience and not on armchair theorising or limited projections' (Cunningham 1988, p.165). For experiential research to be useful, it needs, says Cunningham, to be linked to other methods: as well as talking with others (dialogic or collaborative research) one needs to test one's personal research in action.

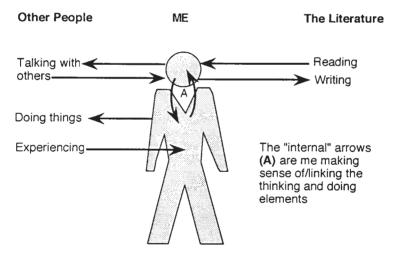


Figure 2: Contextual locating

Source: Cunningham, 1988, p. 168

Action research he identifies with Lewin's (1946) work, while contextual locating refers to the process by which one:

feeds into and off the context within which one operates; so in this research there are people working in the field, writing about it, discussing it at conferences, etc. The theory developed in and through the other four methods will in part come out of this wider context and also feed into it. Hence there is an iterative, to-and-fro process which provides the basis for testing and evolving theory (Cunningham, 1988, p. 166).

Cunningham's work suggests ways in which the subjectivity of human inquiry is not denied or artificially excluded from the research process but is acknowledged as the stuff of which wisdom is made. He encourages us to work with this subjectivity directly and systematically. The next chapter examines in more detail ways in which we can work robustly with our own subjectivity.

Sustaining 'critical subjectivity' in reflective learning and action research

As discussed in the previous chapter, convergent thinking can increase the internal validity of action research. Hence action researchers are often encouraged to employ techniques which encourage convergent thinking among participants (whether researcher, client or participant). Such a process does not guarantee that the result or findings are necessarily applicable elsewhere but it helps validate them in the context in which, and for which, they were originally generated.

Those outside the research who want to draw conclusions about the relevance of the research findings to their own concerns, need to understand that context: this includes how the research was conducted, where and by whom. This locates the work in time, place and culture. When I supervise action research students, I require them to specify these contextual aspects and to develop the skills to do this. This means being able to discern what is particularly characteristic of a given situation and thus relevant to those outside the research. It allows the researcher to manage the potentially highly individualistic nature of research findings.

As in the previous chapter, this approach encourages researchers to recognise that everything is 'admissible data'. However, it does not solve Heron's 'critical paradox' of (action) research: 'that I am seeking to validate research propositions by undergoing experiences that are picked out, defined and identified in terms of those same propositions' (Heron 1988, p. 59). In that sense, we will always be the victim of our own 'self-fulfilling prophecies', caught in our own individually and socially constructed reality.

Heron suggests the need for 'bracketing':

a competence that prevents such validation from merely being self-fulfilling and circular. . . it means that we can, as it were, hold these constructs in mental suspension, and allow the phenomena to speak somewhat for themselves' (Heron 1988, p. 59).

Zuber-Skerritt (1992) alludes to a 'critical attitude', while Reason (1988) uses the terms 'critical knowing' and 'critical subjectivity' to describe the quality that researchers need to have:

Critical subjectivity is a quality of awareness in which we do not suppress our primary subjective experience, nor do we allow ourselves to be overwhelmed and swept along by it; rather we raise it to consciousness and use it as part of the inquiry process (Reason 1988, p. 12).

My understanding of 'critical subjectivity and knowing' is that it involves the researcher in a delicate balance: between, on the one hand, fully knowing the individuality of the meaning or sense one makes of one's own and other's data (including experience), and, on the other, being able to stand aside from that individuality and put it in some larger or different perspective which places a different meaning on the data. This is a paradoxical skill; it involves full recognition and ownership of 'self' as well as distancing from self in order to develop meaning. It is an important skill for the learner intent on understanding and changing self (see chapter 7). For the researcher, it means being able to discriminate precisely between one's own values and meaning which one brings to the research and those of others and which, in both instances, creates meaning and knowledge.

This is a difficult task. As Heron (1988) has observed, to:

take an idea down into experience, whether to notice what it distorts or what it omits, is a tricky business. . . Making the experiential test (of a conclusion or idea born out of reflection on experience) involves them (the researcher) in a change of being. They become different: the idea is no longer just grasped by them intellectually—they have lived through it, they know it connaturally, as the philosophers say. They have worn it as the garment of their doing. . . (Heron 1988, p. 50)

'Critical subjectivity' represents 'third position thinking' of a very high order, as well as 'double-loop learning' and critical incident analysis processes which were described earlier. Engaging with the research task and with the people involved means engaging with oneself, with one's own theories, assumptions, values, confusions, generalisations, filters, strengths and weaknesses.

At the very least, 'critical subjectivity' requires that we become aware of what we are doing—that we catch ourselves in the act—and consider carefully the stamp that we wish to leave and the behaviour we wish to enact. In the collaborative work implied by the action research paradigm, we are encouraged to take our clients, participants and other collaborators into the same state of 'critical knowing'—an extraordinary feat of double-loop learning provided one is capable of it. For example, in developing a construct or theory:

> the inquirers need to believe in an idea enough to get experientially involved in it, and at the same time they need to be unattached to it, watchful for shortcomings, noticing more than belief in it entails, and holding alternative ideas available in the mind at the ready (Heron 1988, pp. 50–51).

In my experience, this results in a sustained creative tension which arises from somehow standing aside from oneself, watching and listening to oneself both in action and in the process of theory development. The next section describes some of the reflective techniques that I and others have found help develop this attribute of critical subjectivity and critical knowing.

Reflective techniques as tools in research activity

I use the term 'reflective techniques' to encompass a number of processes—including data recognition and selection, data generation, data capture and interpretation. I see reflection as a creative action on the part of the researcher which cannot be neatly categorised as 'data collection' or 'data analysis' since it incorporates elements of both. In fact, the nearest I can get to making that distinction is to identify particular situations in which data are to be generated (such as 'supervision' sessions with students or in interviews with managers) and to nominate those as 'sources of data'.

Drawing on my experience of action research and action learning, I begin by attempting to describe what the process of reflection is; then I provide an account of the reflective techniques: finally, I provide a review of some of the reflective techniques offered in the research literature—generally from writers with an hermeneutic perspective. Key points are made in bold type. From a research perspective, the intention in using these techniques is not to 'take the person out of the equation' or even to simply acknowledge and understand what the person is doing so that we can 'factor the person out'; rather, it aims to find a way to enhance the quality and richness of our knowledge generation process by allowing it be a fully human and creative act while, at the same time, identifying and taking responsibility for our own idiosyncratic contribution. Therapy or management development aims to enhance individual understanding and competence. But action research has, as one of its purposes, the development of our collective understanding and wisdom. It is therefore important that we put our contribution—our creative act—into context thus allowing others to judge whether the meaning we have created is applicable and useful to them in creating their own meaning.

A description of reflection

In the fields of education, philosophy and psychology, there is a large and often sophisticated literature on how minds create meaning and knowledge (see for example Bruner, 1966; Bateson 1973; Belenky et al. 1986; and Donaldson 1992). Barry Smith (1992), in *Management Development in Australia*, takes a more elementary approach, offering both a definition of reflection and a description of how reflection contributes to the development of meaning.

Smith's (1992) approach is useful because it is easily accessible and an interesting attempt to explain the mechanics of reflection to practitioners in the field of training and development. He defines reflection as:

> the processing of data to create or modify meaning schemas... Meaning schemas are learned cognitive structures by which we give order or meaning to events which impinge on us. They determine the way the individual views and orders his or her world. Since meaning schemas are learned, they are neither static nor universal, and are subject to continuing confirmation or negation (Smith, 1992, p. 29).

Reflection is thus a creative act (the creation of meaning). Smith suggests that the critical phase of the creation process involves identifying and linking salient events into a meaning schema. Once they are developed, they begin to influence the perception of subsequent events and the creation of subsequent schemas, although they themselves can be modified by subsequent schemas and events.

Acknowledging that this is a highly idiosyncratic process, Smith lists some of the factors which influence the creation of meaning schemas and the linking of events to those schema, describing some of the dynamics of reflection as follows:

- time connections which lead to the engagement of causeeffect relationships or simply to the coupling of ideas and events;
- need states and emotions which influence the meanings attached to events;
- completion, meaning the resolution of incongruence;
- value-fit, the sense that something is 'right' or 'wrong';
- reasoning and logic patterns and techniques;
- application—the idea helps us to do something or achieve something of value to us;
- novelty or surprise—as in some forms of humour—which reveals unexpected meaning;
- the context and source of an event (a person or place) which influences the meanings attached and created;
- insight: the illumination or sense of discovery that is experienced when an idea explains something of importance;
- the cultural associations which are attached to meaning schemas.

In the daily process of acting, thinking and feeling any or all of these factors are at work, consciously or unconsciously influencing whether particular events are 'attended to' or noticed. If they are noticed, events are given meaning and significance by being attached to or associated with an existing schema; they also influence the creation and rearrangement of the meaning schemas through which subsequent events are interpreted.

The essentially creative nature of even basic 'attending' behaviour is nicely captured by Donaldson:

> Human thought deals with how things are, or at least with how they seem to us to be, but it does this in ways that typically entail some sense of how they are not—or not yet. It deals with actuality and with possibility; but some recognition of possibility is already entailed even in the discovery of actuality whenever this is achieved by the characteristically human

means of asking questions. Is it like this? Or is it perhaps like that? (Donaldson 1992, p. 9).

In practice, of course, this is a very complex process, the dynamics of which still challenge cognitive psychology. Ulric Neisser's (1966) observation, made some thirty years ago, still stands: that it is difficult to explain how human beings ever notice or 'register' events for which they have no existing schema. Until we understand this, we cannot build a computer that recognises the handwriting or voice of 'just anybody' who wanders along and for whom the machine isn't specifically programmed. In this respect, the human brain has yet to be replicated.

Whatever the precise mechanism, in the act of conscious reflection, the researcher takes charge, to a greater or lesser extent, of the process of constructing meaning. Reflection not only provides a way of creating meaning, but of testing that meaning. The schemas can be used to ask 'what if' questions and to generate future scenarios, with the purpose of suggesting appropriate action, predicting possible outcomes of that action and evaluating those outcomes. Meaning schemas allow us to create expectation, beliefs and fantasies of events which we have never experienced and may never experience; they also allow us to interpret experience and to direct behaviour in the hereand-now, and to place new meaning on events which are part of our past experience. They even allow us to reinvent or remake those experiences in the way that Mintzberg (1987) describes: those of discerning and constructing patterns of meaning in past experiences which are only available to us because they are *past*.

As Smith observes, reflection is basic to all the phases of the action learning and action research cycles. Because the construction of meaning is happening at all phases, the researcher has the chance to become conscious of and, to some extent, direct the process. The Kemmis and McTaggart (1988) action research methodology mentioned earlier, in common with many others, separates out reflection as a particular part of the cycle: plan, act, observe and reflect. In my view, this understates the role that reflection can play in the whole process, beginning with the basic act of noticing or attending to the data.

As Smith (1992, p. 39) observes, in its most developed form reflection becomes a meta-process: the person is reflecting about their own reflection process, deliberately and consciously using reflection (the creation and development of meaning) to understand the way they create and develop meaning (the way they reflect). This represents the most developed form of what I call 'third position thinking'. In third position, the person becomes self-reflective, literally applying the action learning cycle to themselves: *noticing* aspects of their internal and external behaviour, and *evaluating* the impact of those behaviours on self and others, *asking* 'Why do I do this?', 'What's driving my behaviour?' and *planning* to do something different 'next time'. All of this enhances self-understanding, it develops and creates 'self-meaning'. At the point where the person is reflecting about how they create meaning, they are arguably in a very advanced state of 'critical subjectivity', examining the very processes by which one creates meaning of both the internal and external worlds—of self and others.

The attainment of this meta-skill of self-reflection does not, of course, mean that, through our own effort and 'critical knowing' of ourselves, we can easily or completely overhaul all our meaning schemas and 'remake' ourselves. As Berger and Luckmann (1966) point out, we are powerfully influenced and constrained by the constructs we carry with us into adulthood, and there is every chance that we will remake ourselves in our own image. But arguably, it helps us in the process of research—and everyday living—to understand the relativity of our own schema, and 'critical subjectivity' can help us to be aware of that relativism, and its unique nature.

Other reflective techniques in the research literature

The research literature describes a number of other techniques which help to create 'critical subjectivity' or 'critical knowing'; these heighten the researcher's awareness of the distinctions between the invention of personal meaning and knowledge and meaning, and knowledge of value to others. While the techniques overlap in practice, they may be grouped as techniques for *contextualising* the construction of meaning, *cycling* reflective activities, *drawing out* meaning, *enriching* meaning and *constructively challenging* meaning.

Contextualising

Earlier, I talked about the value of *contextualising* as a research skill: that is, explicitly describing for oneself and others the context in which action is being taken, meaning is being created and theories constructed. In this act of description, the researcher not only gives life to the context but distances him or herself from the experience. In addition to describing the context, a colleague suggests the practice of

data checking: that is, asking the researcher (individually or with the help of others) to reflect on what he or she recognises as 'relevant data'. This can be done by asking questions like: 'What counts as data for *me*?', 'What do I even notice', 'What do I attend to?', 'What sort of data will I go on creating (for example, by asking questions) or allow others to create (by clearing the space or setting the scene for action, or allowing action which others have initiated to continue)?' Such questions can be asked of both internal data (like the feelings, thoughts and behaviour of the researcher) and external data, and help highlight the individuality of the researcher's data.

Research cycling

Research cycling is designed to help identify and manage subjectivity in the broadest sense (Heron 1988): that is, by reminding the researcher to balance evaluation and diagnosis with action and reality testing (and vice versa). This is highly important, since no amount of disciplined 'standing aside' from oneself can compensate for a failure to carry thought and meaning into action with the regularity and discipline that are fundamental to action research. However, the process also serves to create the conditions for 'critical subjectivity'. It consists of deliberately designing the overall research strategy to incorporate the cycle depicted in Figure 1. For example, there might be whole phases of action in the form of participant observation in the field, followed by or interspersed with phases of interpreting and evaluating what has been said, heard or done; focusing and refocusing the diagnosis of what's 'really' happening; and planning further action.

However, research cycling is not confined to these larger phases of the research strategy. It relates to using the cycle in a disciplined way as part of particular interventions within the overall design, so that, for example, at the end of each week or each day—or, in some cases, even each hour of activity—the researcher engages in the process of action, evaluation, diagnosis and planning.

Used very regularly in this way, my experience is that the researcher moves from a stage of having to be 'reminded to cycle' the research design to a stage of doing it so naturally that it becomes a 'meta-skill': that is, it becomes almost automatic to 'stand aside' in one's head from the action one is involved in, and observe and evaluate it as it happens. At that point, reflection has become truly integrated into every aspect of the action research cycle. The researcher may not be aware of the constructs and meaning schemas he or she is

using at the time but research cycling sensitises the researcher to the limitations and possibilities created by their own behaviour.

Research cycling can be individual, collective or interactive. In individual cycling, the researcher—Heron's inquirer—has to operate as their own control mechanism, implementing the cycle on a serial basis over minutes, days, weeks, months and/or years. In collective research cycling, the inquirers operate as a group at each phase of the cycle: either experiencing and reflecting together and interactively, or doing things individually but side-by-side in the same space.

In interactive research cycling, the intention is to achieve a balance between some individual research cycling and some aspect of collective research cycling. This can be achieved in different ways: for example, separate individual cycles of experience and reflection can be followed by collective reflection in which each person's individual findings are shared for feedback and discussion, and in which the content and method of the next individual cycles is planned collectively (Heron 1988, p. 45).

Drawing out, enriching and constructively challenging meaning

The value of collective and interactive research cycling is that the individual's own 'learning' can be fully *drawn out* and acknowledged; shared and put side-by-side with the 'knowing' of others, so that individual meaning is *enriched*, enhanced and extended by interaction with others; and evaluated and *constructively challenged* by others. (This concept is fundamental to the process of action *learning*, as Revans (1982), among others, points out. Here, I'm suggesting that it is also important in the research context.)

For these things to happen, other more specific skills and techniques are required. The learning disciplines which were described earlier, of using 'meta-me', team learning, bringing to the surface and testing mental models, and action science are all relevant here; in fact, I would argue that these things are unlikely to happen, or to be sustained effectively without them.

The research technique of open-ended, non-directive interviewing (Jones, 1985) is relevant here. It specifically encourages the researcher to focus on exploring and fully drawing out the ideas and perceptions of another person by using the attending and listening skills—and the respectful, unconditional attitude—which Carl Rogers (1961) and others articulate. Dialogic inquiry, as Cunningham (1988) describes it, is a two-way reflective process which involves reciprocal and mutual attending and listening in order to draw out meaning.

Barry Turner's (1988) approach to the development of 'grounded theory' is a research technique which provides a disciplined way in which collective meaning and knowledge can be developed from individual statements and expressions of meaning. As Turner practises it, grounded theory construction involves a group of individuals in identifving how they react to words and phrases they and others use; such identification can be used to build hypotheses about how people actually behave: these can then be tested by observation and other means. Whether examining statements the researcher or others make, Turner makes the point that the researcher must actively contribute to the process by being more than merely a 'human tape recorder'. All those analysing the data bring distinctive perspectives to the inquiry, as well as their own values and intellectual passions (Turner, 1988, p. 115), but in walking together and in paying close and rigorous attention to the data as presented, they collectively develop new patterns of understanding and meaning from it.

Other research techniques encourage active evaluation and constructive challenging of the researcher's theories, interpretations and conclusions. Heron (1988, pp. 49–55) urges researchers to find out whether there is 'coherence in action': in other words, to take the coherent viewpoint, which progressively develops out of dialogic or grounded theory or related techniques, and expose it to explicit and specific testing by applying it to 'real-life' situations. 'Falsification' involves maintaining vigilance on how ideas fall short when taken into practical experience. Should the researcher tend to collude in not reporting any 'corrective aspects' of their experience in applying the concepts, a formal 'devil's advocate' procedure can be instituted which specifically invites rigorous attempts at falsification and encourages researchers to seek out doubts even when they are most convinced of the 'rightness' of their propositions. In taking the role of devil's advocate, others are invited to check the logic processes, whether inductive, deductive or abductive, through which the researcher arrived at a particular concept, idea or conclusion.

The challenge of sustaining critical subjectivity

As suggested earlier, using these techniques requires the skill and will of all involved; it includes the capacity to adopt the 'meta-me', to rigorously apply the team learning skills, to bring to the surface and test mental models, and to use Argyris's action science methods to articulate and explore implicit theories and defensive routines.

Heron (1988) has suggested that the researcher also needs to be able to tolerate what he calls the sequence of 'chaos and order'. He observes that when researchers attempt to be open, to challenge and avoid collusion, then clarity and divergence of thought and expression 'may well collapse into confusion, uncertainty, ambiguity, disorder and chaos—with most or all of the inquirer's feeling lost to a greater or lesser degree' (Heron 1988, p. 52). He concludes that it is important for researchers to be able to accept chaos and have a high tolerance for ambiguity and confusion. He compares the inquiry process to the dissipative structure in organic and inorganic chemistry (Prigogine & Stengers, 1984) in which new order is created by perturbation. While researchers cannot plan for this, and cannot say, 'now let's have some chaos':

> they can plan to be creatively divergent, and learn to stay with the chaos, to recognise and accept it, without anxiously trying to clean it up, without getting trapped by fear into premature and restrictive intellectual closure (Heron 1988, p. 53).

Similarly, Percy (1992) has described what she calls the state of 'not knowing' in the context of research activity:

To arrive at a point of creating meaning out of the data collected without starting with an hypothesis, required an ability to tolerate ambiguity and a willingness to be vulnerable during the action research project and subsequent stage of theorising. The mental state needed before *knowing* could be arrived at was that of *not-knowing*. I had to trust myself to not know exactly what was being sought, to wait until the figureground formations developed into patterns. The notion is similar to Senge's (1990) concept of 'suspending assumptions' as a prerequisite for dialogue, and Vaill's (1989) discussion of the Taoist concept of *wu-wei*, that is, 'non-action', of not forcing movement but of going with the flow. The state of notknowing, like incubation, was not passive. Knowing was born of not-knowing and non-action (Percy 1992, p. 71).

Heron also highlights the need to manage the 'unaware projections' created by fear and defensiveness. He believes 'unaware projections' can be triggered by the very process of inquiring into human interactions and behaviour, and compares them with the 'counter-transference' to which therapists are said by some to be prone in therapy (Braun 1961). In essence, this refers to the possibility that the researcher will see in others' statements and behaviour qualities

which they have difficulty in acknowledging or accepting in themselves, and then reject that perception. The researcher might also, as a result of their own unaware projections:

> research extensively trivial and peripheral bits of behaviour. They may manipulate and deceive their experimental subjects. They may never ask their subjects how they construe the experimental situation and give meaning to their actions within it (Heron 1988, p. 55).

Heron believes that even researchers who are aware of this kind of defensiveness may still be subject to disruption from all kinds of unfinished emotional business which may, in turn, affect their choice of research subject and how they plan and manage the research cycle. It may result in lapses in recording data; the neglect of validity procedures; emotional and intellectual difficulty in noticing and reporting important experiences; becoming bored, distracted or rebellious about the whole research program; dysfunctional collusions of various kinds, and so on. Since it may be difficult for researchers to recognise or deal with the source of their own defensive behaviour, Heron suggests that time needs to be set aside for reflective—including cathartic—activities such as journal writing, meditation, group and individual process sessions.

Percy (1992) pursued a similar line of thinking in her research activity, observing that data generated by personal assumptions, values and beliefs outside the personal awareness of the researcher, elude that combined quality of 'knowingness' and objectivity which is the hallmark of 'critical subjectivity'. She set herself the task of 'non-defensive reflection', commenting that:

> discerning personal filters is like tuning into one instrument out of a full orchestra so that the listener can discern the flute within an orchestra of sound. . . I should add that I was not often quick at recognising projection, nor discovering choice, and that it was a difficult process. Argyris' (1990) model of espoused theory and theory-in-use provides a framework to explore this further. To re-own my projections can be described as my espoused theory. To convert this into a theoryin-use required a jump of the greatest significance, both cognitively and emotionally. The 'jump' was rarely quick and to be honest, not often made at the time but with the safety of retrospection. It involved a long process of reflection to move

out of one frame of reference to another and required a shift in my psychological state to one conducive to non-defensive reflection. Non-defensive reflection is crucial to closing the gap between the theory-in-use and espoused theory (Percy, 1992, pp. 68–9).

In Gestalt terms (Goodman et al. 1972), non-defensive reflection involves allowing the Gestalt to form and reform, with elements of the Gestalt differing in when they become part of the figure (central to attention) or part of the ground (the background 'noise' in the orchestra).

As well as accessing personal filters and projections through nondefensive reflection, the researcher might also access the extent to which we tend to fill up the gaps in the data we collect about others. We rarely get a whole picture of an organisation or hear the full story of an incident, as seen by all parties. Most often we rely on fragments but are quick to complete the Gestalt by expanding our impression of a person or group to the whole organisation; we sometimes rely on metaphor and analogy, which we develop from the fragments, to describe or even explain the whole.

The value of cooperative inquiry in sustaining critical subjectivity

This section describes a range of reflective techniques and the skills required to use them effectively which involve both individual and cooperative effort. As already mentioned, action research is a paradigm that allows for periods of both kinds of effort and which, at the very least, requires balance between the two. There are other research paradigms within the interpretivist perspective that do not seek the same kind of balance.

Experiential research (Cunningham 1988) is a form of research which uses as its focus the direct experience of the person/researcher: in other words, the researcher is the 'subject'. Cunningham differentiates between two kinds of experiential research: a personal form where researcher and subject are one and the same, and dialogic, where experience and/or response to experience is shared with others. While quick to defend the value of investigating one's own behaviour and personal practice as a means of contributing to collective knowledge, Cunningham points out that a research paradigm that simply involves the researcher in reflection about themselves, without dialogue with others in any form, is not going to be given the same status as research which involves dialogue with others, even though, in both instances, the researcher's own behaviour is being researched.

At the other extreme is the research paradigm known as 'co-operative inquiry' (Reason, 1988) which involves collaborative research activity of a particular kind. In keeping with their views on the strength of social context in shaping the contents of consciousness, Kemmis (1992) and Zuber-Skerritt (1991) suggest that critical selfreflection must of necessity involve others in collaborative analysis in order to have any chance of penetrating the illusory definition of reality which may have been socially conferred.

Like action research, cooperative inquiry removes the distinction between researchers, the people who design, manage, and draw conclusions from the research, and subjects: those involved in the action and experience which the research is about. Researcher and subject are 'arm-in-arm' and the researcher's behaviour is also the subject of research. Cooperative inquiry goes still further, by suggesting that there is no distinction between researcher and subject or client: both devise, manage and draw conclusions from the research and both undergo the experiences and perform the actions that are being researched. In action research, while much is shared, it may still be the case that the researcher is an adviser to or consultant to the client as subject. Such a distinction is not made in cooperative inquiry.

Although not using cooperative inquiry as the exclusive research paradigm, I have incorporated some of its features into my research activity. Reason's detailed description of cooperative inquiry is worth quoting here, and because it brings to life many of the ways in which reflective techniques and skills can be applied in the context of dialogue. Reason's cycle of cooperative inquiry is very similar to the action learning and action research cycles described earlier:

A group of co-researchers meet to inquire into some aspect of their life and work. They discuss and agree *what* it is they wish to research, what *ideas* and *themes* they may bring to the inquiry; what kind of *research action* they will undertake to explore these ideas; how to observe, record, measure and otherwise gather their experience for further reflection. Stage 1 is primarily in the realm of propositional knowledge.

In Stage 2 they take these decisions about research action into their lives; they engage in whatever behaviour has been agreed, note the outcomes whether these be physical, psychological, interpersonal, or social; and record their discoveries. Stage 2 may involve self-observation, reciprocal observation of other members of the inquiry group, or other agreed methods of recording experience. It is primarily in the realm of practical knowledge.

As part of this application the co-researchers (Stage 3) become fully immersed in their practice. They encounter each other and their world directly, as far as possible without preconception, bracketing off any prejudicial influence of the ideas they started with in Stage 1, and so opening themselves to novel experience and discerning so far as possible what is actually happening. They may actually forget that they are taking part in an inquiry. This deep engagement with the subject of the inquiry is in the realm of experiential knowledge, and is the touchstone of the method; it is to be contrasted with the superficial engagement of a subject in orthodox inquiry, who responds to a questionnaire or who is paid to take part in an experiment, while having at most superficial knowledge of, and interest in, what is being studied.

Having engaged deeply with their practice and experience in Stages 2 and 3, the co-researchers return in Stage 4 to reflect on their experience and attempt to make sense of it. This will involve revising and developing the ideas and models with which they entered the first cycle of inquiry, even discarding them and starting anew. This reflection involves a whole range of both cognitive and intuitive forms of knowing; its expression may be primarily propositional, but may also involve stories, pictures, and other ways of giving voice to aspects of experience which cannot be captured in propositions. When this making sense has been completed, the co-researchers can consider how to engage in further cycles of inquiry (Reason 1988, pp. 4–5, emphases in original).

In closing this chapter, Heron (1988 p. 55) reminds us that truly cooperative inquiry involves sustained authentic collaboration that is not possible if the process is contaminated by differences in power or status. He suggests that an inquiry is most cooperative if it can maximise both the distinctive individuality of the inquirers and the collective reciprocal effect of their working together. Individual reflection needs to be both autonomous and:

fully open to influence by my experience, your experience, your reflection on my experience, your reflection on my reflection, and vice versa; and all this in relation to each person in the inquiry group. Of course, this is all a counsel of perfection. For any given inquiry one adopts that form of cycling . . . that seems best suited to the subject-matter of the inquiry, and that offers an accessible and manageable balance between individual and collective effects (Heron 1988, pp. 456).

The creation of meaning through narrative, storytelling and writing

Chapter 6 attempted to describe some of the ways in which meaning is created through the use of reflective techniques. Some of these techniques derive from human learning and development applications and some from research applications; some can be used effectively by the individual in isolation from other people, and others depend on dialogue. This chapter examines in more detail the ways in which meaning is actually created by the concrete activities of talking and writing.

As action research work progresses, the researcher becomes increasingly aware of the extent to which planned interventions and actual events differ, and of just how much is invented or created through the process of interaction with others, whether these others are clients, colleagues or anybody else with whom one comes into contact. If the researcher only attends to those things which proceed as planned, if she or he excludes all the accidental or unplanned experiences to which they are subject, they do not effectively achieve any of their tasks: these are the development of learning praxis and research praxis, and the theory which would help to explain aspects of both.

Yet the business of capturing 'unplanned' data can prove to be formidable. I rarely went out without pen and paper and if 'caught' without them I would use anything that came to hand to make notes while events, experiences and ideas were fresh in my mind. I also became extremely attentive to the words and phrases others use in conversation. As Jones (1985) puts it:

> all interpretation involves making sense of things—deciding they 'mean' something or other . . . though we use dress, gesture, touch and even smell to communicate meaning, the most sophisticated way we do it is through language. For this

reason interactionist research is typically very interested in what people say. What they say stands for what they mean—what the interactionist is interested in (Jones 1985, p. 94).

As Jones observed, talking can take place in an interview, but unlike the positivist use of the interview, the point is not to gain evidence of the speaker's ideas and activities we have decided **we** want to investigate, but to explore the way the other person sees the world.

Unlike the positivist, we want no preconceived ideas. Therefore we want no leading questions. We do not want our actors to go where we lead them. We want to go where they lead us (Jones 1985, p. 94).

The interpretivist's problem opposes that of the positivist researcher: instead of clearly imposing a structure on events, the interpretivist is concerned lest any imposed structure destroy the integrity or authenticity of what happens. The 'interviewer effect' is such that in subtle, and not so subtle, ways, the researcher influences the data by telling 'the subject' enough to produce what we wanted to hear about anyway.

This raises the possibility of the 'desirability effect'—the proposition (supported by research interviews) that people may respond in ways that they think the other person will approve of. As Jones says:

> since we soon come to believe that others will interpret our behaviour, our *own* interpretative abilities allow us to manipulate the interpretation to suit our vision of ourselves. We use our capacity to be *self-reflective* in order to present the person we wish others to think we are. We play roles in a *creative* way to elicit from others the responses we desire. In effect, we manage, or orchestrate, the responses of others by presenting the image of our self we wish them to hold. We become actors on the stage of life, writing our own lines (Jones 1985, p. 95).

Arguably, then, in any encounter—whether devised or unplanned, whether for research purposes or any other—the participants in the action are both creating themselves, and, to use Morgan's phrase 'meeting themselves':

In conversation, as in research, we meet ourselves. Both are forms of social interaction in which our choice of words and action return to confront us . . . because of the kind of discourse, knowledge or action that we help to generate. . . When we engage in action research, thought and interpretation, we are not simply involved in instrumental processes of acquiring knowledge, but in processes through which we actually make and remake ourselves as human beings (Morgan 1983, p. 373).

My reflection on these words, and later on my experiences, had at least two outcomes. One was to understand the importance of capturing words and phases as I and others produced them, and also to find effective ways to do that. Writing down everything that is being said can be powerfully reinforcing, and therefore manipulative, of other people's behaviour, as Jones (1985) reminds us. It can also destroy the sometimes fragile and tentative, and sometimes energetic and robust flow of conversation during which ideas and meaning are being explored, created, confirmed or rejected. On the other hand, while relying on one's memory after the event can be difficult, to continually carry round and use a tape-recorder would be both inconvenient and intrusive.

In time, I developed a habit of writing down almost casually certainly with an economy of movement and gesture—key words and phrases as they occurred, provided I could do it without disrupting the interaction. This was frequently possible, since I worked mostly in consultancy and academic settings where taking notes is a familiar activity.

I also kept a journal in which I wrote reflectively and at length about what had happened during events and conversations that day. I often—but not always—wrote in the journal daily, and at least weekly throughout the course of the research project. I also continued my practice of maintaining case files in relation to each consultancy intervention. This entire process combined quite 'messy' features (dozens of manilla folders containing scribbled notes and jottings) with others which were more systematic, such as journal entries and case files.

The power of narrative in the creation of meaning

What I've described so far is the mechanics of keeping track of some of the data created by action research. The second outcome of reading Morgan's words was almost a 'quantum leap' in my appreciation of just how powerful the acts of spontaneously talking and writing about things that matter to people are: not just in describing their realities, but in discovering them, creating them and changing them.

We know from the field of counselling, that the act of talking about oneself can be very helpful: because of the release of emotion which sometimes accompanies it, because it feels good to be on the receiving end of somebody else's attention and regard, and because, in talking about a problem, we sometimes gain added insight into what the problem is and how we might deal with it (Carkhuff 1969). We also know that applying symbols—whether in words or in pictures—to experience and to ideas enhances their meaning (Gendlin 1970).

Even so, it is easy to underestimate the basic 'truth' of Morgan's statement that in action research we make and remake ourselves as human beings. It is equally easy to underestimate the value of simply creating the space for telling and listening to people's narrative, to their stories; for telling one's own story; for writing one's own and for reading the stories of others.

It is equally easy to underestimate the relevance of creating the space for telling, and listening to, people's stories, whether one's own or that of others, and from writing and reading stories. These activities can lead to knowledge which is useful in research and which can facilitate personal learning and change.

In the context of learning, and facilitating learning in others, a colleague reminded me of the value of asking people to tell and retell, and sometimes tell yet again, the 'story' of an incident, or to relate the history of the group or their own personal contribution to something. With each telling, the story is enriched and extended, and deeper layers of meaning emerge as well as closer connections with people or things which, in the first telling, were in the background of the Gestalt. These themes or patterns of meaning were not always obvious to either teller or listener on the first telling. The telling and retelling create a clarity of perspective that incorporates the paradoxical qualities of closeness and distance central to 'critical knowing'. In the telling, one 'owns' the story fully and in the same moment, sometimes lets go of it, moves on. And the way the story is told is often as important as the content of the story: the teller brings to the telling, no matter how brief it is, important 'bits' of themselves and these small bits often accurately represent and reflect the whole.

Various writers have described the research value of 'talk', including Jones (1985), Heron (1988), Cunningham (1988), Morgan (1983) and Reason and Hawkins (1988). Morgan (1983) points out that we sometimes need to go on talking for as long as we need until we can't create any more useful meanings, and also highlights the value of recycling our records and memories of earlier conversations, revisiting them with the wisdom of accumulated experience and learning, and gaining different perspectives from the rereading—as we can from the face-to-face retelling. In *Story-telling as Inquiry*, Reason and Hawkins (1988) suggest that through *expression*, the meaning of experience is not simply communicated but is discovered and/or created. As a result, the medium and the meaning are essentially interpenetrating so that it is foolish to ask the meaning of a story or painting as separate from the work in itself. Sometimes the meaning is released and made manifest by the medium, as Michelangelo claimed in saying that he did not create his sculptures, he only released them from the stone (Reason & Hawkins 1988, p. 81).

Reason and Hawkins note that in Western culture the expression of experiences is often seen as belonging to the realm of the creative arts, to the production of the beautiful or entertaining rather than to the world of science. However, they suggest that psychotherapy which, in the Freudian school, grew in part out of the scientific medical tradition, very soon had to incorporate storytelling both in the process of therapy and in its product (the therapeutic case study).

They observe that, in hermeneutics, this does not mean that any study qualifies as science but that science consists of taking studies seriously. Their view is that the 'best' studies in everyday life are those which stimulate or stir up people's minds, hearts and souls, which thereby give them new insights into themselves and their environments: the issue then is not whether storytelling is science but whether science can learn to tell good stories (Reason & Hawkins 1988, p. 83). They then ask: 'How do we use stories as inquiry?', 'How do we draw forth meaning through storytelling?' and 'What are the stages in the process of meaning creation in and through stories?'

They begin by describing the processes followed by social scientists and then discuss personal storytelling. Social scientists, having entered a field situation, proceed to gather information and to identify themes based on their experiences there; these themes are woven into a descriptive case study which contains within it a 'pattern model' of explanation; social scientists then compare and contrast case studies, perhaps seeking new cases to fill out the categories so that they can develop a typology which, in turn, might lead to the development of a general theory.

In personal storytelling, a similar progression occurs. This happens through levels or stages of development, from basic description to metaphor. Metaphor captures meanings and patterns in experience which are difficult to capture in any other way. In society as a whole, the metaphors of story enrich our understanding or interpreting the world and our experience of it. In time, personal stories enter collective local folklore, becoming sagas, and eventually, as their archetypical patterns become increasingly divorced from their original content and context, they become fairy tales or myths. As Reason and Hawkins note:

> we have two paths of inquiry: from experience through explanation to general theory; and from experience through expression to myth and archetype. Thus we create between them a space for dialogue and for a dialectical development, so that a theme may be illuminated by a story or a theory may clarify a myth. Indeed, some of the most illuminating researchers have used both paths . . . [as in] . . . Freud's use of the Oedipal myth . . . and [the way in which] . . . modern physicists have turned to the metaphors of wave and particle to illuminate and express their mathematical formulations of matter and energy (Reason & Hawkins 1988, p. 85).

They describe some of the techniques they have used to develop storytelling as a form of collective inquiry. For example, the storyteller would be encouraged to write the story down and then read the story aloud, so adding tone and feeling to the words on the page. The listener might then read the story back, using *their* style and tone. In this way, the original story begins to take on a separate life of its own, since the original teller hears their own story in a new way, seeing it not only as part of themselves but also as distant from themselves ('critical subjectivity'). At the same time, the storytelling also awakens different reactions and perspectives in the audience. In a workshop situation, people might retell the story in their own words or respond with a story of their own.

A story told in this way moves very quickly from belonging to an individual to becoming part of the collective, tapping into shared experiences and values, but also helping to define the boundaries or limits to that shared experiences. Reason and Hawkins go on to describe what they have done as creating a *dialectic of expression* that is quite different from the debate or dialectic between opposing explanations. In the manner of grounded theory, the response of the story-teller and the listeners to the telling and retelling of the story creates a process which catches and contributes different aspects of the whole, both focusing and extending the range and levels of meaning contained in the original story. As a group moves beyond description and seeks for explanation through the storytelling process, another dialectic emerges as expression illuminates explanation and vice versa.

Reason and Hawkins caution that the task of the researcher is to allow an appropriate balance between the use of storytelling to create meaning (whether in the form of description or explanation) and the use of other dialogues and dialectics which deliberately and constructively challenge, test and evaluate the products of the storytelling dialectics. For example, a group within an organisation might use storytelling to develop metaphors which capture the existing culture of the place, but this metaphor might simply reflect a collective defensive projection which needs to be held up to the light and be seen for what it is: one version of 'reality'.

As a practice issue, they reiterate that it is important to establish a method of inquiry that honours expression as well as explanation, which does not rush prematurely into explanation but invites individuals and groups to search for the images and metaphors which do justice to their experience, a method of inquiry which captures the essence of that experience before seeking to find the reason for it. So the simple invitation to 'tell me the story' evokes a different response from 'can you tell me why. . .?'.

Storytelling and story writing have featured increasingly in my research praxis, as well as my praxis as a learner and learning facilitator. I often use storytelling and writing to create dialogue with others that serves to bring to the surface and develop meaning—both when describing and when attempting explanations of experience and ideas. However, I also write stories to create my own internal dialectic—a dialogue with myself. This dialogue takes place in my journal, but its most sustained manifestation occurred when I was writing my doctoral thesis: then nearly every sentence caused me to reflect on what I was writing, as well as making me aware of, and even more determined to use, the power of expression in the way that Reason and Hawkins (1988) describe.

But is it research?

However, without the external dialectic, does this kind of expressive and reflective writing count as 'research activity'. In other words, does it 'count' as a research tool if it was produced without having been read aloud to others and without having become the source of the kind of dialogue which Reason and Hawkins (1988) describe and so value? This might seem like a fine point: why be so concerned about whether this kind of writing 'counts'? I believe that it is an important issue, relevant to action research which requires the researcher to balance action and private reflection with collective inquiry. To devalue the enormous amount of private or internal dialogue that accompanies interactive research of any kind, and which is certainly involved in the production of a thesis, is to discount data that is potentially very valuable.

My years of doctoral research (more than five) produced thousands of journal entries, notes on the margins of articles and papers, workshop outlines, exercises to facilitate action and learning on the part of clients and students, lecture notes and handout materials: in Reason and Hawkins' terms, these were very powerful forms of expression as story writing. Between them, they told the story of the interaction between the external data (the writer's professional and life experience) and the internal data: the frameworks, ultimately to be thought of as an evolving praxis, which guided her behaviour, her instinctive ways of doing things and her emotional as well as intellectual reactions.

Action research, coupled with action learning, was a powerful process of data generation, collection and analysis. The keeping of notes particularly in the form of a learning journal (Boud 1985) provided a way to capture that process as it happened, day-by-day. But something else was needed for the story to be told coherently as an integrated account of a complex series of experiences and reflections. In using exactly those words in conversation with a colleague one day, an answer was offered: tell the thesis as a story, but tell it as a particular story—yours, your 'autobiography'. And use the autobiographical method not just as a vehicle for *reporting* the data, but as an integral part of the methodology used to *generate* and analyse it.

As a method of research, autobiography, like biography, has primarily attracted the attention of sociologists. *The Concise Oxford Dictionary* defines autobiography as 'writing the story of one's own life'. With some notable exceptions, which include Gordon Allport's (1942) *The Use of Personal Documents in Psychological Science*, it's my observation that psychologists as a professional group have not systematically recognised the production and reading of autobiographies, or biographies, as a means of expanding the knowledge base of their discipline.

By contrast, Bertaux (1981), in his edited collection *Biography and Society*, suggests that biography and autobiography offer a powerful means of transforming sociological practice. He and other contributors offer many perspectives and frameworks for analysing and interpreting the content of biographical and autobiographical material.

Bertaux notes that autobiography provides us with a rich source of data not only when we read the autobiography of others, but also when we write our own. The use of storytelling, including the telling of one's own story, is a method of extending the wisdom and praxis of sociologists:

> narration need not be atheoretical, but it forces the theoretician to theorise *about something concrete*. If its form is simple, it can be used to convey highly complex contents . . . as it forces us to transcend that analytic stage, at which we stop too often, and to move towards synthesis (Bertaux 1981, p. 44) (italics in original).

This was how I used autobiography or 'story writing'. The act of writing, as much as the telling of the story to other people, became increasingly a means of generating data and making sense of and synthesising it, as well as simply reporting it.

In this way, keeping a journal, making other notes, and producing the thesis also became research tools. In *The Way of The Thesis*, Turner (1989) compares thesis writing to a craft, in that it involves the skilled application of tools in both *creating* and *uncovering* the subject matter. Through these craft skills, the thesis writer searches out, constructs and sustains a good argument or contention (a thesis). The argument is carried on with oneself and with others, through the process of construction and search: 'when you have brought understanding to the reader, you begin to grow wisdom for yourself' (Turner 1989, p. 35).

The use of *journal writing* as a means of not only recording experience but making sense of it in various ways, has a long and m ulticultural history (Rainer 1980). Rainer believes that the first diaries that were not essentially historical records were written in the tenth century by Japanese women. They used their diaries to explore their fantasises and dreams and not just external events. Carl Jung (1875–1961) used his diary to develop much of his psychological theory, including his theory of the collective unconscious, recording his dreams and fantasies of recurring images and symbols.

In using a journal or diary in this way, the keeper of the journal is doing more than collecting field notes. Both Rainer (1980) and psychologist Ira Progoff (1975) have written detailed accounts of journal techniques which can be used to facilitate the development of understanding and changed behaviour. Progoff's *Intensive Journal Method* is a very systematic approach in which one maintains 'a continuing confrontation with oneself in the midst of life' as a 'psychological laboratory' in which personal growth is recorded and studied so as to bring the outer and inner parts of experiences into harmony.

Anais Nin (1903-1977) not only published her own diaries (1966-1976) but collaborated with Tristine Rainer for some years in teaching journal workshops. Their approach suggests four basic uses of the diary: first, as a means of *catharsis* (the release or expression of feelings and the accessing of emotion); second, as a means of description and recollection (probably the most common form of diary expression, capturing and recording reality-or at least the way we experience it, through our senses); third, as a means of accessing the imagination, through free, intuitive writing (Rainer believes that this can also be a means of getting in touch with personal creativity and the unconscious mind, by removing or putting aside the control of the conscious mind); and, fourth, as a means of *reflection* in which the intellect contemplates experience and develops ideas, solves problems and, at times, integrates catharsis, description and intuition. In this way, the diary is used to access four aspects of the person: that which comes from the heart, the senses, the imagination and the head (Rainer 1980).

The use of diary or journal techniques as a means of facilitating management development has also been developed and propounded in more recent times (for example, Boud 1985).

While keeping a journal and writing a thesis are different undertakings, there are some similarities. Both require the integration of separate and diverse experiences and ideas into one coherent account, or, in the case of a thesis, a sustained argument. But the methods of writing described above give some idea of how the process of writing extends well beyond the recording of experience to include an active role in double-loop learning.

To emphasise Turner's point, however, the telling of a *whole story*, through the mechanism of writing a thesis, differs from the cathartic, descriptive, intuitive and reflective purposes which might be served by writing about isolated and separate incidents. The need to make connections between many different sets of ideas, to tie the story back to an essential thread of argument or contention and to make sense of a broad range of experiences over a long period of time, offers the potential for a deeper, richer and more sustained insight for both the writer and the reader.

Here I should make it clear that I did not regard the production of a thesis as being literally the same thing as writing one's life history. But I did come to see the thesis as providing, among other things, an opportunity to use personal story writing as a research activity that could, and did, generate personal meaning.

While convinced that personal story writing does generate personal meaning, the question remains whether it should be taken seriously as an activity for generating collective knowledge. In other words, does it create meaning and knowledge that is of use to others? This assumes that in writing the story itself (not just in her activities in the field), the writer is capable of maintaining 'critical subjectivity' of the kind this chapter has explored. Hankiss (1981) has observed that:

> Everyone builds his or her own theory about the history and the course of his or her life by attempting to classify his or her particular successes and fortunes, gifts and choices, favourable and unfavourable elements of his or her fate according to a coherent, explanatory principle and to incorporate them within a *historical unit*. In other words, everybody tries, in one way or another, to build up his or her ontology.

> Specific mechanisms are involved in this building process. Human memory selects, emphasises, rearranges and gives new colour to everything that happened in reality; and, more important, it endows certain fundamental episodes with a symbolic meaning, often to the point of turning them almost into myths, by locating them at a focal point of the explanatory system of the self. It is through this system that what a person has to say about himself is expressed in a particular way, for instance by telling stories having others than himself as protagonists: one finds out about people through the way in which they talk about others.

> This *mythological rearranging* plays a specific *instrumental* role within the self-regulating system of the psyche which allows the subject to smoothly incorporate his past and his own life-history into the strategy, or 'script' of his present life (Hankiss 1981, pp. 203–4).

In other words, the writer might engage in a kind of personal mythmaking, as opposed to the collective myth-making which Reason and Hawkins (1988) describe.

Without the exercise of critical subjectivity, integrated storytelling cannot be regarded as research activity in and of itself although it might become the object of someone else's research activity in much the way Ferrarotti (1981) suggests the study of other people's biographies and autobiographies is a legitimate way of studying the larger phenomenon of an organisation or society. To borrow words used earlier, it becomes simply another story, possibly a good one, but not one that creates directly transferable meaning and knowledge that is of value to others. If others try to apply the personal meaning constructed by the writer, there is a chance that they are applying someone else's myths to their own reality.

In practice, I could think of no other way to integrate the complex and large body of experience comprising action, feeling and thought over five years; some of this experience was generated by others and shared with the researcher, some by the researcher alone and shared with others, and some in company with others. In telling the story (Cherry 1995), I took care to describe how I attempted to maintain critical subjectivity during the research activity itself, and I also indicated when this was completely missing. I described how I tested my conclusions and developed my theory; and how I modified my constructs in the light of my experience. In writing the story, I attempted to be both close and distant, to adopt the perspective of 'meta-me'. If I have constructed a myth or fantasy, at least I have aimed to write about it in such a way as to make the entry into mythology as visible as possible, both to myself and others.

When coupled with action research, storytelling produces a story that no longer represents one person's unchallenged view of the world: it exposes the means by which that view was acquired. The individual's 'third position thinking' is on full display and can be readily critiqued by others.

The value of the individual case study

Whether it explores an intervention by a group of people in one organisation or one person's interventions in dozens of organisations, action research still carries the limitations of all case study research: it produces purely 'local' knowledge even when that local knowledge is internally valid.

Gummesson (1991) summarises the ways in which case studies can be of use. Case studies can be used in several different ways: first, as an attempt to derive general conclusions from a limited number of cases (it serves the purpose of efficiency); second, to arrive at specific conclusions which are particular to this one case because this one case is, for some reason, important (it might represent a 'landmark' as in case law). Individual cases can also be used to generate change: to 'showcase' or 'sell' an idea that would otherwise not be acted upon by others.

Gummesson then provides an excellent summary of the arguments for and against case studies as a research methodology. He argues against using the methodology of case studies in order to derive general conclusions from a limited number of cases, on the grounds that it lacks statistical validity and is hard to replicate (the test for reliability). He suggests, as do Susman and Everard (1978), that, in practice, the most important advantage of case study research is the opportunity it provides for holism: enabling us to study many different aspects of the phenomenon, to study those aspects in relation to each other and to view the phenomenon within its total environment (Gummesson, 1991).

In my view, a story based on action research has another, even more important value. If it is done well, it can provide a template against which the reader can review his or her own experiences: it thus becomes a trigger for third position thinking in others. If this kind of personal review and reflection were happening face-to-face, that would be called 'immediacy' (Carkhuff 1969). When it happens through the pages of a book we might call it something else, but it can sometimes have something of the same power. Most of us have experienced being challenged and stimulated to think about our own lives when reading an account of someone else's. To be stimulated by an account of someone else's thinking process is perhaps more unusual, but hopefully possible.

Thus the value of the individual story should be assessed in terms of the thinking that it stimulates in others, rather than whether it is representative of the experiences of others. In other words, examining this seashell (the story of how praxis was created and discovered) might not enable you to make reliable inferences about the construction of the universe, but if, in examining this single seashell, the reader becomes interested in exploring his or her own story and praxis, then it has served a practical purpose and possibly made the most enduring kind of contribution.

References

- Abelson, R.P. 1981, 'Psychological status of the script concept', *American Psychologist*, vol. 36, pp. 715–9.
- Allport, G.W. 1942, The Use of Personal Documents in Psychological Science, Social Science Research Council, New York.
- Altrichter, A. 1992, 'Do we need an alternative methodology for doing alternative research?', in *Action Research for Change and Development*, ed. O. Zuber-Skerritt, Avebury, Aldershot.
- Ansoff, H.I. 1985, *The New Corporate Strategy*, John Wiley and Sons, New York.
- Argyris, C. 1982, *Reasoning, Learning and Action, Jossey-Bass, San Francisco.*
- Argyris, C. 1983, 'Action science and intervention', *Journal of Applied Behavioural Science*, vol. 19, pp. 115–40.
- Argyris, C. 1985, Strategy, Change and Defensive Routines, Pitman, Boston.
- Argyris, C. 1990, Overcoming Organisational Defences, Prentice-Hall, New York.
- Argyris, C. 1991, 'Teaching smart people how to learn', Harvard Business Review, May–Jun., pp. 99–109.
- Argyris, C. 1993, 'Education for leading-learning', Organisational Dynamics, Winter, pp. 5–17.
- Argyris, C. & Schon, D.A. 1974, *Theory in Practice: Increasing Professional Effectiveness*, Jossey-Bass, San Francisco.
- Argyris, C. & Schon, D.A. 1978, A Theory of Action Perspective, Addision-Wesley, Reading, Mass, USA.
- Argyris, C. & Schon, D.A. 1989, 'Participative action research and action science compared: a commentary', *American Behavioural Scientist*, vol. 32, pp. 612–23.
- Baburoglu, O.N. & Raun, I. 1992, 'Normative action research', Organisation Studies, vol. 13, no. 1, pp. 19–34.
- Bakhtin, M.M. 1981, *The Dialogic Imagination*, University of Texas Press, Austin, Texas.

- Bateson, G. 1973, *Steps to an Ecology of Mind*, Paladin, St Albans, Herts, USA.
- Belenky, M.F., Clinchy, B. McV., Goldberger, N. & Tarule, J.M. 1986, Women's Ways of Knowing, Basic Books, New York.
- Berger, P. & Luckmann, T. 1966, *The Social Construction of Reality*, Doubleday, Garden City, New York.
- Bergin, A.E. 1970, 'Psychology as a source of inner experience', in *New Directions in Client-Centred Therapy*, eds J.T. & T.M. Tomlinson, Houghton Mifflin, Boston.
- Bertaux, D. 1981, 'From the life-history approach to the transformation of sociological practice', in *Biography and Society*, ed. D. Bertaux, Sage Publications, Beverley Hills.
- Blaikie, N.W.H. 1980, 'The interpretative alternative to positivistic sociology', in *Reactions to Positivism*, eds E. Vest-Brause et al., Deakin University Press, Geelong, Victoria.
- Blaikie, N.W.H. 1991, 'Methodological perspectives in sociology: a framework for analysis', *Quality and Quantity*, vol. 25, pp. 113–16.
- Blaikie, N. 1993, Approaches to Social Inquiry, Polity Press, Cambridge, UK.
- Bolen, J.S. 1989, Gods in Everyman, Harper and Row, San Francisco.
- Boud, D. (ed.) 1985, *Reflection: Turning Experience into Learning*, Routledge & Kegan Paul, London.
- Bowden, P. 1986, 'Problem-oriented training', *Training and Development in Australia*, vol. 13, 1, p. 13.
- Boyatzis, R.E. 1982, The Competent Manager, John Wiley and Sons, New York.
- Braun, J.A.C. 1961, *Freud and the Post-Freudians*, Penguin Books, Harmondsworth, Middlesex.
- Braun, L., Henry, C., Henry, J. & McTaggart, R. 1988, 'Action research: notes on the national seminar', in *The Action Research Reader*, eds S. Kemmis & R. McTaggart, Deakin University Press, Geelong, Victoria.
- Brouwer, P.J. 1964, 'The power to see ourselves', Harvard Business Review, Nov-Dec., pp. 36-46.
- Bruner, J.S. 1961, 'The act of discovery', *Harvard Educational Review*, vol. XXXI, pp. 21–32.
- Bruner, J.S. 1966, *The Process of Education*, Harvard University Press, Cambridge, Mass.
- Burgoyne, J.G. 1976, 'Learning processes in the acquisition of managerial skills and qualities', *Management Education and Development*, vol. 7, pp. 205–7.

- Carkhuff, R.R. 1969, *Helping and Human Relations: a Primer for Lay and Professional Helpers, Vol II: Practice and Research, Holt, Rhinehart and Winston, New York.*
- Carr, W. & Kemmis, S. 1986, Becoming Critical: Education, Knowledge and Action Research, Falmer Press, London.
- Casey, O. 1987, 'Breaking the shell that encloses your understanding', *Journal of Management Development*, vol. 6, pp. 30–7.
- Checkland, P. 1981, Systems Thinking, Systems Practice, Wiley, Chichester.
- Cherry, N. L. 1995, *Developing Reflective Practice*, PhD thesis, Royal Melbourne Institute of Technology, Melbourne.
- Cohen, W. & Levinthal, D. 1990, 'Absorptive capacity: a new perspective on learning and innovation', *Administrative Quarterly*, vol. 35, pp. 128–52.
- Comte, A. 1864, Cours de Philosophie Positive, Bailliere, Paris.
- Cunningham. I. 1988, 'Interactive holistic research: researching selfmanaged learning', in *Human Inquiry in Action*, ed. P. Reason, Sage Publications, Beverley Hills.
- D'Avis, W. 1984, Neue Einheit der Wissenschaften. Methodologische Konvergenzen Zwischen Natur-und Socialwissenschaften, Campus, Frankfurt.
- De Gues, A. 1988, 'Planning as Learning', Harvard Business Review, Mar-Apr., pp. 70-4.
- Dick, R. 1992, You Want to Do an Action Research Thesis?, Interchange Document, University of Queensland.
- Donaldson, M. 1992, Human Minds: an Exploration, Penguin Books, London.
- Dunphy, D.C., & Stace, D. 1990, *Under New Management*, McGraw Hill, Sydney.
- Elbaz, F. 1988, 'Knowledge and Discourse: the Evolution of Research in Teacher Thinking', paper presented at the 4th Conference of the International Study Association on Teacher Thinking, Nottingham University.
- Eliot, T.S. 1943, *Little Gidding: Four Quartets*, Harcourt and Brace, New York.
- Ferrarotti, F. 1981, 'On the autonomy of the biographical method', in *Biography and Society*, ed. D. Bertaux, Sage Publications, Beverley Hills.
- Freed, G. 1992, *Fifth Generation Innovation*, Australian Centre for Innovation and International Competitiveness, University of Sydney, Occasional Paper.
- Freeman, M. 1993, Rewriting the Self, Routledge, London.

- Freire, I. 1970, *Cultural Action for Freedom*. Centre for the Study of Change, Cambridge, Mass, USA.
- Gendlin, E.T. 1970, 'A theory of personality change', in *New Directions in Client-Centred Therapy*, eds J.T. Mark & T.M. Tomlinson, Houghton Mifflin, Boston.
- Georgi, A. 1993, *Existential Phenomenological Philosophy as Grounding for Person-Centred Science*, Educational Research and Development Unit, Royal Melbourne Institute of Technology, Occasional Paper 93:3.
- Goodman, P., Hefferline, R.F. & Perls, F.S. 1972, *Gestalt Therapy*, Bantam Books, New York.
- Goss, T., Pascale, R. & Athos, A. 1993, 'The re-invention roller coaster: risking the present for a powerful future', *Harvard Business Review*, Nov–Dec, pp. 97–108.
- Gummesson, E. 1991, *Qualitative Methods in Management Research*, Newbury Park, Sage Publications.
- Hankiss, A. 1981, 'On the mythological re-arranging of one's life history', in *Biography and Society*, ed. D. Bertaux, Sage Publications, Beverley Hills.
- Heidegger, M. 1962, Being and Time, Harper and Row, New York.
- Heron, J. 1988, 'Validity in cooperative inquiry', in *Human Inquiry in Action*, ed. P. Reason, Sage Publications, Beverley Hills.
- Honey, P. 1989, 'The opportunist learner', paper presented at the annual conference of the Association for Management Education and Development on The Individual Learner, Chipping Norton, Oxon.
- Hughes, J. 1980, The Philosophy of Social Research, Longman, London.
- Jick, I.D. 1979, 'Mixing qualitative and quantitative methods: triangulation in action', *Administrative Science Quarterly*, vol. 24, pp. 602–11.
- Jones, E. 1962, *The Life and Work of Sigmund Freud*, Hogarth Press, London, abridged.
- Jones, G.R. 1983, 'Life history methodology', in *Beyond Method: Strategies for Social research*, ed. G. Morgan, Sage Publications, Beverley Hills.
- Jones, P. 1985, *Theory and Method in Sociology: a Guide for the Beginner*, Bell and Hyman, London.
- Jung, C. 1933, *Modern Man in Search of a Soul*, Routledge and Kegan Paul, London.
- Kanter, R.M. 1989, When Giants Learn to Dance, Unwin Hyman, London.

- Kelly, G.A. 1955, *The Psychology of Personal Constructs*, Volumes 1 and 2, Norton, New York.
- Kemmis, S. 1992, 'Improving education through action research', in *Action Research for Change and Development*, ed. O. Zuber-Skerritt, Avebury, Aldershot, pp. 57–75.
- Kemmis, S. & McTaggart, R. (eds) 1988, *The Action Research Planner*, Deakin University, Geelong, Victoria.
- Kerlinger, F.N. 1964, *Foundations of Behavioural Research*, Holt, Rinehart and Winston, New York.
- Klein, E. 1971, A Competitive Etymological Dictionary of the English Language, Elsevier, London.
- Knowles, M.S. 1984, *The Adult Learner: a Neglected Species*, Gulf Publications, New York.
- Koestler, A. 1964, The Act of Creation, Pan Books, London.
- Koffka, K. 1935, *Principles of Gestalt Psychology*, Harcourt and Brace, New York.
- Kolb, D.A. 1984, Experiential Learning: Experience as the Source of Learning and Development, Prentice-Hall, New Jersey.
- Lansbury, R.D. 1992, 'Managing change in a challenging environment', *Asia-Pacific Journal of Human Resources*, vol. 30, no. 1, pp. 16–28.
- Lawler, E.E., Mohrman, A.M., Morhman, S.A., Ledford, G.E. & Cummings, T.G. (eds) 1985, *Doing Research That is Useful for Theory and Practice*, Jossey-Bass, San Francisco.
- Lepani, B. 1994, *The New Learning Society: the Challenge for Schools*, IARTV Seminar Series, May 1994, No. 33.
- Lessem, R. 1982, 'A biography of action learning', in *The Origins and Growth of Action Learning*, ed. R.W. Revans, Chartwell-Bratt, Bromley.
- Lewin, K. 1946, 'Action research and minority problems', *Journal of Social Issues*, vol. 2, pp. 34–6.
- Marrow, A.J. 1969, The Practical Theorist: the Life and Works of Kurt Lewin, Basic Books, New York.
- Marsick, V. J., Cederholm, I., Turner, E. & Pearson, T. 1992, 'Actionreflection learning', *Training and Development*, Aug., pp. 63–6.
- Martin, R. 1993, 'Changing the mind of the corporation', Harvard Business Review, Nov-Dec., pp. 81-94.
- McCall, M.W., Lanbordo, M.M. & Morrison, A.M. 1988, *The Lessons of Experience*, Lexington Books, Mass, USA.
- McGill, M.E., Slocum, J.W. & Lei, D. 1992, 'Management practices in learning organisations', *Organisational Dynamics*, vol. 21, pp. 5–17.

- McTaggart, R. 1992, 'Action research: issues in theory and practice'. Keynote address to the Methodological Issues in Qualitative Health Research Conference, November, Deakin University, Geelong, Victoria.
- Milner, M. 1936, *A Life of One's Own*. Published under the pen-name Joanna Field, Chatto and Windus, London.
- Mintzberg, H. 1987, 'Crafting strategy', *Harvard Business Review*, Jul-Aug., pp. 66–75.
- Morgan, G. (ed) 1983, *Beyond Method: Strategies for Social Research*, Sage Publications, Beverley Hills.
- Morgan, G. 1986, *Images of Organisation*, Sage Publications, Beverley Hills.
- Mumford, A. 1980, Making Experience Pay: Management Success Through Effective Learning, McGraw Hill, London.
- Neisser, U. 1966, *Cognitive Psychology*, Appleton-Century-Crofts, New York.
- Nin, A. 1966–1976, *The Diary, Volumes I-VI*, Harcourt, Brace and World, New York.
- Nonaka, I. 1991, 'The knowledge-creating company', Harvard Business Review, Nov–Dec., 1991.
- Pedler, M., Burgoyne, J. & Boydell, T. 1986, A Manager's Guide to Selfdevelopment, McGraw Hill, London.
- Pedler, M., Burgoyne, J. & Boydell, T. 1991, *The Learning Company: a Strategy for Suitable Development*, McGraw Hill, London.
- Percy, D.E. 1992, 'Invisible Faces at Work: the Real Work of Managing Organisational Change', Master of Business in Management thesis, Royal Melbourne Institute of Technology, Melbourne.
- Polanyi, M. 1958, *Personal Knowledge*, Routledge and Kegan Paul, London.
- Polanyi, M. 1967, The Tacit Dimension, Doubleday, New York.
- Pope, M. 1981, 'In True Spirit: Constructive Alternativism in Educational Research', paper presented at the 4th International Congress on Personal Construct Psychology, Brock University, St Catherine's, Canada.
- Pope, M. & Deniculo, P. 1992, 'Developing constructive action: personal construct psychology, action research and professional development', in *Action Research for Change and Development*, ed. O. Zuber-Skerritt, Avebury, Aldershot, pp. 93–111.
- Prideaux, G. 1990, 'Action research, organisation change and management development', *Australian Health Review*, vol. 13, no. 1, pp. 3–14.

- Prideaux, G. & Ford, J.E. 1988, 'Management development: competencies, contracts, teams and work-based learning', *Journal of Management Development*, vol. 7, no. 1, pp. 56–68.
- Prigogine, I., & Stengers, I. 1984, Order Out of Chaos, Bantam Books, Toronto.
- Progoff, I. 1975, *At a Journal Workshop*, Dialogue House Library, New York.
- Rainer, T. 1980, The New Diary, Angus and Robertson, Sydney.
- Rapoport, R.N. 1970, 'Three dilemmas of action research', Human Relations, vol. 23, pp. 499–513.
- Reanney, D. 1993, 'Science and the Search for Meaning', D.O. Williams Memorial Lecture, released by Mindware Exchange, University of Sydney.
- Reason, P. (ed) 1988, *Human Inquiry in Action*, Sage Publications, Beverley Hills.
- Reason, P. & Hawkins, P. 1988, 'Story telling as inquiry', in *Human Inquiry in Action*, ed. P. Reason, Sage Publications, Beverley Hills.
- Revans, R.W. 1980, Action Learning, Blond and Briggs, London.
- Revans, R.W. 1981, 'The nature of action learning', *International Journal* of Management Science, vol. 9, no. 1, pp. 1–25.
- Revans, R.W. 1982, *The Origins and Growth of Action Learning*, Chartwell-Bratt, Bromley.
- Richardson, G. 1990, Feedback Thought in Social Science and Systems Theory, University of Pennsylvannia Press, Philadelphia.
- Rogers, C.R. 1961, On Becoming a Person, Houghton Mifflin, New York.
- Schon, D.A. 1987, *Educating the Reflective Practitioner*, Jossey-Bass, San Francisco.
- Schutz, A. 1967, *The Phenomenology of the Social World*, trans. George Walsh & Frederick Lehnert, Northwestern University, Evanston. (Originally published in German in 1932.)
- Senge, P. 1990, *The Fifth Discipline: the Art and Practice of the Learning Organisation*, Doubleday/Currency, New York.
- Sharratt, P. & Field, L. 1993, 'Organisational learning in Australian organisations: hollow rhetoric or attainable reality?' *Asia–Pacific Journal of Human Resources*, vol. 31, pp. 129–41.
- Smith, B. (ed.) 1992, *Management Development in Australia*, Harcourt Brace Jovanovich, Sydney.
- Snell, R.S. 1988, 'The emotional cost of managerial learning at work,' *Management Education and Development*, vol. 19, pp. 322–40.
- Snell, R.S. 1989, 'Graduating from the school of hard knocks', *Journal* of Management Development, vol. 8, pp. 23–30.

- Snell, R.S. 1990, 'Congenial ways of learning: so near and yet so far', *Journal of Management Development*, vol. 9, pp. 17–23.
- Susman, G.I. & Everard, R.D. 1978, 'An assessment of the scientific merits of social research', *Administrative Science Quarterly*, 23, pp. 582–603.
- Thorndike, E.L. 1932, *The Fundamentals of Learning*, Teachers College, New York.
- Toffler, A. 1981, The Third Wave, Pan Books, London.
- Turner, B.A. 1988, 'Connoisseurship in the study of organisational culture', in *Doing Research in Organisations*, ed. A. Bryman, Kegan Paul, London.
- Turner, B.A. 1989, The Way of the Thesis, Capriccio Press, London.
- Vaill, P.B. 1989, Managing as a Performing Art: New Ideas in a World of Chaotic Change, Jossey-Bass Publishers, San Francisco.
- Warner, J.W. 1971, 'The journal of introspection and its plan in the graduate elementary teacher education program', *The Journal of Teacher Education*, 22, pp. 287–90.
- Watkins, P. 1992, 'Restructuring Australian Educational Administration: Japanese Management Strategies, Taylorisation and Practices', paper presented at the Commonwealth Council of Educational Administration Conference, Hong Kong.
- Watson, J.B. 1925, Behaviourism, Norton, New York.
- Westland, G. 1978, Current Crises of Psychology, Heinemann, London.
- Woods, P. 1985, 'Conversations with teachers: some aspects of lifehistory method', *British Education Research Journal*, vol. 11, pp. 13–25.
- Yin, R.K. 1987, Case Study Research, Sage Publications, London.
- Zuber-Skerritt, O. 1991, 'Action research as a model of professional development', in *Action Research for Change and Development*, ed. O. Zuber-Skerritt, Avebury, Aldershot, pp. 112–35.

Appendix 1

Experiences from the field

PAMELA J. FITZPATRICK-HERRERA¹

Imagine this. You have embarked on an action research project. You have the permission of your organisation. You have a timeline to complete the project and submit the thesis. You are enthusiastic and raring to go. Then your best laid plans begin to unravel. It seems you just can't get started. Your action plan is taking you nowhere. Your client doesn't want to talk to you, while the 'project team' doesn't want to participate. Is this the time to throw the project out and start again? Can the project continue?

This was the dilemma I faced when I did an action research project for my Master's in Applied Science in Innovation and Service Management at RMIT University between February and October 1996. In what follows I will share with you some of the insights I gained in tackling these dilemmas.

When I began, I intended using the project as the mechanism by which to drive the development of my workplace to take on the processes and characteristics of a learning organisation: one which learns from its experiences, values its staff and actively encourages their development and involvement in constantly shaping the business and modifying its systems. To achieve this I decided to focus on the newly formed management executive.

Everything was going well. I had written permission from my client, the Chief Executive Officer (CEO) to undertake an action research project, and a commitment that the organisation would give its full support. The timing of the project seemed to be perfect. A new executive had been established to work with the CEO in order to seize the challenges and lead the organisation into a bright future. As one of the three new managers, I envisaged using the project as the context through which we could establish ourselves as a team and develop the practices and behaviours that would model our aspirations for the whole organisation.

For several weeks I rehearsed how I would sell the action research proposal to the executive. I had an overwhelming sense of foreboding and delayed taking the plunge as long as I could. So much of the project's success seemed to depend on their willingness to participate. To allay my fears I practised my 'speech' and tried to anticipate the questions from the group. This was difficult because I was not going to be able to offer any concrete answers or solutions—I could only outline a process and the benefits that I believed were to be gained from undertaking our work in this way.

Finally I took the plunge and presented my ideas at an executive meeting. There were a couple of polite questions. Then silence. Then the meeting moved on to other matters.

Although the reaction, or lack thereof, was very disappointing and disconcerting, I believe I had taken an important step. In the first place, this action officially confirmed that I was engaged in an action research project, thus going beyond the agreement with the client (the CEO) and informal discussions with the other managers. Secondly my colleagues' response left me without any doubt that my original ideas on how the project would unfold were not going to work. I would have to find a different path.

What next? Where to now?

From the start of the project I wrote in my journal nearly everyday. The first thing I did every morning on waking was to write for half an hour. I quickly learned to enjoy the experience. The journal became my confidant and companion throughout the process. On weekends I reviewed the week's events.

Reviewing my notes a few days after the executive meeting enabled me to see and accept that the group was far from ready to make any type of commitment, especially to a process which entailed reflecting on ourselves and our way of working. I realised that this approach would require a level of trust and ease that did not yet exist.

The map: one destination—many paths

What then, could I do about the project? Would I have to scrap it and start again? The answer is no. At the beginning of the year I had been encouraged by the course advisers to invest time articulating the outcomes I wanted to achieve in the action research project: for the organisation, for my practice and for myself. As experience shows, this was not just a nice exercise to do, but fundamental to meeting the challenges an action research project frequently presents. Having very clear outcomes at the beginning, provided the basis of a map. On this map I could see where I was today, and where I wanted to finish, but the space in between was uncharted territory. Despite the state of chaos that I seemed to live in from day to day I could take out the map and see the outcomes that I aspired to. Gradually I understood that what was fundamental to the project was achieving the outcomes, not taking a particular pathway, and that there were a myriad of strategies that could be used.

Survival tools

My survival tools were my map, and my trusty journal. Although I felt as if a day at the office was like bobbing up and down in sticky mud, the journal offered another view of reality. The systematic recording and reflection enabled the change process to become visible and assessable. By using the journal I developed a sense of movement over time and of being in control of the process. I took comfort from the actions I had taken, and the sense that I was in the project and collecting data. I recorded what I did, and what happened, with particular focus on the executive meetings, and interactions with the individual participants outside those meetings.

When an action or event generated a lot of emotional heat for me I analysed these situations using the critical incident analysis format—a powerful and efficient reflective practice tool. These critical incident analyses helped me see that there was often a gap between my intended actions and what took place. By using critical incident analysis I was able to uncover my assumptions as well as generate other strategies I could try next time in a similar situation. These analyses were simple, gentle, yet powerful processes that helped me get to the heart of major practice issues.

Reviewing the journal each week, I began to identify recurring patterns in my management practice. Once the pattern was confirmed the action research project quickly shifted from a project focusing on the activities of the executive to that of focusing on my own practice as a member of the executive.

The new project focus

The project outcomes remained the same but my orientation to the project had changed. Rather than undertaking the project from the perspective of 'expert facilitator', I was now a participant observer of my own practice within the context of the executive.

Nature of collaboration

A hallmark of action research is a changed state as a result of a partnership. This requires the research to be undertaken in collaboration with others. In changing the focus of the project from the executive group to my practice, was a collaborative approach still possible?

Collaboration with the client

Collaboration with my client was nebulous—it was there, yet it wasn't. On the one hand, I had been given formal approval and support. On the other, the project and the process was ignored. In a sense the newly formed executive floated in the same type of limbo, struggling with the same dilemma—existing in name but not in substance. Given the ambiguities, I chose to interpret the situation in a way that enabled me to act. I decided that I had the authority to proceed as long as the research contributed constructively to organisational outcomes. I assumed that if my interpretation was incorrect and I was doing the wrong thing, my client would advise me.

Collaboration with the other managers and staff

In keeping with the philosophy of action research, I kept my research visible to others and encouraged people who had an interest in the research outcome to collaborate on their terms. By the end of the project I had undertaken a wide range of collaborative actions with managers and staff—from specific organisational development activities to reflective dialogues.

The other managers and I attempted to incorporate an action research approach into the work we did together. When our meetings flowed it was easy to incorporate a reflection component at the end, and in this way our meetings became more effective. However, we never managed to go beyond this point.

One role that I took in our meetings, which the other managers seemed comfortable with was being the group historian. If we were confronted with a situation, I would recall a similar challenge from the past, the strategies we had used and what we had learnt. I was able to do this as a result of the journalling and systematic critical reflection which facilitated an objective stance to the work, thereby extracting myself from the drama in the moment. In this role, I provided a framework for clarifying our ideas and building on what we had tried in the past. When taking this helping, non-directive role, our meetings tended to stay positive and focused. This was in stark contrast to the occasions when by proposing solutions I took an expert directive role: these solutions were rarely listened to and tended to close down the conversation. In this role I was also able to demonstrate through modelling the benefits of action research to the organisation.

Impact of the project on my practice

By the end of the project I had made significant movement towards achieving the outcomes I had identified at the beginning of the year for the organisation, my practice and myself. Personally, I had undergone a major transformation, learning how to see, and act, in the organisation, in a profoundly different way.

I had learnt to use my energy more effectively. By directing my efforts into activities for which I had responsibility, I began to produce significant results with less expenditure of energy than before the project. I had enhanced confidence in my perceptions as a result of learning how to see more clearly and more objectively, how to check evidence and clarify assumptions. Using action research, I learnt to treat experience as evidence, rather than filtering it through me. I began to see patterns in my own and other's behaviour, and develop a view of the whole organisation, and its culture.

Changing my mental models was one of the most successful aspects of the project. At the beginning I was unaware of the characteristic ways I perceived and interpreted my world. As the project progressed, I became aware that one of the assumptions underlying my behaviour was that I was able to change the behaviour of others, and that it was my responsibility to do so. In the end, however, I learnt that this belief was not only ill-founded, but it was also contrary to my own values; furthermore, that people were unlikely to open themselves to new ideas, and reflect on their own attitudes and behaviour, unless they had a trusting and supportive environment.

Through transforming my world view and redirecting my energy into areas where I could achieve results, I significantly increased my leverage and personal effectiveness. I discovered a whole new range of roles available to me in my workplace. I experienced pleasure in my skills and knowledge, confidence that I knew how to address problems—no matter how difficult—with the new learning tools I had developed through the project. I have begun to live from the inside out, in alignment with my values and vision. As a result I have developed a deep-seated confidence and ease.

Contribution of the project to developing a learning organisation

Through improving my practice I became a more effective member of the executive, and manager. This is not to say that the executive thrived as a result of my changed practice, but rather that I could evaluate my own performance more objectively and maximise my leverage and personal effectiveness. By building a continuous learning process into my own work, the next step of introducing this approach into programs throughout the organisation was relatively easy. By the end of the year, the impact of this project on the organisation was best articulated by a staff member who recently returned from a six months absence. 'How do you feel to be back?' I asked her. 'I am happy to be here,' she replied, 'because I can see there is hope that things are going to change.'

Final insights

After the project changed direction I was initially concerned that it lacked legitimacy, that it wasn't real action research. I felt that it was a sort of a consolation prize: I had envisaged a more public and formalised project, where the executive could talk animatedly about what 'we did' and what 'we had achieved' and feel an inner glow of teamship and success. The path I took may not have flattered my ego, but shifting the focus from the executive to my practice speeded up the important processes. This is because while I was focusing on the executive, I was concentrating on what my colleagues were doing or not doing, and successfully avoiding the very thing that I could completely control, that was my responsiblity, and the one thing that I could change: my own practice.

¹ Pamela undertook her Master's degree in Applied Science (Innovation and Service Management) at RMIT University in 1996, using action research as her methodology.

Appendix 2

Learning and developing by doing and reflecting—a personal view

JULIAN LIPPI¹

Action research changed my life. While action learning would have to be added to make the statement true in a strict sense, undertaking action research has had a profound effect on both my professional and personal lives. For me, action research is the undertaking of practice improvement through taking considered action, reflecting on the outcomes, planning and taking more action, and so on. Unlike action learning, it does not involve the informed participation of others. In this short paper I will outline my experience with action research and action learning as a learner/researcher, as a consultant in management development and as a mentor/supervisor to management students undertaking action research projects.

In 1990, fifteen years after completing a Bachelor of Arts degree with a major in Spanish which had led me through tutoring Spanish, broadcasting (mainly as a television current affairs producer), corporate communications, human resources and various roles as an internal consultant, I began a Graduate Diploma in Management at RMIT. The course was action learning based, and it focused on encouraging participants to challenge their usual ways of seeing things and operating, and to take action outside their 'comfort zone' to alter their practice. Like many people who have undertaken this and similar courses of study, I found having to challenge my usual way of operating very confronting.

Over the two years of the Graduate Diploma, I was introduced to a number of research tools and processes which helped me better understand and take responsibility for my own actions and then begin to change those actions: that is, change my practice.

One of the most valuable tools for me was the journal that I was encouraged to keep as I made my way along the new and sometimes steep and challenging track of improved practice. The journal was a repository for my thoughts about life, me, others, the fairness and unfairness of organisational life, my diatribes against those whom I perceived to be 'wrong' or dealing with me badly, and so forth. At times it was a 'dumping ground' for things I did not understand or chose not to understand. At other times it was a record of my 'flashes of brilliance' as I made connections with data in new and different ways. Slowly, almost inexorably, patterns began to emerge in my data and I began to make sense of things that had either been 'givens' or before had eluded me.

The most significant pattern for me during those two years was that things only changed when I took responsibility to make a change in my behaviour. By changing the way I was dancing, I changed the dance for those with whom I was interacting. I realised that when I thought in terms of 'them' and 'me', the most effective way to get 'them' to change was for me to do something different. This realisation led me to leave the organisational life with which I had become increasingly frustrated and dissatisfied, and to leap into creating my own future and setting up my own consultancy practice. With six months to go to the end of the Graduate Diploma, and in the middle of a significant recession, I took some very confronting and heavyduty action in starting my consulting practice.

I survived the leap, and, a year after completing the Graduate Diploma in Management, I returned to study to undertake an action research Master of Business Management. I was being stretched and challenged in my consulting practice. Being mindful of the changes I had been able to make to my practice so far, I felt that an action research project and the study associated with the Master's would further hone my skills and my practice.

When I began the process my energy was consumed by the search for a significant action research project. I say 'significant' because it was a course requirement that the project had to be something which would have an organisational impact, and which would change the way in which individuals or groups of people worked together. It had to have some lasting benefit for the organisation and some lasting benefit for me. Somehow this translated into 'BIG PRO-JECT' for me and I now think that I passed up a number of suitable opportunities because they didn't seem big or serious enough. It's something I have seen many people undertaking action research get caught up in. If people ask my advice, I generally try to steer them in the direction of that I would call a 'boutique' project (or part of a project) rather than something the size of a large department store. After all, the project has to be done in a limited time and results written up. If the process is to take only a year, devoting much more than around six months to the 'guts' of the project is very courageous.

The project I settled on was with a government department, and my client was a human resource manager who wanted to introduce 'benchmarking' into the organisation. At that stage my understanding of the project was that it was about benchmarking. Looking back it is difficult for me to understand how I did not see it as a change intervention. I recall being given advice along those lines by my supervisor (and others), but that data was 'inadmissible as evidence'.

Having reached an agreement with the client about the project and its scope, I put on my 'expert' consulting pith helmet, picked up my big game rifles (assorted benchmarking books, articles, etc) and set off into the organisational jungle. I was hardly any distance along my path when things got really tough. I had arranged a meeting with staff in the area where my project would begin. This was action research, and they were going to be informed and active participants. It would be an understatement to say that as a group they were not pleased to be meeting with me. Sixteen people met in a room suitable for about six. It felt like fifty! I had come prepared to talk with section leaders (four from memory), but at the last minute I had been told by the line manager that I was to brief all staff. I felt ambushed. It was a pattern that was to be repeated throughout the life of the project.

As the project proceeded, it became more and more evident that there were problems with the way the group was operating, how they interacted with their manager and the levels of respect they had for their manager and each other. A new state government had been elected shortly before I began to work with the group. The government had a clearly stated policy of decreasing the size of the public service. I realised after some time that some of what I was observing was a result of the group waiting for the 'slashing and burning' to begin. They were demoralised, angry and many, I would guess, were quite ineffectual—thereby contributing to the demise they so feared.

As it became clearer and clearer to me that the benchmarking project was a lodestone for the dissatisfaction of the group, I moved further from an 'expert' consultant role to a process consultant role. I then tried to work with the group and its management to raise and resolve some of the issues. The 'hottest' part of the intervention was a workshop where the group was encouraged to develop a vision of its future. This was seen as a cynical exercise to get the group to identify the people who would be sacrificed to the push for downsizing. Facilitators, management and participants all took a battering that day.

As a result of a subsequent conversation, I believed that there was no longer (if there had ever been) a real commitment to the intervention the project had become. I decided with my client from human resources to put things on hold, and to write about the outcomes of my experiences with action research to that point and what it had taught me. I felt very edgy about doing this because I was not confident that I had met one of the criteria for undertaking action research—that there had to be a change in the group or the organisation as a result of the intervention(s).

I could outline significant learnings for me; I could show how my assumptions about what are data, and how a consultant can interact with a client system had changed; I could demonstrate how I had been able to bring to the surface a major impediment to my development as a consultant; I could reveal my anxiety in working with clients, and how I had begun to make progress in acknowledging and managing that anxiety. But had I undertaken 'true' action research if the participants in the process had not also learned and changed? I believe I had, but I was spared the need to have to argue the point in my dissertation by changes that occurred in the organisation as a result in the project.

Very briefly, those changes included a senior manager reflecting on his/her role and its demands, and deciding that he/she did not want to continue. That person then made a deliberate move into another area even though it was to a lower status position. As a result of this change, the group I had worked with reorganised. A number of other changes also occurred in the human resources area.

So what did I learn from my action research/action learning experience?

There are seven key learnings which may interest others who are either contemplating or working on action research projects.

1 THREE LAWS OF ACTION RESEARCH

A few years after completing my Master's, I was at a conference that was addressed by Bob Dick. He offered what he described as the three immutable laws (my recollection) of change:

- Everything is connected to everything else;
- Some of the things are people;
- Wherever you start, it's the wrong place.

It struck me that what he was saying about the systemic nature of change projects applies equally to action research.

2 JUST GET STARTED

For me, it's most important to start the action research intervention as soon as possible. Start generating data and capturing it. Start analysing the data as soon as practicable and use the insights gained to plan and implement future steps. As often as possible, go around the cycle of planned action, reflection and analysis, planning of new action or adjusted action, and taking that action.

I often work with students or clients taking an action research approach who baulk at the idea of starting the project as soon as possible. Just as I said when I started my Master's project, I hear them saying: 'I'm not ready yet. I'm not expert enough. I have to do more reading.' Action research is about taking action, and while I would not advocate that anyone rushes into blundering, uninformed action, I have learned that many of us have a tendency to hold back. Holding back from taking action on getting into the cycle of action; reflection, planning, and new action, can seriously affect the progress and outcomes of a project.

3 DON'T JUST DO SOMETHING. STAND THERE!

The other side of this coin is the urge to take action when doing nothing might be a better approach. My experience indicates that this can happen when people start focusing on the task too much—especially if they've been stalling about starting to take action. Taking action without spending the time to reflect and consider and plan can be counterproductive. There are times for doing little or nothing in an action sense. I had the good fortune to study with someone who had wisdom and a sense of humour when it came to taking action. On many occasions when I was 'forcing the pace' regarding taking action, he would say to me: 'Don't just do something! Stand there!' It became a kind of mantra for me, and I would chant it to myself whenever I felt an overwhelming urge just to do something. Doing this would help me to step back and reflect on why I wanted to take action., whether it was a reasonable thing to do and to plan the action I thought I needed to take.

4 JOURNAL, JOURNAL, JOURNAL-REFLECT, REFLECT, REFLECT

The tool I found most useful for helping me with reflection was my journal. Initially I found it difficult to begin keeping the journal. Despite having spent a considerable period of my life in journalism, writing about what I'm doing, what is puzzling or challenging me, is not something I come to willingly or naturally. I have to discipline myself to write, and often my resolve is not strong enough to keep the flow going. This seems to hold true for many of the people I work with. Whether they are students or managers they are reluctant to use their journals, and those who don't journal their experience in a systematic way are disadvantaged in two ways. Firstly, they can have difficulties sifting through their data and making connections and having insights about it. Secondly, and this can make the writing process very painful, when it comes to writing their thesis all those things which were so clear and unforgettable at the time seem to have disappeared into a mist: there's good recall of recent events and insights, and poor recall of earlier events in the project.

5 READ ENOUGH TO GET GOING, USE THE READING TO GUIDE ACTION AND TO MAKE SENSE OF THE DATA

Perhaps it has a lot to do with the way we were taught and learned at school, but I, and many of the action researchers I have observed or worked with, have a tendency to begin by doing a lot of reading. The literature is important, but if I read to the exclusion of taking action and also of reflecting, the literature can become much more like a straightjacket than a path to improved knowledge and insight. Reading a little, and using that reading to inform my action and/or reflection, and then analysing how useful that literature has been is far more useful for me.

6 CRAFT A BALANCED OUTCOME

During my Master's year we were exposed to the idea that there are three strands to action research: an action strand, a knowledge strand and a reflection strand. The idea was that we needed to weave a strong rope from the three strands, and in so doing we would create something strong and robust. While the metaphor of the rope is a very useful one, I would like to offer another: action research as a three-legged stool. There are still three elements, but they are now the legs of the stool. For me this is a very helpful image because it introduces the idea that we have to maintain a balance in our work as action researchers. Too much or too little work on one of the 'legs' of the stool, and its usefulness and robustness begins to be compromised. To keep the stool balanced we need to be working regularly on each of the legs, crafting it, adjusting it, making it sound, and never losing sight of its relationship to the other two.

7 CHANGE WHAT YOU CAN CHANGE—YOUR OWN PRACTICE

From personal experience, as well as from observing the efforts of other, I have come to the realisation that the most powerful way to change a situation is to change something I do. Most of us have a strong tendency to try to change 'them'. My experience tells me that there is little return on effort in this pursuit. I can make the most of my effort by changing some element of own practice. In that way the situation changes and often, as a consequence, 'they' change.

Reference

Dick, R. 1992, You Want to Do an Action Research Thesis?, Interchange Document, University of Queensland.

¹ Julian is a management consultant who completed his Master of Business in Management at RMIT University in 1992.

Appendix 3

Using action research

TRICIA HILEY¹

Action Research as Practitioner and Educator

I begin with my original experience as an action researcher. I discovered the methodology while studying for my Master of Business in the early '90s. Most of this chapter will use this research as the focus of discussion. Later, I will briefly look at how I have continued my involvement with action research more recently as the director of the Royal Melbourne Institute of Technology's Innovation and Service Management program, working with students undertaking their own Master's research.

Part 1—Using action research as a methodology for my Master of Business

I began my exploration with action research a number of years ago, during my Graduate Diploma and we've been friends ever since.

WHAT WAS MY RESEARCH?

My thesis was titled 'An Invitation to Wonder: Exploring Learning, Internal Commitment, and the Search for Valid Information as Core Principles for Executives'.

At the time of this project, I was a Senior Management Development Consultant in a large Australian organisation. I was responsible for the development and introduction of a process to help prepare executives to effectively lead their organisations into the future and improve overall business performance.

The 'external' project was to develop and introduce a competency-based process for senior management development in a major Australian financial service organisation. The work linked effectiveness in a range of critical leadership competencies to achievement of organisational and personal 'Key Result Areas'. The activities of the project centred on a process of using behavioural feedback from key stakeholders to plan development actions for individuals and executive teams.

More informally, or 'internally', I worked with my clients, stretching the boundaries of the formal project, to help them rediscover the magic of curiosity, of questioning, of wondering about and exploring the unknown rather than fearing and avoiding it, of using inquiry itself to support learning. My aim was to create a novel learning system by encouraging participants to look at situations in new ways and thereby create new action initiatives. This, essentially, was moving them from a first position of 'doing what comes naturally' to a second position of 'doing what comes naturally and then stopping to think about it'. My action research process had this 'designed in'. An unspoken desire I had was that we also explore a third position, 'stopping not only to think about what comes naturally but also to think about the way we are thinking'.

WHAT WERE MY METHODOLOGICAL CONSIDERATIONS?

Action research is a useful approach when dealing with complex issues, where there are many stakeholders and where the answers are not necessarily obvious. Also, action research, with its involvement of the participants, has the potential to encourage a growing commitment, cooperation, and motivation as the 'researchers' share their discoveries. This was very important for my project, if I wanted the senior management of the organisation to support the assessment and development process as it rolled out across the organisation.

My project developed and implemented a process that provided executives with feedback from key stakeholders on their leadership and team behaviour. The whole process was approached in such a way as to inspire, encourage, and develop the executive's ability to learn. As a researcher and practitioner I worked to rekindle the magic and energy of curiosity, wonder and inquiry.

I chose action research as an approach for this project primarily because it encourages a shared exploration into our individual and group/organisational practices and encourages, indeed necessitates, shared knowledge and understanding in an area of mutual concern to those involved. I wanted to use interventions that fostered inquiry and learning in individuals, leadership/senior management teams and in the organisation as a whole, and, in turn, to make a useful contribution to the broader fields of consulting and leadership.

The research was about me as a practitioner as well as about the mutual concerns my clients and I investigated. Action research fits my

desire to explore my own practice and increase my understanding of people generally. My own behaviour was part of the research, the focus of as much sustained reflection and inquiry as the 'outside' task. It's easy to espouse the principles of inquiry and reflection, but more difficult to acquire and maintain a frame of mind which is always open to this type of learning. Over the years, I have attempted to combine my study in this area with regular practice. With friends, family, and associates, I have gradually learned to inquire into the sources of others' views, to search for observable data before I begin interpreting, and regularly consider the assumptions on which I make meaning and inferences. I am prepared to ask for illustrations, to inquire into others' responses and test them preliminarily, and to explore any inconsistencies. All these skills are important for the action researcher.

WHAT ASPECTS OF ACTION RESEARCH ARE EASY FOR ME?

I love questioning. I love questioning myself as much as questioning anyone else so including critical reflection in the process was one of the biggest joys of the entire project. I wasn't looking for single answers or absolutes. I was seeking joint exploration of what the data might mean.

HOW DID THIS ACTION RESEARCHER KEEP FOCUSED (OR FIND OCCASIONAL FOCUS)?

I have a very strong sense of 'inter-connectedness'. Everything is connected to everything. Nothing is irrelevant. This was both a joy and a frustration in my research. Action research allows for synchronicity, serendipity and the discovery of new insights in unexpected places, sometimes when you least expect them. I had a tendency to get swamped by everything I was gathering. How to focus?! In the end I regularly asked myself the question 'what is this research not about?' The responses went into an 'extra' chapter on all the theses I could have written but didn't. This satisfied my unconscious need to include these issues but allowed me happily to put some of my insights 'outside' the focus of this particular project.

POTENTIAL DISCOMFORT OF CLIENTS WITH THE PROCESS

Not all executives were used to, or initially comfortable with, the sort of involvement required in action research. However, throughout the entire project, there wasn't a single person who was unwilling to participate. They all took the first step and, once they realized I was not there to be 'expert' but that we were going to work through things together, they got involved in making sense of our explorations.

For some, the process was extremely moving. A number went on to pursue substantial reflection on their praxis and make significant changes to their work lives. Others saw the activity as a convenient tick in a box that was important for promotion and for gaining salary bonuses.

HOW DO YOU TRANSFER THE RICHNESS OF YOUR ACTION RESEARCH TO PAPER?

As Nita discusses earlier in this book, there are three strands to any action research: the action strand, the knowledge strand, and the learning strand. In my research these three strands were very closely wound together, which leads to one of the issues action research raised for me: 'however does one write this up?' The telling of the story is an integral part of the research process. At the start of this process, one sees that it is more than simply putting the right words in the right order. Another iteration of critical reflection occurs in the process.

A major challenge during the writing of my Master's thesis was to find a way to express the work in each of the action, knowledge and learning strands in a manner respectful and appropriate to the research itself. This is actually one of the major issues raised in action research. It is not a linear process. More likely it is cyclical or even cycles within cycles. How does one effectively make this complexity transparent to 'an other'? There are many ways to respond to this including the researcher's facility with the English language, the fine art of storytelling and the rich use of metaphor. Nita discusses these at length as practice issues. Another aspect I'd like to include is the impact computers can have on this process. I know they make much word processing easier. For the action researcher, I feel the research's complexity is becoming somewhat easier to portray with technological advances like colour printers and smarter word processing packages. In addition to the words they choose, action researchers can now easily use fonts, colours, voice clips, mindmaps, dialogue bubbles and many other techniques to express the richness of the story. Interestingly, this often proves another developmental hurdle for action researchers. I wonder what this means?

HOW TRANSPARENT IS TRANSPARENT ENOUGH? WHO NEEDS TO KNOW YOU ARE 'DOING' ACTION RESEARCH?

While my clients never raised this as an issue during my research, I reflected on the question at various times and considered the impact of different ways of responding to it.

Transparency is very desirable in action research. As the methodology relies to a large degree on collaborative action and working with your client, can you be 'doing' action research if there are parties who aren't aware that 'research' is being done? I feel the straightforward answer is 'no' but it's not quite as simple as that. There were times when it was my practice that signalled an action research approach rather than an explicit statement that I was doing so. I tried to approach all actions and interventions with an open spirit of inquiry. For example, in the report I produced for each individual, I purposefully left questions unanswered. For the executive to get the most from the feedback, we needed to ask these questions and explore possible answers. This we did together, through dialogue and questions during each interview. This encouraged and gave permission to a spirit of inquiry and discovery. There was space to reflect on and wonder about the past, the present, and the future. The executive was encouraged to draw links between what we discovered and his practice and development needs.

WHAT IS PRIVATE AND WHAT IS SHARED? HOW DO WE BALANCE THE TWO?

I thoroughly believe in the power and impact of dialogue, and my clients and I engaged in a lot of dialogue at different times during the research process. Another part of my natural practice is that I can get 'stuck in my head'—I love playing around with ideas—I have a tendency perhaps to stay there too long. It was important for me to remember to 'get out there' regularly to check on how things were looking to my clients.

A DILEMMA FOR ACTION RESEARCHERS IN A CORPORATE ENVIRONMENT

A fundamental premise of action research is that any results are context-sensitive and not intended for generalising across an entire organisation or discipline. That said, within the particular context, the impact of the research can be deep and far-reaching. This was the case with my research. The implementation of the Senior Management Assessment and Development process altered for each business unit in response to: personal reflection; reflection with the previous business unit on what we had learned from the process; and involvement with the next business unit regarding what would make the process most effective for them. At each cycle, I introduced changes which our reflections had shown were warranted and helpful. It was very much a collaborative activity.

One result was that each business unit felt they had had specific input and had developed a commitment to the process and content. This process of collaborative development differed from other experiences in the organisation, in that Human Resources had historically acted unilaterally and from a distance. Any collaboration was in coming up with a standardised process and product for the entire organisation. The feedback through my research showed that client acceptance of this process was very high because they were able to work with me to create something meaningful for them. The dilemma for Corporate HR was that the (successful) process challenged their traditional interest in a one-size-fits-all solution. This is a possible dilemma for any action research that occurs in an organisation that desires standardisation.

HOW DO I VALUE THE DATA AND THE METHOD?

An issue that requires my ongoing attention is the tendency to undervalue my own methodology. I sometimes catch myself trying to find quantitative ways of describing a qualitative circumstance. My feeling is that, as action researchers, we are still coming to terms with our own methodology. We haven't completely shed the historic need to describe our research in terms that would satisfy a positivist researcher. It is important to me, as an action researcher, that we find the strength of conviction to let go of other paradigms and truly grasp our own.

Part 2—Using action research as a methodology in the innovation and service management program

Remember that the title of my first major action research piece was 'An Invitation to Wonder: Exploring Learning, Internal Commitment, and the Search for Valid Information as Core Principles for Executives'. This is the basic approach I take to working with my Master's students during their action research projects. My aim is to continually invite wonder, the spirit of inquiry, and living the question. This still involves the core principles of exploring learning, internal commitment and the search for valid information. I and the supervisors who work with me in the program, work to support the action research of our students. In conversation with a group of my supervisors recently we spoke of 'being' in our research. Action research requires people 'step into' their own authority, confronting in every way possible who they are. As action researchers we need to ask ourselves 'who am I going to *be* in my research?' As well as 'who' I am going to be in my research, I encourage my students to consider 'how' they are going to be. How will they stay with their question?

One of the best insights I have had in years came from Ann Kerwin, resident philosopher at the University of Arizona Medical School. She made the comment, 'All learning takes place in the realm of ignorance'. We need to leave space for learning through our ignorance. I encourage students to accept their knowledge and explore their ignorance. As a methodology, action research is very appropriate here.

I wrote the following letter just before our students' final presentations last year. I had had some difficulty with just what we mean by mastery when we undertake action research: linking the two ideas was problematic. This is my best attempt at doing so and, in the end, is at the heart of my practice as an action researcher.

Dear Masterful Beginners,

I have been struggling to write this note for the past week at least. I couldn't find the 'just right' feel for it. A simple statement of facts did not seem appropriate. But I wanted to express some expectations I have. How could I do that without being 'prescriptive'? How could I express my intent adequately? Why was this such a worry for me? I know that this is a time of high anxiety for many and I didn't wish to increase that.

I eventually turned to my friendly mentors (my books) for insight. Many yielded lovely thoughts but no insight on this subject, at this time. Come on guys! Get with it! I'm stressed already. I need to get this out, I have other things to do, etc. etc. Finally, very, very early this morning Peter Vaill showed his stuff. Learning as a Way of Being. Delicious! But look! Here and here and here he is attacking 'institutional learning'. My hackles rise. We're not like that in the ISM. But what of 'Mastery'? Is that not an institutional notion? What are we expecting to be masterful? This may sound like a digression but it is at the heart of my issue, expressing my expectations around our final session together. The AHA came as I read the following

'It is not an exaggeration to suggest that everyone's state of "beginnerhood" is only going to deepen and intensify so that

Appendix 3

ten years from now each of us will be even more profoundly and thoroughly settled in the state of being a perpetual beginner. . . . We do not need competency skills for this life. We need incompetency skills, the skills of being effective beginners.' (Peter Vaill, 1996 in 'Learning as a Way of Being', p. 81).

That's it! Not mastery simply but masterful beginners, with learning as a 'way of being'. That is where I'm coming from. Of what relevance is this to next week? Well, it's really the 'masterful beginnings' I would most like you to share with us. Weave the three strands of your work for us.

I like Nita's suggestion that each person find a way to help the rest learn from the person's work. Vaill expresses it in this way.

'If learning as a way of being is a mode for everyone, being then must include interpersonal being as well as personal socially expressive being—my learning as a way of being will somehow exist in relation to your learning as a way of being.' (p. 43)

So, expectation **one** is to 'be' your stuff, don't just 'talk' your stuff. Interpret this as you will. Expectation **two** is to help us learn from your work. We are part of the 'community' on which your research can have impact. Expectation **three** is to let us know how *you* want *us* to be through this. What are your expectations of your audience? Expectation **four** is to give us time to engage with you and your material. That is, up to 25 minutes of 'presentation' and then 20 minutes at least of dialogue with your community. It is your responsibility to manage the process to that outcome. I will take a directive role on the day if pushed but I would certainly prefer not to.

I think that about says it. Oh, there are a few other things. If you wish to speak with me over the next week, please call my mobile on xxxxx as I am interstate. Please call me if you plan to attend the dinner so I can make arrangements.

I'm looking forward to a wonderful, 'learningful' time next week. 'Til then,

Fond regards,

Tricia Hiley

¹ Senior Lecturer Royal Melbourne Institute of Technology. Tricia completed her Master of Business in Management at RMIT in 1994.

Appendix 4

The element of surprise

DI PERCY¹

Surprise can be a springboard to creativity in action and reflective learning.

In this paper I explore the value of surprise during the process of consulting to organisations using action research.

Surprise can be a sudden event or a gradual unfolding of meaning. It is one of the ways that I become aware of unconscious processes, both individual and collective. Surprise wakes up the sleep of assumptions, the collusion of becoming caught in the organisational dynamics, or the seduction of confusing my concerns with those of my client. For the consultant, these are all dangerous states.

There are many situations of surprise in organisation consulting when there is no space for preparation or reflection until after the action has taken place. These are the critical events that are unexpected and arise out of the blue, requiring immediate, on-the-spot action. In such situations my action is intuitive, grounded in my years of consulting experience and a variety of surprises.

As an Organisational Dynamics Consultant, I work one-to-one with Chief Executive Officers (CEO) on their issues around leadership, understanding the organisational dynamics and how to align these dynamics with the organisation's primary task. I also work with executive teams on team building and strategic change, and design events to bring about whole system change. The action research cycle of planning, action, reflection and conceptualising-theorising is a continuous process for my work with clients and their organisations.

The cycle of action research starts before I contract with my client, and ends it after closure and my exit from the organisation. It is during the space after the work has been completed, that I integrate my overall learning from the consulting process.

According to the Myers Briggs Type Indicator (1987), my type is INFP (introverted, intuitive, feeling, perceptive). Reflection comes naturally to me—in fact, it is almost an obsession. In considering how I use action research, I believe that reflection is my strength and sometimes where I take root. I reflect on possibilities, contingencies, look at the scenario from a myriad of vantage points, get into others' shoes to understand how they might be feeling and how things look from their perspective. I analyse, interpret, go back to the facts and ground myself again in the raw data. I go to the relevant literature for further consideration and identify a range of possible actions and interventions. Then I make a decision about how to proceed. I do it. Talk with key people about what is now going on for them so that they feed back to me the implications of my intervention on their thoughts, actions and reactions. I reflect on the new data and possibilities arising, identify what I know and what I need to find out, again project myself into the shoes of key people . . . and so on. The action research cycle is intertwined in the relationship with my client within the context of their organisation.

Reflection is an activity that can lead to impasse instead of action and informed practice. In Gestalt terms, impasse occurs when a person fixates on the 'figure' which stands out from the 'background'. The figures which emerge in my attention cover a wide range of issues and processes, such as a certain cultural norm, a distinctive organisation metaphor, or particular group dynamics. An impasse will occur if my attention and awareness gets stuck on a particular figure to the exclusion of other figures, so that the natural flow and emergence of new figure-ground formations seizes up.

Impasse is the psychological equivalent to staring, and the physiological equivalent to being frozen or immobilised. Too much reflection on what is figural may induce or exacerbate a state of impasse. There are various ways out of impasse for the consultant: I find this includes going inward to identify and resolve any of my own unfinished business associated with the figure. Alternative ways include being confronted by surprise in the present, from something or someone, or discovering surprise during the uncovering work of solo or collective reflection.

The incidents that have brought surprise to me have also brought insight and are significant in advancing my work. Surprise incidents have brought great affirmation of my skill and knowledge as a practitioner. Equally, surprise has caused me to lose my centre of gravity and behave in ways definitely less than elegant! Reflective learning associated with the more difficult experiences have brought gifts of learning for me and often for my client as well. By the term 'reflective learning' I mean open, non-defensive enquiry into the incidents and patterns of which I am a part in my role as consultant. Although, in the main, this is a solo activity, I have also found great value in collective reflective learning with my client and client group. Surprises difficult to deal with in my consulting work have served to jolt me awake and back into full awareness and action. The sleep of assumptions, the collusion of becoming caught in the organisational dynamics, or the seduction of confusing my concerns with those of my client, are all captivating and dangerous states for the consultant.

The case studies below give some examples of surprise. Surprise can emerge from the gradual unfolding and careful observation of the organisation, or it may be sudden and immediate. The learning from each case has been memorable, sometimes sharp, and has always strengthened my competence and knowledge as a practitioner.

Two stories of surprise

DEMONS IN THE HOLY ORGANISATION

The CEO of a religious organisation contracted with me and my colleague to work on team building with his executive team (ET). The ET wanted to build team trust, competence and generally strengthen the way they worked together. The word 'empowerment' was on everyone's lips, and the ET had devised strategies to empower organisation work teams to make decisions and take action without always following unnecessary and time-consuming procedures for approval. The ET's goal was to make this a personally fulfilling place for employees to work.

The organisation prided itself on applying Christian values to its day-to-day functioning. Generosity, care and thoughtfulness towards others seemed to be the norm, and on entering the organisation, my co-consultant and I found this reflected in the language organisation members used. Initially, I took the culture of generosity on face value, and assumed that this would be a consulting assignment in a gentle organisation. My assumptions were short-lived.

There was evident difficulty and conflict between members of the ET. Our role as co-consultants was to help the team resolve these blocks. Issues of role and territory were identified by ET members as needing to be aired and worked with, as well as the issue of reaching agreement on how to cooperate as a united team rather than competing with each other as individual department heads. The ET declared they wanted their work together to be carried out with openness and trust.

During an intensive team building retreat with the ET over several days, we worked on their internal team dynamics and conflicts, and by the end of the retreat they were displaying increased openness and trust towards each other. Though they still struggled with issues of conflicting interests regarding their different departments and areas of expertise, understanding and a feeling of goodwill was now present.

However, my co-consultant and I were struck by the high level of defensiveness and anxiety within the ET when they returned to the workplace. This surprised and puzzled me. The CEO felt relief that we were seeing and experiencing the same contradictions that he grappled with and wanted to change. Together with the ET members, we tried to make sense of what was going on. We continued to co-consult and work with them at the weekly ET meetings, feeding our observations, experience and interpretations of the team back to them, and inviting their collaboration in exploring what was happening. However, instead of recognising and taking responsibility for their actions or enquiring into what might be occurring for them as a team, our input was met with flat denial, and our experience of their defensiveness they regarded as 'the consultant's issues', unconnected to the ET.

The ET's behaviour became more extreme over time, and included acts of sabotage, public undermining of each other and exposing the vulnerability of the weaker ET members. Even when these specific behaviours were named, they were collectively denied while the culture of trust, openness and care for each other continued to be espoused. I felt as though the ET was now colluding against us, and yet it was precisely these dynamics that we had been contracted to work on with them. It was as though my colleague and I had become the enemy.

The further surprise was that during our individual meetings with the ET members, (which were ongoing throughout the consulting assignment), many would talk about how dangerous the workplace felt for them and describe incidents of violation and betrayal within the team. What was going on here? How was it that ET members lost their voice and seemingly their memory of threatening incidents when they participated in team meetings? What were the unspoken rules operating? Did they hold a collective belief that confrontation was unchristian or dangerous? We discussed all these questions with them, even though it seemed unsafe to do so.

I started to feel anxiety and dread whenever I entered the organisation. I was torn between working to resolve (or at least alleviate) these crippling team dynamics on the one hand, and, on the other hand, thinking that the team was locked in and would not shift, no matter what intervention was made. As co-consultants, we were caught in the web of the organisational dynamics, still wanting to make a difference and to be seen to be acting with integrity, and not as their enemy. However, we were being treated like the demons in the holy organisation. The ET members were projecting their denied and disturbing dynamics onto me and my co-consultant.

In the wider organisation, 'empowered' team leaders were not taking up their authority to be more self-directed. Instead, there was passivity, tentativeness and fear, evidenced by extreme politeness and subservience to those more senior. It seemed there was no space for staff to be themselves at work and have normal emotions and exchanges. Anger, anxiety, envy, competitiveness and other aspects of the organisational shadow were swept underground and denied. They erupted in violent acts of psychological assault and scapegoating of individuals. The organisation was starved of the very things it espoused. It was ruled by undiscussables.

The culture encouraged organisation members to act out a collective pretence of a happy, loving family, and to maintain and not question these distortions of perception. In other words, it was crazy to doubt that the pretence was not true. To do so was to risk being the only one who saw the emperor had no clothes. The complex dynamic of pretence and fear resulted in chronic miscommunication and impasse. Organisation teams were split by fear and blame.

The splitting and confusion were contagious, and for a time they manifested themselves between us in our role as co-consultants. Through rigorous reflection and exploration of our actions and coconsulting relationship with each other and the ET, we were able to recover and make sense of our split as a parallel process to the ET and the whole organisational dynamics.

The identity the ET projected of themselves was contradictory to their actions. The shadow side of the organisation—the feelings and actions denied, disowned, and undiscussable—were in part projected onto my colleague and me. The creative action for us, as consultants to the ET, was to refuse to take on their projections—to reject the pressure placed on us to see ourselves as the source of their issues—as demons in the organisation.

By rejecting the perception that I was the demon, I therefore rejected *becoming* the demon. This was precisely the unconscious pattern of blame and denial that the ET was caught up in. *My responsibility was to confront without blame.* In taking action in this way, I could shed light on the unconscious dynamics of the team demonising each other, so that they could heal the splits between the ET factions and between the CEO and the ET. The pertinent questions for each ET member to consider was, 'What am I contributing—intentionally and unintentionally? What is my purpose? What can I do now?' I needed to maintain inner balance and my own centre of gravity. I am capable of both good and bad, as everyone is. To do the work, I had to act out of generosity and be alert to the inertia of the organisation's dynamics. This was difficult work, and at times I became caught in the web of the dynamics. I was hooked by wanting to complete our consulting contract with integrity and competence, to be free of the ET's demonic projections, and to 'shift' the ET to improved working relationships.

I believe this same paradox was what hooked the ET members. They were bound up in trying to prove their good intent each time they experienced being blamed by each other for a lack of competence in their leadership and team roles. The way out of the paradox lay in the ET taking the additional steps of recognising the team's patterns and how they maintained these patterns, even against their individual and collective interests.

The surprises I encountered during this assignment were extreme, and taught me a great deal about the power and inertia of organisational beliefs and dynamics. In particular, I am wiser about the fantasy of my own omnipotence as consultant and the extraordinary power of unconscious processes in organisations.

Action research

My experience of action research is of a complex process that occurs on multiple layers of work, each one deeper and more complex than the previous layer (Percy 1993). The layers of work start with concrete experience (the raw data), then progress to multiple realities (different perceptions of the raw data), and paradox (contradictory constructions of the data). The core layer of work is one of interactive patterns, where the dynamics and patterns of the organisation and of the consultant's interaction with the organisation form invisible forces and what Argyris (1990) refers to as 'undiscussables' (this is explored in depth in Percy 1993).

The notion of planning, action, reflection and conceptualisingtheorising, is straightforward when it is applied to 'concrete reality' the raw data. The level of working with concrete reality, however, does not shed light on the organisation's undercurrents and unconscious processes. It is precisely the irrational and psychodynamic processes that exert huge waves of power in organisations, which are experienced by organisation members but are often too difficult and ambiguous to be brought into the open by those inside the organisation. External consultants are better placed, by their distance from the organisation as well as their specific expertise, to read the dynamics and intervene to change those dynamics that are blocking good functioning.

Like the wind in the trees, which is visible only by its effect such as the sight and sound of the branches moving, unconscious processes are only visible or felt indirectly, by their effect on the organisation and individual members. Organisation change which is experienced as unwanted, threatening or imposed, will lead to dissatisfaction, resistance, and, at times, sabotage during the change implementation. These defensive processes are most often underground and surface gradually. They are a response to anxiety, perceived threat, and are usually covert and complex.

THE UNDERGROUND WAR

The dissatisfaction and wrath of the workers in another organisation I consulted to were both literally and metaphorically underground. This was a traditional mining organisation with the traditional dynamics present, such as the split and blaming between management and workers.

My role was to lead a conference and to facilitate a process involving workers, production supervisors, managers, engineers and some other professional staff. The conference task was to improve work processes in order to speed up production times. Containing any anger and aggression that emerged was explicitly stated to be part of my role.

The first day of the conference, I stood at the front of a room that seemed full of big men. There were thirty-six in all, with only two other women present. The previous week there had been an explosion in one of the mines, which was suspected of being deliberately staged to give management a message about some disagreeable organisation changes introduced. All the shift workers were safely out of the way of the blast and no one was injured. This led management to think the explosion was orchestrated as a protest at the new shift changes, which workers saw as unfair and as reducing their take-home pay.

This felt like a dangerous assignment and I felt alone in my role. It would have been easy for the conference participants to make me the flack catcher, for the workers to deflect the hostility and anger they felt towards management onto me. Although I hoped this would not be the case, I expected that it might well be. I came ready to identify, uncover and confront their projections. In my anxiety, I planned some protective strategies. My defence was to acknowledge my defencelessness, and to take on my authority and courage boldly and with unabashed feminine values.

I was prepared for the worst-case scenario. As each day of the conference went past, I knew that the next could bring fire and brimstone in an explosion of emotion. I worked with the conference participants to name what was really going on: the decision making process was not fair, the workers felt powerless, they did not have formal power equal to managers but had other ways to demonstrate power (and no one asked me to clarify this point!). We worked collaboratively to identify the organisational dynamics of Us vs Them, mutual blame, and avoidance of responsibility, (of 'kicking arse and passing it along'), and being caught in a game without an end. At the same time, I acknowledged the respect and generosity of spirit evident towards fellow organisation members, and the creative thinking demonstrated to work through the glitches in production.

To my surprise, the explosion I expected did not occur. The anger and bad blood between workers and managers was able to be acknowledged and expressed with restraint but without the need for constraint. As a large group which represented a cross-section of the organisation with opposing views, their conduct was remarkably tolerant. I was both impressed and relieved, and it seemed the danger I was in was not of being attacked, but of underestimating their capacity for fruitful discussion.

Barry Turner's words came back to me, 'Look closely and be surprised' (Turner 1988). What was underground in this organisation was the desire for recognition, which, when met, brought out commitment, loyalty and good will towards one another in the organisation.

Summary

The creative process in action research for the consultant is about building something new rather than revisiting existing knowledge. Together with the client, the creativity is to break the dysfunctional patterns and build a new way of functioning. Building something new means moving out of what is familiar and known into the unfamiliar and unknown. This is exciting and risky business for me, involving my awareness and choice, for I must decide what is work I will do and can do, and what is work I will not or cannot do (this is explored in another paper).

Action research is a way of bringing myself to what I do. It offers me developmental work at a deep level. As a practitioner, action research is a preferred operational method. Academically, action research was the methodology applied in my Master's thesis, and it is a discipline central to the four Master's programs I currently teach in.

References

- Argyris, C. 1990, *Overcoming Organisation Defenses*, Prentice-Hall, New York.
- Hirsh, S. K. and Kummerow, J. M. 1987, Introduction To Type In Organisations, second edition, Consulting Psychologists Press, California.
- Percy, D. E. 1993, *Invisible Forces At Work: The Real Work of Managing Organisational Change*, Master of Business Management Thesis, Royal Melbourne Institute of Technology, Melbourne.
- Turner, B. A., 1988, 'Connoisseurship in the study of organisational cultures', in *Doing Research in Organisations*, ed. A. Brynan, Routledge & Kegan Paul, London.

¹ Di Percy is a consultant working in the field of organisational change and development. She undertook her Master of Business in Management, using action research, in the early 1990s.

About the author

Nita Cherry (Ph D, MAPS) is a management consultant with over 25 years' experience as a personnel specialist, line manager, organisation consultant and organisational psychologist. She is a registered psychologist, a member of the Australian Psychological Society, a Chartered Member of the Australian Human Resources Institute and an Adjunct Professor in the School of Management at RMIT.