

PAPER
60

AR and grounded theory

Bob Dick (2003) *What can action researchers learn from grounded theorists*. Paper prepared for the research symposium at the Australian and New Zealand ALARPM/SCIAR conference, Gold Coast, 4-5 May 2003.

A refereed paper.

Abstract

As we build larger and more interconnected social systems we create increasing turbulence. Applied research methodologies will be more effective if they can cope with this turbulence. As a flexible research methodology, action research is well placed to do so.

Being iterative, action research is an emergent methodology — it accumulates understanding gradually. It can begin with very loose ideas about what is happening in the relevant system. As an action research study proceeds, understanding increases. Diagnosis and action plans can be shaped bit by bit to make the most of growing understanding. At

the same time, the actual research methodology can also be adjusted and improved as understanding grows.

On a superficial examination action research and grounded theory appear quite different. Some of these apparent differences are real. Grounded theory tends not to be participative. The action tends to be someone else's responsibility.

A deeper exploration, however, reveals some important similarities. In particular, both are emergent — in both, the understanding and the research process are shaped incrementally through an iterative process. In both, data analysis and interpretation and theory building occur at the same time as data collection.

In comparison to action research, the literature on grounded theory is sometimes more explicit about these issues. Comparing action research and grounded theory allows a better understanding of action research as an emergent process.

This paper compares some aspects of the two research processes. It draws some conclusions about emergent processes of relevance to action researchers. It describes a way in which the two methodologies can usefully be combined.

Introduction

As we move towards a global economy we almost inevitably increase the pace of change. Large systems with closely coupled components are inherently unstable and unpredictable.

It may be that the increasingly turbulent world accounts for the rising use of action research. In any event, two integrated components of action research suit it to present times. One component is its emphasis on participation. This it

shares with much of community development and organisation development. Participation, by building shared understanding and shared commitment, increases the motivation for collective and collaborative action.

The other component, closely linked to the first and equally important, is its cyclic or spiral nature. Being iterative, action research can be flexible. A start can be made without requiring prior understanding. Understanding of the situation can grow bit by bit as a study proceeds. As understanding accumulates, the research process can be modified to capitalise on that understanding.

In other words, in action research both the content (the growing theory) and the process (the research methods that are being used) can be emergent. This it shares with grounded theory. Comparing the two — action research and grounded theory — allows us to increase our insight into both. Combining the two allows us to tap some of the advantages of both.

Action research

From Kurt Lewin (1946) onward many descriptions of action research refer to its cyclic or spiral nature. The labels used differ from person to person. For Stephen Kemmis and Robin McTaggart each cycle consists of “plan - act and observe - reflect”. Ernie Stringer (1999) chooses a different starting point. He uses the deceptively simple labels “look - think - act”. These and other descriptions can be compared to the experiential learning cycle of David Kolb (1986): “concrete experience - reflective observation - abstract generalisation - active experimentation”. These different versions might be summarised as a two element cycle which alternates between action and critical reflection. In turn, critical reflection can be subdivided into analysis of what has happened, and planning for the next action.

A number of points can be made about this cycle.

First, as Robin McTaggart (1996) reminds us, for some writers it is not the core characteristic of action research. They view a collaborative mindset as more central. Perhaps this explains the ideological fervour of some action research writers, as Graham Webb (1996) has commented. For many writers, including all or almost all the contributors to the recent action research “handbook” (Reason & Bradbury, 2001), action research *is* participatory. I return to this point later.

Second, action research bears a strong resemblance to what many practitioners already do. To some extent they plan before action. To some extent they notice afterwards what has or hasn’t worked. Action research benefits from much more careful and systematic and critical planning and review than is common with practitioners. However, it does build upon natural skills and processes.

Third, the cyclic process confers a valuable flexibility. It isn’t necessary for the action researcher to have a precise research question or a precise research methodology before beginning a research study. Both the research process and the understanding it yields can be refined gradually over time. In other words action research is an emergent process with a dual cycle: an action cycle integrated with a research cycle. Judy McKay and Peter Marshall (2001) make a similar point. It can be symbolised as a double helix (Dick, 2000), for this reason chosen as the logo on the Southern Cross University action research website.

We might even take a hint from Peter Checkland and Sue Holwell (1998) and add a third cycle. In addition to reviewing and refining content and methodology, they also insist on first specifying and then refining the epistemological framework which supports the research.

Grounded theory

Since grounded theory originated in the work of Barney Glaser and Alselm Strauss (1967) its purpose has been to develop theories which are grounded in the data: which fit the data, which work in practice, and are relevant to the

researched situation (e.g. Glaser, 1982). It does this by using a particular process for analysing the data.

(The description which follows is based on a number of works by Glaser, especially 1992, 1998 and 2001. Although the work of Anselm Strauss and Juliet Corbin, 1990, 1998, is better known, Glaser's more grounded approach compares more easily to action research.)

As data are collected, for example by interviews, the researcher ...

takes notes on the content of the interviews (or other data collection methods)

codes: sorts the data into categories, and the properties of those categories, which are relevant to the concerns of the people in the situation being researched.

memos: writes notes on the possible links between categories.

These four activities — data-collection, note-taking, coding and memoing — are carried on simultaneously. In time, a *core category* emerges. This is a category which is of central concern to the people in the situation, and to which many other categories are linked. After a time no further categories emerge. At this point data collection and analysis cease. The memos are sorted and the theory is written up.

In other words, the theory is built progressively as the study proceeds. As further information is collected it is compared to the emerging theory. The theory is refined to take account of the additional information.

A word about sampling is also in order. As a study progresses the researcher adds to the sample in such a way that the diversity of the sample is increased. The choice of sample is guided by the categories and properties which are emerging from the analysis.

Emergent processes

Descriptions of action research and grounded theory might lead to the conclusion that they are very different. Action research is action oriented and usually participative. In grounded theory the researcher alone does the theorising. The actions are left to the people in the research situation. Action research is usually described in terms of the relationship between researcher and participants, or as a cycle. Grounded theory is described more in terms of the different operations carried out. The cyclic nature is left implicit.

From the description above, however, the emergent nature of both action research and grounded theory is evident. Both use an iterative approach. The understanding of the situation emerges gradually as the study unfolds. Further, the research process (or at least the sampling, in the case of grounded theory) is also progressively refined. Both action research and grounded theory might be described as using the dual-cycle process I have already described.

Examining grounded theory methods may potentially increase our understanding and our practice of action research. To this I now turn.

Improving the theory in action research

There are relatively few descriptions in the action research literature which reveal exactly how a theory is developed. Further, as Ruth Beilin and Lucia Boxelaar (2001) point out, action research has often been used by practitioners. In the pursuit of action, theory sometimes takes second place.

It would be possible to use grounded theory as a theory development process within an action research cycle. I have co-supervised and am presently co-supervising action research theses or dissertations in which this has been done. Glaser argues that theorising is the role of the researcher. It should only be done by people who can conceptualise (Glaser, 1998). My own experience is that the development of a grounded theory as part of action research may not be beyond the

reach of many participants, especially if someone skilled in facilitation guides them through the process. However, a more accessible and less demanding approach to theory development might be a useful addition to action research processes.

Strauss and Corbin (1998) have tried to make grounded theory processes more accessible. The result is a much more elaborate and in some respects more constraining process. Further, their earlier edition (1990) elicited from Glaser (1992) the accusation that what they propose is no longer grounded theory. I agree that it is a less emergent process than Glaser's, and in my view less compatible with action research.

I have elsewhere (2000) proposed a deliberate approach which can develop theory from data. As with grounded theory, any form of data may be used. As with Glaser's form of grounded theory it is less constraining than the Strauss and Corbin method:

any two data sets are compared and overlaps are identified

where the two data sets overlap and agree, disconfirming evidence is vigorously sought in further data collection

where the two data sets overlap but disagree, explanations for the disagreement are sought.

I find this a less onerous approach than the coding and memoing used in grounded theory. In my experience it is not beyond the ability of a typical participant in an action research study. It can be shown diagrammatically as in Figure 1.

For ease of theory development and application, Chris Argyris and Don Schön's action theory approach (1974) can be used. Such a theory takes the form

In situation **S**, actions **A** were followed by outcomes **O**

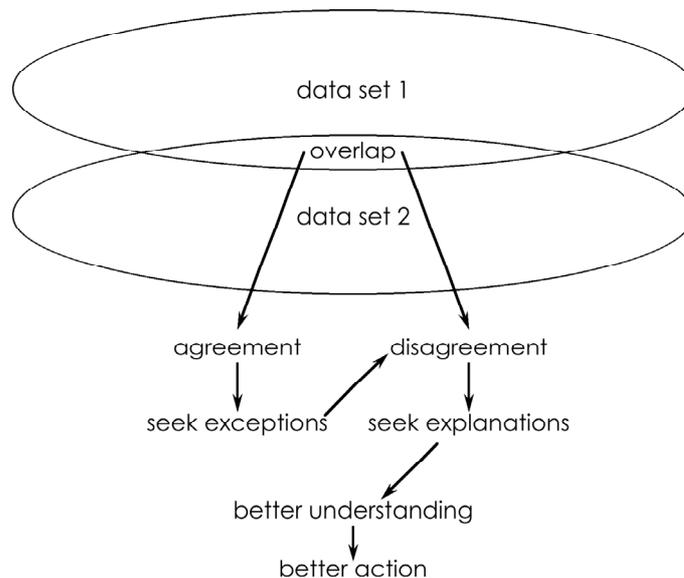


Figure 1
A process for theory building in action research
(after Dick, 2000)

Argyris and Schön also recommend specifying the assumptions which led to the choice of the outcomes and actions. During the planning which precedes action, researchers and participants can identify their assumptions and intended actions with these six questions (Dick, 2002) based on a theory of action approach:

- 1a What do I think are the salient features of the situation that I face?
 - 1b Why do I think those are the salient features? What evidence do I have for this belief?
 - 2a If I am correct about the situation, what outcomes do I believe are desirable?
 - 2b Why do I think those outcomes are desirable in that situation?
 - 3a If I am correct about the situation and the desirability of the outcomes, what actions do I think will give me the outcomes?
 - 3b Why do I think those actions will deliver those outcomes in that situation?
-

The “a” questions identify in turn the situation, desired outcomes and intended actions. The “b” questions identify the assumptions underlying the answers to the “a” questions.

After carrying out the plans, the researcher can review the situation, actions and outcomes. The assumptions supporting those choices can then be checked.

Combining the two

I wish to draw a number of conclusions from this comparison. First I argue that the iterative process of action research has value whether or not it is used for participatory and action-oriented research. Grounded theory demonstrates this possibility. Second, I suggest that in some ways action research and grounded theory are complementary. They can be combined in a number of ways.

Before I do so, I would like to forestall a possible objection to what follows. I have no wish to engage in a definitional debate. I therefore draw a distinction between action research, and the cyclic action research *process* for data collection and interpretation.

There are people (such as Wilfred Carr and Stephen Kemmis, 1983) who believe action research *must* be participatory. To them I say that it is not my intention in what follows to argue against participation. When it is appropriate I value it highly, for practical as well as ideological reasons. I suggest, however, that there is an aspect of the action research process which is valuable in its own right. Whatever we might agree to label it, I think it would be a pity to limit it to situations where participation is possible and appropriate.

The process I am referring to is the cycle of planning, action and critical reflection — in any of its various forms. As I have mentioned, it is an enhancement of what for many practitioners is a natural process. It is a formalisation of a process by which many (all?) of us learn from experience. We can therefore apply it to how we learn to do research.

In other words, we can use it as a research meta-methodology. Whatever methodology we use for data collection and analysis can be reviewed and refined using overarching action research cycles. When we are uncertain of the methodology to use, action research cycles allow us to begin collecting information. As our understanding of the research situation grows we are better able to make an appropriate choice of methodology.

Action research can then be the meta-methodology, for example, in a grounded theory study.

Alternatively, elements of action research can be embedded in a grounded theory study. The action research process of figure 1 may be substituted for the grounded theory processes of coding and memoing. The result is a more economical analysis of data, using a process which also more easily allows participation. What for many are the onerous tasks of coding and memoing can be reduced or avoided.

It is common for research to follow established procedures. If there were no such procedures, researchers would then presumably design each research study to fit the research situation and the purpose of the research.

We can approximate this state of affairs by being more willing to “mix and match” features of different methodologies. For instance in this paper I have argued that action research and grounded theory fit well together. Two illustrative examples were provided. One used action research as a meta-methodology within which grounded theory (or some other methodology) could be reviewed and refined. The other substituted a process derived from action research to improve the efficiency of data interpretation and theory building of a grounded theory study.

References

- Beilin, Ruth, and Boxelaar, Lucia (2001) Exploring beyond the boundaries of extension. Australasia-Pacific Extension Network International Conference 3-5 October 2001, University of Southern Queensland, Toowoomba, Queensland. Available on line: <http://www.regional.org.au/au/apen/2001/p/BeilinR.htm>. [Downloaded 20030403]
- Carr, Wilfred, and Kemmis, Stephen (1983) *Becoming critical: knowing through action research*. Geelong: Deakin University Press.
- Checkland, Peter, and Holwell, Sue (1998) *Information, systems, and information systems: making sense of the field*. Chichester, UK: Wiley.
- Dick, Bob (2000) Data-driven action research [On line]. Available at <http://www.scu.edu.au/schools/gcm/ar/arp/datadriv.html>
- Dick, B. (2002) *Questions for critical reflection* [On line]. Available at <http://www.scu.edu.au/schools/gcm/ar/arp/reflques.html>
- Glaser, Barney G. (1982) *Basics of grounded theory analysis: emergence vs forcing*. Mill Valley, Ca.: Sociology Press.
- Glaser, Barney G. (1998) *Doing grounded theory: issues and discussions*. Mill Valley, Ca.: Sociology Press.
- Glaser, Barney G. (2001) *The grounded theory perspective: conceptualization contrasted with description*. Mill Valley, Ca.: Sociology Press.
- Glaser, Barney G. & Strauss, Anselm L. (1967) *The discovery of grounded theory: strategies for qualitative research*. Chicago.: Aldine.
- Kemmis, Stephen, and McTaggart, Robin, eds. (1988) *The action research planner*, third edition. Victoria: Deakin University.
- Kolb, David A. (1984) *Experiential learning: experience as the source of learning and development*, Englewood Cliffs, NJ.: Prentice-Hall.
-

- Lewin, Kurt (1946) Action research and minority problems. *Journal of Social Issues*, 2(4), 34-46.
- McKay, Judy, and Marshall, Peter (2001) The dual imperatives of action research. *Information Technology and People*, 14(1), 46-59.
- McTaggart, Robin (1996) Issues for participatory action researchers. In Zuber-Skerritt, Ortrun, ed., *New directions in action research*. London: Falmer, 243-255.
- Strauss, Anselm L. & Corbin, Juliet (1990) *Basics of qualitative research: grounded theory procedures and techniques*. Newbury Park: Sage.
- Strauss, Anselm L. & Corbin, Juliet (1998) *Basics of qualitative research: techniques and procedures for developing grounded theory*, second edition. Newbury Park: Sage.
- Stringer, Ernie (1999) *Action research*, second edition. Thousand Oaks: Sage.
- Webb, Graham (1996) *Understanding staff development*. Milton Keynes, UK: SRHE/Open University Press.
-