Action Research

Transforming Inquiry and Action: Interweaving 27 Flavors of Action Research

Dawn Chandler and Bill Torbert

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What is This?

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Transforming inquiry and action

Interweaving 27 flavors of action research

Dawn Chandler
Boston University, USA
Bill Torbert
Boston College, USA

A B S T R A C T

This article presents a conceptual typology of 27 different flavors of action research, underpinned by the dimensions of voice, practice, and time. This typology highlights how narrow a segment of reality is examined in most social science studies, as well as how fundamentally different the first- and second-person participatory study of the present and the future is from the third-person detached study of the past. We show that action research has multiple aims, including personal integrity and social mutuality as well as explaining empirical variance in intended outcomes. Far from diluting the positivist concern with validity, however, we argue that action research studies that include a greater proportion of the 27 types of methods are likely to account for more of the empirical variance in situations than do traditional social science studies.

K E Y   W O R D S

- first-person research
- second-person research
- third-person research
- presencing
- timing

Action research, although not easily defined, has been described as

> a participatory, democratic process concerned with developing practical knowledge in the pursuit of worthwhile human purposes . . . It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities (Reason & Bradbury, 2001, p. 1).

In other words, action research can become the guiding method by which we organize our everyday inquiries and actions. Starting with everyday experience and the 'development of living knowledge', this kind of inquiry or research 'can be considered a verb rather than a noun' (Reason & Bradbury, 2001, p. 2). Using this description, it is clear that action and research are inherently intertwined in real life, not polar opposites of one another, as they appear to be under the assumptions of empirical positivism (Reason & Torbert, 2001; Torbert, 2000a).

Since its origins in Kurt Lewin's social-psychological experiments in the 1940s, action research has emerged as a critique and alternative to more traditional views of social science (Argyris, 1970; Reason & Bradbury, 2001). Most social science studies seek to make causal links between predictor and dependent variables based on data or events that occurred in the past. In contrast, action research aims not only to understand past events, but also present phenomena, particularly the ongoing dynamics of human interactions in which one is a participant, as well as future intentions and the forward design of joint organizing. Inquiry conducted in the present and for the future by co-participants are critical kinds of social science and social art that remain unexplored in most empirical scholarship to date. How does one generate valid information about a present situation when one is one of the interested parties and action is urgent? How does one generate data about one's own current practice and monitor its congruity or incongruity with one's strategies? How does one determine what oneself and others truly wish for the future? By employing action research strategies associated with present or future-oriented practical, effectual and transformational learning in action, we can gain a more comprehensive vision of the research methods options available to research/practitioners.

Second, action research differs from most social science studies in that most social science studies are aimed at aggregating data about many individuals, organizations or events and attributing generalizable causal links among the variables studied, irrespective of the particulars. Thus, a kind of anonymous, third-person knowledge is sought, and it is then communicated to other anonymous third persons, usually in the impersonal, third-person voice of a journal article (like this one). Qualitative studies reach this end by offering rich, in-depth accounts of one or numerous case studies, and quantitative studies do so by generating statistically significant results. Although these explanatory and pre-

dictor studies are quite clearly valuable for understanding the social world, other areas of reality have been neglected. Action research methods begin to fill this void by emphasizing methods to obtain first-person, subjective data about oneself while in action that one can use in the present to act differently. Action research also generates second-person data from the members of a team at work that they themselves can use to appreciate their multiple perspectives and to change how they work together. The methods that constitute the core of action research are not impersonal and disembodied, but rather personal embodied disciplines of simultaneous research and practice among others 'on line' (Heron, 1996; Reason, 1994; Sherman & Torbert, 2000; Torbert, 1991).

This article seeks to aid social science generally and the field of action research in particular by offering a typology of '27 flavors', or modes, of research. We believe that this conceptual framework will offer researchers a richer understanding of the types of research that can be and are conducted in the field and of the ways they can complement one another. We also propose that, in general, including more of the 27 types of research as part of any given project, organizational design or institutional procedure will improve eventual outcomes (though of course the quality of action and inquiry is also crucial). We use three dimensions – time, voice, and practice – to construct a 3×3×3 figure (past/present/future × subjective/multiple/generalized research voices × 1st-/2nd-/3rd-person practice), with 27 possible research and practice disciplines.

The article will proceed with a description of each of the three primary dimensions used to form this conceptual typology. As we do so, we introduce short illustrative cases of research in that mode. We purposely introduce wildly diverse illustrations, in order to highlight the potential practice of simultaneous action and inquiry in all corners of one's life. In this article we limit ourselves to introducing the overall 3×3×3 framework. We do not offer illustrations of each of the 27 types of research (e.g. Hartwell & Torbert, 1999), nor do we describe typical validity-testing procedures in all 27 modes (Torbert, 2000a, makes a start at this), nor do we describe the results of studies that integrate a large number of the 27 types. We will introduce these future research areas below.

Time and timely action

Time is arguably the least understood mystery in modern philosophy and science (Bergson, 1911; Braun, 1999; Needleman, 1998; Torbert, 1991). Time somehow intertwines subjective consciousness, intersubjective politics (think of deadlines, or how we know it is 2003) and objective phenomena (e.g. the earth's rotation and revolution). In action research, timely action in the present, transforming historical patterns into future possibilities, is the ultimate aim and achievement.

In our typology, the dimension of time refers to research conducted on the past, the present or the future, but with a sense of the present and the future that, without contradicting our ordinary sense of them, transcends our ordinary meaning.

Research on the past

Most people in modern society conceive of time as objective and linear, with the past as the only empirically available time. This line of time can be drawn as a hypothetical 'arrow of time' through the present and into the future, but in fact the present is never more than a vanishing instant and the future is purely hypothetical. From the traditional social science perspective, the present cannot be researched, strictly speaking, because it has passed before you can fully know, analyze and report on it. And the future cannot be researched at all, strictly speaking, because it has not yet occurred (although one can survey, say, people's current preferences or predictions for the future, and one can project past trends into the future, based on various mathematical assumptions). Given this view, it is not surprising that even when time itself becomes the explicit topic (as in the *Academy of Management Review*'s special issue in October, 2001) all articles except for one (Mainemelis, 2001) treat time only as linear.

By contrast with the past-orientation of traditional social science studies, our approach to action research treats time as three-dimensional, analogous with space. This typology treats our intuitions of past, present and future as keys to different, but potentially simultaneous, experiential dimensions of time (Abram, 1996; Mainemelis, 2001; Needleman, 1998; Torbert 1983, 1991, 2002). We can refer to the past as t^1, the present as t^2 and the future as t^3. Past (t^1) refers to the most familiar, linear, durational experience of time. Even this kind of time we experience only occasionally, at intervals, such as when we are under pressure of a deadline to perform, or else when we are bored and feeling there is nothing to do, or else (and for most of us rarest) when we are simultaneously listening inwardly and outwardly, conducting action research in the present. Most of the time, most of us live in qualities of awareness that are time-oblivious.

Presence in the present

One must conduct some kind of research on oneself and others in the present and with regard to future intentions, if one wishes to act in a timely fashion other than by chance by conforming to a past norm out of habit. In the action research approach presented here, the present dimension of time, t^2, refers to experiences of presencing (Scharmer, 2000), experiences when our attention is currently participating in an aligned or incongruent dance among two or more of four 'territories of experience' (Reason, 1994; Reason & Torbert, 2001; Torbert, 1972, 1991). From a subjective perspective, the four territories of experience

include, first, the visible, outside world (the three spatial dimensions, or the earth element). The second territory of experience consists of one's own actions as we sense them from within (the water element, through which we move our earth body in ways that appear in the outside, visible world as patterns of behavior in t^1, durational time). The third territory of experience consists of one's own thoughts and feelings (or the air element). And the fourth territory of experience is the kind of attention (the fire element) that can include two, three, or all four territories simultaneously, such as when we experience ourselves saying what we mean and doing what we say, instead of our usual experience of single-territory awareness. We reserve the word 'consciousness' for this type of attention. Only as we exercise such attention do we begin the journey toward intentionally, rather than accidentally or habitually, generating timely action, action that does not merely conform to existing norms of timeliness, but can also transform existing norms.

The experience of consciousness – the experience of presence in the present, the experience of multi-territory awareness – is not automatically given to us. We light this metaphysical fire through the alchemy of our first-person research on first-person practice in the present (Torbert, 1972; Varela & Shear, 1999), which can in turn be encouraged by second-person research in the present (Isaacs, 1999), and even by third-person research like this writing.

Geometrically, we can imagine the durational line of time (t^1) as the X or horizontal axis of a graph and the 'presence' dimension of time (t^2) as the Y or vertical axis orthogonal to duration. Mystics call this the Standing Now (*Nunc Stans* in Latin). If one begins to take on the optional call to develop one's attentional capacity for presence in multiple territories of experience at once, then one's commitment and capacity may eventually grow till one comes to live primarily in the perpetual present. We call the present perpetual rather than vanishing, for, even though we forget our presence in the present almost all the time, when are we really not in the present? If we practice present-mindfulness, we begin to 'taste' traces of the durational past appearing in the perpetual present in the forms one sees in the outside world (the already-madeness of houses, furniture, books, cooked meals, etc.), in one's bodily habits and in memories.

Let us briefly contrast the modernist social science approach to action in the present (t^2) with our action research approach. Empirical positivism, including qualitative research, concerns two territories of experience: the outside world territory where we find data; and the cognitive territory where we generate theory and systematic methods for testing the validity of the fit between data and theory. Research methods are, in effect, guidelines for how to sequence one's attention between the outside world territory of experience (to collect data) and the cognitive territory (to theorize, design, analyze and write up the study). In this kind of science, one collects data about others' actions which one analyzes and reports about long after the actions are taken. This kind of science does not train the scientist to study social dynamics in the present when one is oneself a co-participant

in the ongoing action, let alone how to invite the emergent data patterns to influence one's emergent actions in the present.

By contrast, action research in the 27-flavor paradigm concerns all four territories as one acts in the present. For example, anyone who wakes up in the middle of the night engages in an at least implicit and primitive form of action research. This first-person research on one's own first-person practice in the present can lead one either:

1. to go to the bathroom or to turn over and try to go back to sleep (single-loop behavioral changes to achieve original goal of sleeping);
2. to turn on the light, write down one's dream and try to imagine what it means (double-loop, cognitive/strategic change, with new short-term goal of learning something about oneself); or
3. to exercise one's attention through slow stretching movement and meditation, inquiring into the difference between the desire to fall asleep and the desire to wake up (triple-loop, attentional change).

Note that the double-loop change may also result in getting back to sleep faster, and that triple-loop change may also result in accomplishing both of the earlier objectives. See Figure 1 for depiction of the four territories of experience and single-, double-, and triple-loop feedback. (For prior work on single-, double-, and triple-loop learning, see Bartunek & Moch, 1994; Hawkins, 1991; Nielsen, 1993; Seo, 2003; Torbert & Fisher, 1992.)

The emergent future

What counts as timely action in a given setting depends not only on past-oriented norms and on attention in the present, but also on the personal intentions and collective visions of the future. In the action research approach presented here, the future (t^3) refers to our largely undeveloped potential for intentionally shaping our emergent experiences with ourselves and others into different patterns from the past by allowing numerous possibilities to arise in our minds and actively choosing among them, rather than passively having our choices shaped by personal habits, familiar patterns of thought or institutional patterns from the past (Priestley, 1964; Torbert, 1983, 2002). This third dimension of time can be imagined as the Z axis, orthogonal to both the X and Y axes. Awareness of all three dimensions of time together creates the volume of all possibilities.

One second- and/or third-person research method for exploring the future and helping otherwise improbable futures to emerge is the future scenario. Future scenarios can be created by, or on behalf of, corporations, not-for-profits and on a society-wide basis (Hawken, Ogilvy, & Schwartz, 1982; Kleiner, 1996; Ogilvy, Schwartz, & Flower, 2000; Torbert in Reason & Bradbury, 2001, pp. 250–260). They are based partly on statistical projections from the past, and partly on
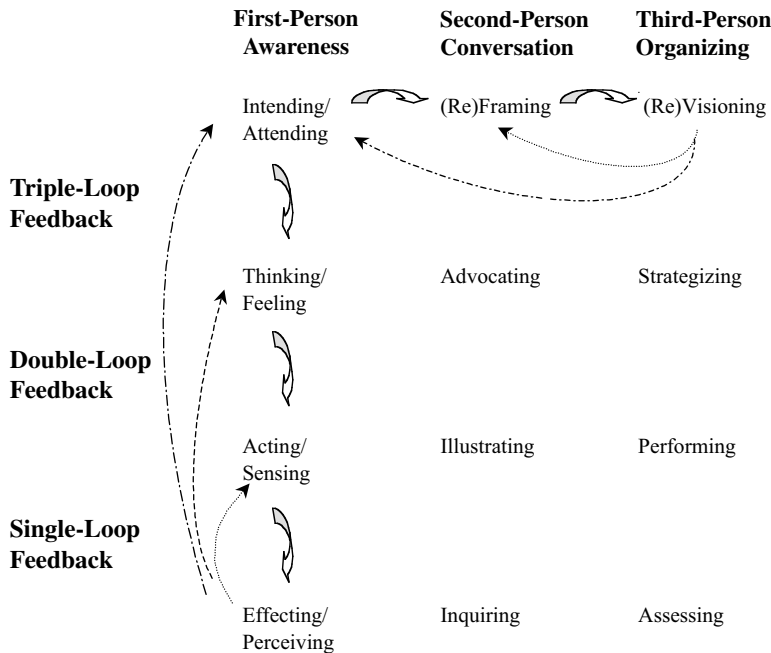
Figure 1 The span of research/practice

values projected into the future through the medium of fictional cases. The point of reflecting on and discussing such different future scenarios is obviously not to predict which will come true, but rather to generate dialogue that shapes future action by influencing participants' first-person perspectives, their second-person relationships with other key players in the company or the country, and the new sense of third-person mission that evolves. Another related research/practice method for creating an inspiring collectively developed future is appreciative inquiry (see Ludema, Cooperrider, & Barrett, in Reason & Bradbury, 2001, pp. 189–199). Past-oriented, third-person empirical research that assesses the efficacy and transformational capacity of these future-vision-oriented research methods will eventually be necessary to test their actual effects.

Voice

Proceeding to the second overall dimension in our typology of research practices, voice refers to the manner in which types of research are conducted and represented to current participants in the research or to other audiences. Sometimes research is conducted and reported in one's own, frankly subjective voice (first-person); sometimes in multiple intersubjective voices (second-person); and some-

times in an anonymous, generalized voice (third-person), such as the sentences you are reading just now (though, of course, that 'you' gives this sentence a second-person quality) (Torbert, 1997).

This tripartite distinction among first-, second- and third-person voices aligns with that made in grammar in the singular (I, you, she). But we treat what is called 'first-person plural' in grammar ('we') as either the second- or third-person type of voice. We treat 'we' as within the second-person realm when the distinctive voices and practices are directly accessible to one another as in 'we, a family living in the same home' or 'we, the two authors of this article'. But 'we' is considered in the third-person realm when many people engage in mediated practices, such as in 'we, Americans, voting in a national election'.

Third-person voice

A single social scientist conducting instrument-mediated research on others and reporting the results in a scientific journal typically does so, not in his or her own first-person voice, but rather in a third-person voice. Just as modernist versions of science (empirical positivism, etc.) explicitly deal with only one of the three dimensions of time, the past, so also do they restrict themselves to but one of the three possible research voices, the third-person voice. As part of the attempt to establish the objectivity of scientific knowledge, such science seeks to eliminate subjective and intersubjective voices (or to treat them only as data or practices to be researched, rather than as necessary and legitimate research-initiating voices). By contrast, the 27-flavors typology of action research invites researchers to generate new and wider forms of validity-testing triangulation among:

1. the subjective, first-person voice;
2. any given particular set of intersubjective, second-person voices; and
3. the objectivity-seeking third-person voice.

Indeed, any judgement that an action is timely must be suspect if it is not based on data that include all three voices (hence, the black humor of the old crack: 'the operation was successful, but the patient died').

Second-person voices

An example of second-person research voices (on first-person practice in the past, in this case) occurs if team members are asked by an interviewer to assess other members' performance, and if each person receives as feedback, not some average number that masks the range and quality of different perspectives on his or her performance, but rather the actual phrases different people say (typically without the names of who said what).

Obviously, such feedback may contain significant contradictions and in-

commensurabilities among the voices. For example, Jack, a Chief Operating Officer (COO), received these comments from others among the seven-person senior management team: 'Jack is good on the budget and at talking and selling. He's not good at personnel and unfortunately he thinks he is.' 'Good relationship with George (the Chief Executive Officer) which helps the company.' 'When Jack is upset in a meeting, he tends to be patronizing or to avoid the issue.' 'He sometimes unloads on others, gets hysterical.' 'Jack sometimes acts like an unsure lover – he laughs too loud at George's corny jokes.'

From an objective point of view, such results would seem to signal a lack of reliability among the raters and to reduce the validity and meaningfulness of the data. But from an intersubjective point of view, the quotes communicate the actual divergent effects of Jack's actions on his significant others (of course, someone may be lying, or someone may later reconsider). The dilemma the recipient of this inconsistent feedback faces in determining how to act more effectively as a team member in the present and future is a real one. (Basically, it is a sign that no single-loop change in behavior will please all; rather, a double-loop change in strategy or action-logic used in the present [and/or a triple-loop change in the kind of attention the practitioner pays to interactions with other team members] is called for).

This second-person research on first-person practice in the past can transform into first-person research on first-person practice in the present and for the future, if the condition is created whereby the team members are invited (and at least some freely choose) to discuss what implications for their future action the (anonymous) feedback they have received suggests (see examples of this in Fisher, Rooke & Torbert, 2001; Lichtenstein, 1997). In Jack's case, when he took the lead in revealing the feedback he had received to the rest of the team, his initiative, his openness to the data, and the subsequent conversation, permanently transformed his tentativeness and shiftiness in this setting, as well as his actual relationship to each other member of the team and the ethos of the team as a whole. In a word, what this specific example of research/practice generated, and what second-person research on second-person practice in general seeks to generate, is increased mutuality (Hartwell & Torbert, 1999; Isaacs, 1999).

First-person voice

An example of a first-person research voice occurs when a woman engages in, and then reports, her own efforts over many years to 'come to terms with' the traumatic residues of having been raped (Raine, 1998; Ramsey, 1995). Here is the ultimate, memorable act of non-mutuality, an event that marks the entire subsequent life of a survivor. At their very best, books and other public actions that result from such first-person inquiry may affect third- and second-person practices as well as first-person practice. They can affect third-person practices by

becoming healing companions for many unknown others; and/or by affecting public policy, law enforcement or medical practice. They can affect the second-person practices of people directly related to the author. And they can affect both the first-person practice of the author herself and even her voice. (For recent doctoral dissertations that explore first-person action research, see Bradbury, 1998; Bravette, 1997; Foldy, 2002; Scholes-Rhodes, 2002; see also Behar, 1996; Ellis & Bochner, 2000; McNiff & Whitehead, 2000).

This kind of action research may increase first-person efficiency, or effectiveness or transforming power. In addition, over a lifetime of observing incongruities among the four territories of experience and experimenting toward authentic translation of intent through strategy and practice into effect, this kind of simultaneous action/inquiry generates integrity. Along with second-person mutuality, first-person true-ness or integrity over one's lifetime is a key aim and outcome of this approach to action research. The modernist scientific tradition does not envision, actively work toward or achieve either of these outcomes.

Practice

In our action research typology, the third principal axis of practice refers to the three types of practice – first-, second- and third-person practice – that may be studied in any (or all three) of the research voices and in any (or all three) of the temporal qualities.

First-person practice

One may study one's own first-person practices either by using third-person, empirical measures; or by seeking feedback from second persons with whom one interacts (as in the example above of Jack, the COO, receiving performance feedback from team members); or through one's own subjective research voice (and ear) in the present. In modernist science, research validity is improved the more rigorously the third-person researchers are separated from the first-, second-, and/or third-person practices being studied; but, as we have already remarked, this makes it useless as a method for learning to exercise timely action in the present. By contrast, in this approach to action research, the methodological questions revolve around the strategic question of what combination of first-, second-, and third-person research/practices most effectively reinforce one another during an ongoing action/inquiry project.

Second-person practice

Obviously, second-person practice refers to the ways two or more persons interact face-to-face, verbally and non-verbally, around issues of mutual concern.

What patterns of participation, power, competence, subgrouping and inquiry characterize the group interactions (Mills, 1965)? How to test the validity of different members' perceptions, inferences, attributions and assumptions in the present (Argyris, Putnam & Smith, 1985; Fisher, Rooke, & Torbert, 2001; Friedman in Reason & Bradbury, 2001, pp. 159–170)? How to optimize mutuality, trust and shared vision, so that members are internally motivated to tell and to test their truths (Isaacs, 1999; Senge, Kleiner, Roberts, Ross & Smith, 1994)? How to create a single-, double- and triple-loop community of action/inquiry together?

It is easier in principle to describe and report second-person research on second-person practice than first-person research on first-person practice because second-person research/practice is carried out between people rather than within a person. Hence, it can be audio (and even video) recorded relatively unobtrusively, with parts played back during the same conversational inquiry, or else later transcribed for analysis. Exemplars include Argyris (1994), Cochran-Smith et al. (2000), Hartwell & Torbert (1999), Reason (1999) and Torbert (2000b). In the *Handbook of Action Research* (Reason & Bradbury, 2001), the chapter by Heron and Reason (pp. 179–188) entitled 'The practice of co-operative inquiry: Research "with" rather than "on" people', offers the fullest general description of second-person research on second-person practice. And a number of other chapters in this Handbook offer specific exemplars of such research in both the North and the South.

In particular, Barrett's chapter (pp. 294–300) on a Midwives' Action Research Group at a hospital, illustrates well how inquiry and action intertwine in such second-person research/practice. The group tape-recorded its own cooperative inquiry meetings and gradually empowered itself to start an Early Mothering Group for new mothers and mothers-soon-to-be. At one point before the creation of the Early Mothering Group, one of the midwives says:

> I really believe that one of the biggest ways we're going to get anything done in this group is by gaining strength ourselves, through talking to each other, and getting really firm beliefs and strength in our own opinions . . . We haven't yet got feeling for the importance of what we're doing to the point where we're ready to stand up and take this action that we're talking about. I think that's why we haven't even had the meetings yet with the mothers (Barrett in Reason & Bradbury, 2001, p. 297).

This comment can be used to illustrate how closely intertwined valid research and effective action are in second-person research on second-person practice, and how both relate to the exercise of paying subsidiary attention to the four territories of experience. First, we offer a very brief sense of how second-person conversational practice in general attends to the four territories of experience and then we will analyze the quoted comment to see what evidence it shows about what territories of experience it attends to.

In the second-person conversational context, one attends to the outside-world territory by inquiring into others' views and by active listening. One brings attention to the sensual, liquid, embodied territory by illustrating with stories about one's own and others' actual performances. One focuses attention in the thinking territory by advocating a perceived pattern or a proposed strategy. And one challenges and expands the limits of a group's assumptions and its sense of vision and purpose by framing or reframing, as the following analysis of the comment in the Midwives Action Research Group illustrates (see Fisher et al., 2001, for more detail).

The quoted comment above, made during a Midwives' Action Research group meeting, begins with a positive framing of the current activity (the first sentence detaches from identification with any particular task in order to explore the integrity or incongruity among the four territories of the group's experience in the present). Next, we hear a non-judgemental confrontation of the group's current enacted action-logic within the larger intent (advocating). Lastly, the speaker offers an illustration of the group's (non)performance (no meetings with the mothers yet) to support her prior advocacy. Paradoxically, this non-judgemental depiction of the group's hesitation to act probably played a role in increasing its readiness to act (this seems to be the author's interpretation as the article continues). If the speaker had concluded her comment with an inquiry, such as 'Do others of you think this is more or less what's going on, or do you see it differently?' the chances would probably increase of generating focused feedback from other members (assessments of the speaker's assessment), as well as a more explicit sense of how ready to act the group was, and how to make it more ready.

This sort of analysis after the act can help us appreciate how the act itself can be considered a piece of research in the present (in this mini-case, the speech act we are examining presents data from three of the speaker's/group's territories of experience). Such analysis can also suggest future experiments that may improve the quality of the action, both as research and as intervention (in this case, if the speaker inquires and thus explicitly engages the fourth territory of experience). But such an inquiry will likely be perfunctory and ineffective, unless the person who asks is in fact actively listening to, and attuning with, the group at the time (i.e. unless the questioner is actively conducting first-person research on the second-person practice in the present), in order to word the question in a timely way that truly welcomes divergent, surprising responses, not just convergent, reinforcing ones.

Third-person practice

Unlike the intimacies of first- and second-person practice, third-person practice involves many others, very likely at a distance from one another. While it is imme-

diately clear that first- and second-person research/practice, especially in the present and future, is fundamentally different from third-person traditional social science research on the past, what may be less obvious is that third-person research/practice can also be done in ways profoundly different from third-person research in modernist science. Third-person action research can be conducted with many third persons, where the practitioners researched are also the researchers and where analysis and new actions occur in a relatively decentralized way in real time with no single authoritative interpretation of the data crystallizing.

For example, Gustavsen (in Reason & Bradbury, 2001, pp. 17–26) introduces readers to the regional, inter-organizational learning conferences that have developed in Norway, Sweden and Denmark over the past 20 years, where the primary aim is to present one's organization and oneself, in order to develop wider networks and communities of practice through democratic dialogues.

Senge and Scharmer (also in Reason & Bradbury, 2001, pp. 238–249) describe a different kind of third-person organizing that gives explicit attention to first-, second- and third-person research/practice. They describe the 10-year evolution of the Society for Organizational Learning (SoL). SoL's members include researchers, consultants, major corporations (such as Federal Express and Harley-Davidson) and international organizations (such as the World Bank). SoL's constitution, its conferences, its consulting projects and its publications all aim to generate an ongoing action research environment. In the last two years, increasing explicit attention has been paid to encouraging all members to participate in ways that interweave first-, second- and third-person research/practice.

It may be clear by now that everyone on earth continually engages in implicit and unsystematic action research (even when they awaken temporarily in the middle of the night), but virtually no persons, teams or organizations today or historically explicitly, continually and in a disciplined fashion practice intertwining first-, second- and third-person research with single-, double- and triple-loop feedback. To illustrate these twin points explicitly, let us explore briefly to what degree stock markets represent a real-time, decentralized third-person action research process that leads to timely action. We can immediately grasp that the minute-by-minute changes in stock prices represent the research publication of the current actions of all stockholders who are buying or selling particular stocks. Most lay investors, as well as many professional investment advisers, focus the research that guides their choices of when to buy or sell what stock primarily or only on the assessing territory of experience, such as today's price changes or companies' most recent quarterly results. Also, their research is often not disciplined, cumulative or self-referential. (Consequently, it should not surprise us that such active trading is frequently less effective than simply putting one's money in a broad mutual fund and leaving it there.) However, disciplined, cumulative, self-referential stock market research/practice in the performing, strategizing and visioning territories of experience is possible.

In the performing territory, for example, one can adopt as a discipline the self-referential rule: 'Sell any stock that loses 8 percent of its value.' In the strategizing territory, investment professionals can and do offer their clients choices among different investing strategies (large cap growth, mid-cap value, bonds, etc.). And in the visioning territory, Socially Responsible Investing (SRI) has for the past 20 years been offering an alternative vision of the very purpose of investing. The aim in SRI is not just to maximize the investor's financial bottom line by choosing relatively reliably, high-profit-margin companies. Rather, the aim is to optimize a triple bottom line that includes social equity and environmental sustainability as well as financial profit, by investing in companies that give a broader attention to all three bottom lines (Waddock, 2001).

Economists, finance professors and Wall Street investment advisers were almost universally dismissive of SRI during the 1980s and early 1990s because it violated neo-classical economic theory and financial portfolio theory (narrowing one's investment portfolio on criteria other than shareholder wealth maximization cannot help but reduce one's financial return, according to short-term, individualistic, rational choice criteria). Moreover, these professionals obviously could not seriously imagine a double-loop change in such theories. (The work of the 1998 Nobel Laureate in Economics, Amartya Sen [1982, 1987], is rare in economics in recognizing the possibility of alternative action-logics (Klamer, 1989)).

So, imagine the surprise of the professional academics and advisers, as a majority of SRI firms in the US began offering clients better financial returns than the average conventional investment adviser during the late 1990s (Becker, 1999; Torbert, 1999). Major investment houses suddenly began advertising social funds as quickly as they could mount any facsimile of one. Moreover, between 1999 and the end of 2001, socially screened investment portfolios under professional management grew 1.5 times as fast all investment assets, topping $2 trillion and accounting for more than 10 percent of all invested funds for the first time (Social Investment Forum, 2001).

What had happened? The SRI movement had apparently conceptualized variables that are not directly financial, but that nevertheless predict longer-term positive financial results. At the same time, the SRI movement was part of a movement by cultural creatives, identified by marketing researchers, that led some companies to begin marketing green values. Put differently, the socially responsible investing movement is practicing a form of single-, double- and triple-loop action research (including the Global Reporting Initiative to develop new global accounting standards and measures, supported by a $30m UN Foundation grant (Bavaria, 2000)). This action research process is both discovering and creating aspects of the emergent future of investing by simultaneously generating new kinds of knowledge and new kinds of action among many, decentralized third persons.

Discussion and future research

If timely action matters to anyone, the map of the 27 flavors of action research (see Figure 2) highlights a wide field of methods and validity-testing procedures that deserve more detailed articulation and development in forthcoming studies in future generations. We hope to aid the development of a worldwide community of action researchers and to legitimize the interweaving of quantitative, qualitative and action research in academic departments by offering a systematic vision of how one's own efforts are linked to others through the 27-flavor typology. An important next step is a closer description and exemplification of each of the 27 flavors, along with a delineation of validity-testing methods associated with each. Such a fine-grained conceptualization and ordering of action research possibilities allows researchers to locate the areas in which they have contributed and where they can incorporate other 'flavors' into their future research efforts.

The underpinnings of the 27-flavor typology are three dimensions – time, voice, practice – which, taken together, allow a comprehensive vision of action research possibilities. In particular, the time dimension illuminates the importance of present-oriented research and future-oriented research, both of which are still neglected by traditional social sciences and yet are crucial to fostering intra-personal, inter-personal and organizational effectiveness and transformation.

We propose that quality in action research (and in all social science, once we understand action research as ubiquitous) increases: first, to the degree that the research clearly differentiates and integrates subjective (first-person), inter-subjective (second-person) and objective (third-person) voices; and second, to the degree that the research clearly differentiates and integrates past (t^1), present (t^2) and future (t^3) temporal dimensions. Hence, broadly speaking, we propose that action research will account for a greater proportion of the empirical variance in intended outcomes as more of the 27 flavors are engaged in a given project. Cases where multiple research/practice flavors are intertwined deserve careful description; and the use of common empirical measures across multiple such cases will permit statistical tests of this proposition.

However, engaging in a greater number of the 27 flavors of action research in a given project is not the only criterion of quality in action research. Critical to understanding research in the present and future times are the four territories of experience, from attentive visioning through assessment of effects in the outside world. At any given moment, vision, strategy, action and outcomes are either in or out of alignment. We propose that single-, double- and triple-loop feedback progressively give a person, team or wider organizing process increasingly sophisticated capacities for quality action research that leads to increasingly frequent and immediate changes toward more timely action, as co-research/practitioners re-prioritize and re-sequence which of the 27 flavors of action research to engage in when.

As we have suggested through our illustrations, this approach to action research also articulates three co-equal and mutually necessary aims of social science research:

1. to support the first-person, subjective, ethical search for integrity;
2. to support the second-person, intersubjective, political search for mutuality; and
3. to support the third-person, objective search for theories that explain large proportions of the empirical variance in human action settings.

The 27-flavor typology underscores how much of the reality that action researchers are seeking to understand, in order to participate more constructively in the transformation of their lives with others. It also underscores how much of reality is neglected by traditional social science studies. Instead of defending action research against attacks on its validity mounted from the modernist perspective on science, it is time to generously invite the mainstream social sciences to expand the proportion of social reality they investigate. At the same time, instead of ignoring quantitative, empirical research as irrelevant (e.g. there is not a single quantitatively oriented example of action research in the 45 chapters of the *Handbook of Action Research*), action researchers can use this 27-flavor typology to explore how quantitative, qualitative and action research can complement one another.

The shading in Figure 2 suggests that modernist social science studies first-, second- and third-person practices; but only in the past, and only from the perspective of the third-person voice. Moreover, the results of third-person contemporary social science are in general fed back only to the professional scientific community itself via journal articles and rarely to participants in the studies. Consequently, modernist social science generates little direct single-, double- or triple-loop learning in first-, second- and third-person practice (although it has indirect effects on public discourse, company strategy and public policy). Indeed, the principal direct effect of modernist science on social action is to delegitimize and obscure the entire universe of efforts to integrate action and inquiry in real time. (The circular rather than square boxes in the center of Figure 2 are meant to convey the experiential quality of research in the present and the sense conveyed earlier that 'we' surround the origin of the six space/time dimensions in this type of action research.)

In sum, we suggest that contemporary social science, in general, studies roughly half the material available in each of the three domains of third-person research on first-, second- and third-person practice in the past (see shaded spaces in Figure 2). Will action research studies that engage a larger proportion of the 27 flavors actually account for much larger proportions of the variance in intended outcomes than modernist social science typically does? Will cultivating
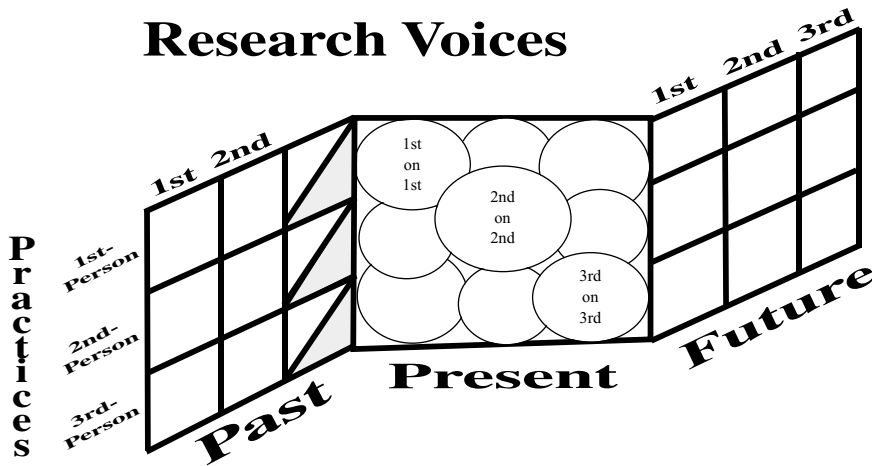
Source: Bill Torbert, Boston College

Figure 2   27 flavours of action research and the proportion of the research spectrum studied through empirical positivist methods

single-, double-, and triple-loop feedback processes help determine which of the 27 flavors to engage in when? Future research can show whether and when and how.

Acknowledgement

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Dawn Chandler is a doctoral student at Boston University. Her primary research interests include action research, careers, and developmental networks and other mentoring relationships. Prior to her doctoral studies, she worked as a financial recruiter in Boston, Massachusetts and San Jose, California.

Bill Torbert is known as a transformational leader, teacher, consultant, and scholar who has pioneered *Developmental Action Inquiry*, a practice that interweaves expanding personal awareness, leading organizational change, and assessing outcomes scientifically. A professor of management at Boston College, he has authored many books and articles, including *Managing the Corporate Dream*, *The Power of Balance*, and, forthcoming from Berrett-Koehler in 2004 *Action Inquiry: The Secret of Timely, Transforming Leadership*. He is a founding member of the Society for Organizational Learning and the Leadership for Change executive program, as well as a Board member of Trillium Asset Management, the original and largest independent socially responsible investment advising firm. *Address*: Chestnut Hill MA 02467 [*Email*: torbert@bc.edu]