Action Research

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A R T I C L E

There is nothing so theoretical as good action research

Victor J. Friedman
Max Stern Academic College of Emek Yezreel, Israel

Tim Rogers
University of South Australia, Australia

A B S T R A C T

The goal of this article is try to retrieve the idea of 'good theory' that provides accessible and useful tools for practitioners, academics, and other participants in action research. In doing so, we advocate the importance of explicit theory building and testing as an integral part of action research practice. The association of theory with positivist research methodologies has resulted in the rejection of theory by many action researchers, who are fundamentally interested in interpretation and change and correctly see positivist theorizing as antagonistic to these aims. Drawing on the example of Chris Argyris and Donald Schön's 'theory of action' approach, we identify six qualities of a non-positivist 'good theory'. Broadly, these suggest that theory needs to be both sensitive to the meanings participants give to their situation, yet go beyond these to explore unseen causal dimensions of their behavior and the environment, and the interaction of the two. A case study based on our own practice illustrates these points. We conclude that empowering clients to make practical and sustainable changes means co-creating a shared knowledge of the causal conditions of their social world and its attendant difficulties, and that this knowledge is theoretical.

K E Y   W O R D S

- action research
- action science
- causality
- organizational learning
- theory

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In an article about experimentation in real-life settings, Kurt Lewin (1951) coined the now famous adage that 'there is nothing so practical as a good theory' (p. 169). While we wholeheartedly agree with Lewin, we believe that his idea of 'good' theory has largely been overlooked in action research. The goal of this article is try to retrieve the idea of 'good theory' that provides accessible and useful tools for practitioners, academics, and other participants in action research. In doing so, we advocate the importance of explicit theory building and testing as an integral part of action research practice.

The article begins by considering the ambivalence towards theory in the action research community and arguing that we should be careful not to 'throw out the baby with the bathwater'. Next we examine the 'theory of action', or 'action science' (Argyris & Schön, 1974, 1978; Argyris, Putnam & Smith, 1985; Friedman, 2001; Friedman & Rogers, 2008) – as an exemplar of theory that fits the values and goals of action research. We then specify the features of 'good' theory and illustrate them through an illustrative case study based on our own practice.

Ambivalence about theory

In the second edition of *Handbook of Action Research*, Reason and Bradbury (2008) defined action research as:

> a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purposes . . . It seeks to bring together action and reflection, *theory* and practice. (p. 4; italics added)

In a review of the action research literature, however, Dick (2004, 2006) noted that little has appeared on the building of theory from experience in action research. This gap in the literature reflects skepticism about theory and theorizing rooted in the action research community's critique of positivism and its attempt to develop general, unified theory and laws of human behavior. Writing from a social constructivist perspective, Gergen and Gergen (2008) argued that in action research theory should be subordinate to practical outcomes:

> . . . the existence of abstract theory has no practical utility in itself … In this context action research provides a refreshing and highly productive alternative. Action research commences with problems or challenges in the world of everyday life. While there may be strong theoretical forestructures in place, the ultimate attempt is to generate change in existing conditions of life. (p. 167)

The authors (2008) specifically criticize theories as attempts to 'map the world of human behavior' believing such maps have no utility 'outside the network of shared understandings that make them intelligible', because they reify aspects of reality that are inherently indeterminate, and because they can be used as tools for control (p. 166).

In fact, Lewin and Gergen, although holding apparently contradictory positions, are both correct. Theory can be practical, or impractical and unhelpful, depending on the epistemological and ontological foundations of that theory. The 'positivist' version of science rightfully criticized by Gergen and Gergen (2008) and others (e.g., Argyris, 1980) is a version of science with significant flaws and shortcomings, not just with respect to its adoption by the social sciences, but even in its description of the natural sciences (Bhaskar, 1975). Rather than reiterate these critiques of positivism, however, we wish to argue that relegating theory to a subordinate role would constitute 'throwing out the baby with the bathwater'.

The establishment of causal laws, in a positivist model, assumes the observation of constant conjunction or statistically significant correlation amongst events (stimulus variables and their effects on dependent variables). The positivist notion of cause as given in correlation has resulted in enormous confusion in the social sciences, both among advocates and critics of positivism (Bhaskar, 1998). Effectively, this is the conflation of all notions of causality with one particular, and flawed, theory of causality (Bhaskar, 1975; Harré & Madden, 1975). Quite apart from any epistemological considerations, action researchers find this an anemic, or grossly distorting, account that fails to capture the inherently meaningful nature of the social world and the individual and collective meaning-making activities of people. As Ryan pointed out some time ago, a driver does not pause at a stop light because the light provides sufficient stimulus conditions for stopping but because the driver understands the *meaning* of a red traffic light (Ryan, 1970).

Many action researchers align themselves with this hermeneutic point on the essential role of *understanding meaning*, in opposition to the positivist's causal theoretical approach of seeking predictive relationships between variables (see Kemmis, 2008; Wicks, Reason, & Bradbury, 2008). The process of action research then becomes understanding the world as the participants have come to understand it, and facilitating their understandings and choices about change as well as attempts to create new realities through communicative processes such as dialogue. Thus, the emphasis shifts from 'causality' to 'knowing' itself, as reflected by new typologies of knowledge in action research (Park, 2001). Causal theory plays a role in these typologies – as 'propositional knowledge', for example – but is attributed no special importance and may even be regarded with disfavor.

The usefulness of abstract theory

In this article we argue for a third way: causal theories that do not depend on stimulus–variable correlation for justification but rather on empirically discerning the effects of real underlying structures (be they social or cognitive), and that necessarily start with the understandings that people hold about their social world. We find philosophical support for this position in the writings of critical realists (e.g.,

Bhaskar, 1975, 1998), who argue against the positivist notion of cause as a flat sequence of observable events. Rather, cause is located in the powers of 'mechanisms', be they social or physical, and may be intermittent in their effect and unobservable in their nature. Thus, reasons, social rules and ideologies, for example, are perfectly legitimate objects for theoretical causal analysis.

The argument we wish to put forward here is that achieving 'worthy human goals' means co-creating shared knowledge of the causal conditions of the social/behavioral world and its attendant difficulties, and that this knowledge is theoretical. While we agree with Gergen and Gergen (2008) about the importance of change, we argue that the building and testing of causal theory should also be an explicit goal of action research and that neither change nor theory is more important. Causal theories and change exist in a reciprocal relationship such that meaningful change requires good theory and the development of good theory requires attempts to change the world. Furthermore, we also argue that abstract theory does have practical consequences.

The 'theory of action approach' as an exemplar of 'good' theory

We strongly identify with the hermeneutic and social constructivist approach, but we differ with many action researchers in our advocacy of the value of explicit causal theories and theory building in action research. The question, therefore, is what constitutes a useful alternative to the positivist version.

In 1974, Chris Argyris and Donald Schön addressed this very question in *Theory in practice: Increasing professional effectiveness*, which presented a conceptual framework to help professionals become competent in taking action and reflecting on action for the purpose of learning. This framework was based on the concept of mental 'theories of action' that determine all deliberate human behavior (Argyris & Schön, 1974, p. 4) and eventually became known as the 'theory of action approach' (Argyris & Schön, 1978) or 'action science' (Argyris, Putnam & Smith, 1985). This approach, which was influenced both by the work of Lewin (1948, 1951) and John Dewey (1938, 1966), drew on concepts from philosophy, cognitive psychology, linguistics, cybernetics, and computer science. Our practice of action research is guided primarily by this approach (Friedman, 2001; Friedman & Rogers, 2008).

'Theories of action' (Argyris & Schön, 1974, 1978) are causal propositions, which exist in people's minds and take the following form: 1) In situation X (conditions), 2) do Z (strategy), 3) achieve Y (goal). From the standpoint of the actor, theories of action are theories of control aimed at achieving desired outcomes. From the standpoint of the observer, theories of action guide observation and are used to explain or predict behavior.

Argyris and Schön (1974) made a critical distinction between 'espoused theories' and 'theories-in-use'. Espoused theories are what actors say or think they do and are used to describe or justify behavior. Theories-in-use represent a kind of tacit knowledge which can be employed almost automatically to produce behavior that is usually, though not always, effective. Theories-in-use can only be inferred from observed behavior because actors are generally unaware of these theories or cannot articulate them. Theories-in-use are general, or abstract, in the sense the same theory can be manifested in different ways at the level of observable behaviors. As a theory of learning, the theory of action approach proposed constructs about types of learning and about the special class of theories-in-use employed in situations where individuals encounter obstacles to goal achievement.

The theory of action approach explicitly linked individual theories-in-use with what Argyris and Schön (1974) called the 'behavioral world', by which they meant the social contexts in which actors live and act:

> We construct the reality of our behavioural worlds . . . Theory-building is reality-building, not only because our theories-in-use help determine what we perceive of the behavioural world but because our theories-in-use determine our actions, which in turn help to determine the characteristics of the behavioural world, which in turn feed into our theories-in-use. Consequently, every theory-in-use is a way of doing something to others . . ., which in turn does something to oneself. (Argyris & Schön, 1974, p. 18)

Subsequently, Argyris and Schön (1978) extended the concept of theories of action to organizations, attributing to them both 'instrumental theories of action' for carrying out tasks aimed at achieving organizational goals as well as theories of action that govern problem solving and learning. This conceptual leap enables the theory of action to trace the causal links between individual reasoning and behavior and organizational/system behavior. Thus, it increases opportunities for actors to exercise joint control over shaping the nature of their shared behavioral world.

The features of 'good' theory

The theory of action approach offers an exemplar of theory that is both abstract and practical for changing the world. It is really a 'meta-theory' in the sense that it provides concepts as well as methods for building theories that both explain social phenomena and guide action. In this section we identify features of the theory of action that can guide action researchers in developing what we call 'good' theory:

1) *Sensitivity to the inherently meaningful nature of social reality and, in particular, the meaning-making nature of participants.* Theory building in the theory of action approach starts with understanding participants' perspectives. This initial understanding, however, cannot simply examine beliefs in isolation. Beliefs are internally related to their objects in the sense that our beliefs about an

event, action, or even other belief are partially constitutive of the meaning of that event, action, or belief. In the case that follows we will see that the meaning given to events by the participants (their beliefs) influenced their reactions to those events, which in turn influenced the behavior of others and created, or recreated, their behavioral world. Thus, sensitivity to the 'meaning-making nature of participants' also means investigating the recursive construction of their reality by their personal causal theories and the meanings given in their cultural system.

2) *Going beyond categorizing events to connecting participants' perceptions to hitherto unrecognized aspects of their reasoning, behavior, and environment, and the systemic interaction of the three.* While understanding participants' perspectives is necessary, it is not sufficient for explaining their circumstances. Theory-in-use implies the existence of tacit processes, unconscious motivations, and unawareness of unintended consequences, so some elements of the field, and their organization as a system, may be invisible to participants. Surface perceptions may be misleading, symptoms of underlying causes, or even projections. Following the argument in point 1), the recursive dynamic of belief, action, and the behavioral world means that the system and the individual will be mutually defining; understanding one requires understanding the other. Concepts such as theory-in-use preserve the importance of the meanings participants give to their social world, yet acknowledge the possibility that these are self-perpetuating individual or collective misunderstandings. Good theory should be able to describe aspects of social reality and explain the causal interplay of the individual and the social environment.

3) *Using concepts that were not in the original description given by participants or, perhaps, not even in their vocabulary.* The theory of action provides concepts and terminology in order to name previously unknown mechanisms or processes that are causally implicated in the issue of concern. New terminology contributes to the practicality of theory to the extent that it 1) illuminates circumstances of concern to action research participants and 2) helps participants become aware of the disjuncture between their comprehension of their social world and the 'reality' of that social world. Marx noted that 'all science would be superfluous if the outward appearances and essences of things directly coincided' (in Bhaskar, 1998, p. 8). Similarly, theory is useful to the extent that it uncovers deeper causal factors not immediately apparent to participants.

4) *Providing a powerful set of causal concepts that enable participants to reinterpret their surface perceptions and theories.* The theory of action approach, as we understand it, takes a position that is both constructivist and realist (Searle, 1995).[1] This position holds that the world, including social reality, exists independently of our representations of it *and* that it may be extremely difficult, if not impossible, for people to get true representations of reality. People, as well as researchers, use theories, even if only tacitly, to interpret the world (Sterman, 2000). Given that these theories can potentially be mistaken, a good theory will

be capable of operating as a meta-theory that helps interpret, situate and explain local theories that are specific to the participants' particular circumstances. It should provide a causal explanatory framework that connects deep structures (such as theories-in-use) to surface events, and show where and why participants may be blind to their own theories and the consequences of those theories.

5. *Providing tools for disconfirmability; that is, for helping people to discover when they are mistaken.* Theories can explain anything or everything but good theories can also be shown to be inaccurate. While generally a good scientific practice, disconfirmability has added importance in action research theory building. Even if truth is unattainable, people may discover that some interpretations may be more reasonable than others (Weick, 1979). Good theory in action research, therefore, should go beyond giving voice to multiple interpretations by offering participants means for critically comparing or testing their understandings.

6. *Putting causal responsibility in participants' own hands.* The fact that people construct social realities does not mean that those realities are somehow less *real* (Bourdieu, 1989; Searle, 1995). By the same token, the existence of an independent reality does not mean that people cannot shape social reality within certain constraints (Bourdieu, 1989; Lewin, 1946). Gergen and Gergen (2008) correctly note that the positivist account of causal theory implies the control of others. It is prone to this because its stimulus-variable account of cause entails that change is a consequence of the manipulation of stimulus conditions (Greenwood, 1989).

A realist causal theory along the lines we are advocating suggests quite the opposite: an increase in scope for personal and collective agency. Good theories that help people generate more plausible explanations of their experience and increase the scope for effective action are important additions to their knowledge rather than theoreticians' abstractions. Thus, good theory provides the cognitive tools for 1) participants to uncover the causal role of existing stimulus conditions (i.e., triggers in their environment that elicit particular responses) and unconscious patterns and 2) shifting cause from these triggers and patterns to their own volition.

Good theory in practice

In July 2004 we ran a three day seminar for the Executive of a Department that provided services at the state level within a confederated national system. The Department was in the midst of a massive strategic change and reorganization and was concurrently attempting to develop a 'learning organization' capacity along the lines suggested by Senge (1993). The Chief Executive Officer (CEO) of the Department was enthusiastic about the learning organization concept and the HR department had been 'rolling out' the 'five disciplines' in a training mode. In the ranks, however, people were unsure about how it all fit together and felt that the Executive (which consisted of six executives with ultimate responsibility for

either a functional or regional aspect of the organization) was out of touch. The CEO realized that, if they were serious about becoming a learning organization, the Executive had to apply these ideas to itself. The objective of the seminar was to strengthen the Executive's capacity to lead the process of putting organizational learning into practice.

From our standpoint, as the seminar faculty, the capacity building meant providing the participants with a theory of their situation that would enable them to make more informed choices and more effective action in dealing with the challenges and dilemmas they faced. The term 'seminar' was used quite deliberately to emphasize the importance of the 'research' and 'theory building' aspects that distinguish the work itself. We refrained from using the term 'workshop' or 'training', which tend to imply skill-building or team building, both of which were subordinated to the goal of the process of theory-building and testing. We assumed that this would be a bit alienating at first, because managers tend to look askance at 'theory' or things 'theoretical', but one of our goals was to reframe this way of thinking about the usefulness of theory. We were modeling, and hoping to transfer, an approach oriented towards developing theory as a better way of dealing with the dilemmas they were facing and would face in the future.

The seminar began with a round of preliminary interviews with the executives, which along with documentary data, constituted the basis for developing a composite 'map', which represented an initial 'theory' of the challenges they faced (see Figure 1). The pre-seminar interviews were designed to get as full a picture as possible of the six executives' perceptions of their current reality, their strategic goals, the difficulties they faced, and the learning organization concept. The map reflects the three main categories of theories of action: a description of the situation (Box 2), the espoused goals (Box 1), and the Executive's strategies, both espoused (Box 3) and theory-in-use (Box 4). These categories provided an initial framework for organizing the data, but it took many hours of working with the data to come up with the specific patterns and organization reflected in the map. The map constituted a kind of 'local theory' that was unique to this particular situation, providing a picture of the binds in which the executives found themselves.

This kind of mapping reflects the first feature of good theory: *sensitivity to the inherently meaningful nature of social reality and, in particular, the meaning-making nature of participants*. Mapping had a number of purposes: to communicate to the executives that we had listened to them and took their meanings seriously, to help them see what they knew but could not fully articulate, and to provide a kind of perceptual anchor for inquiry into areas of high uncertainty and anxiety. After the formal introduction to the seminar, this map was presented and 'tested' with the executives. Testing was critical so as not to impose this particular construction on the participants. We were applying an observational theory which might have been faulty and which had to be employed within an open system of differing, but overlapping, interpretations. Our extrinsic and intrinsic
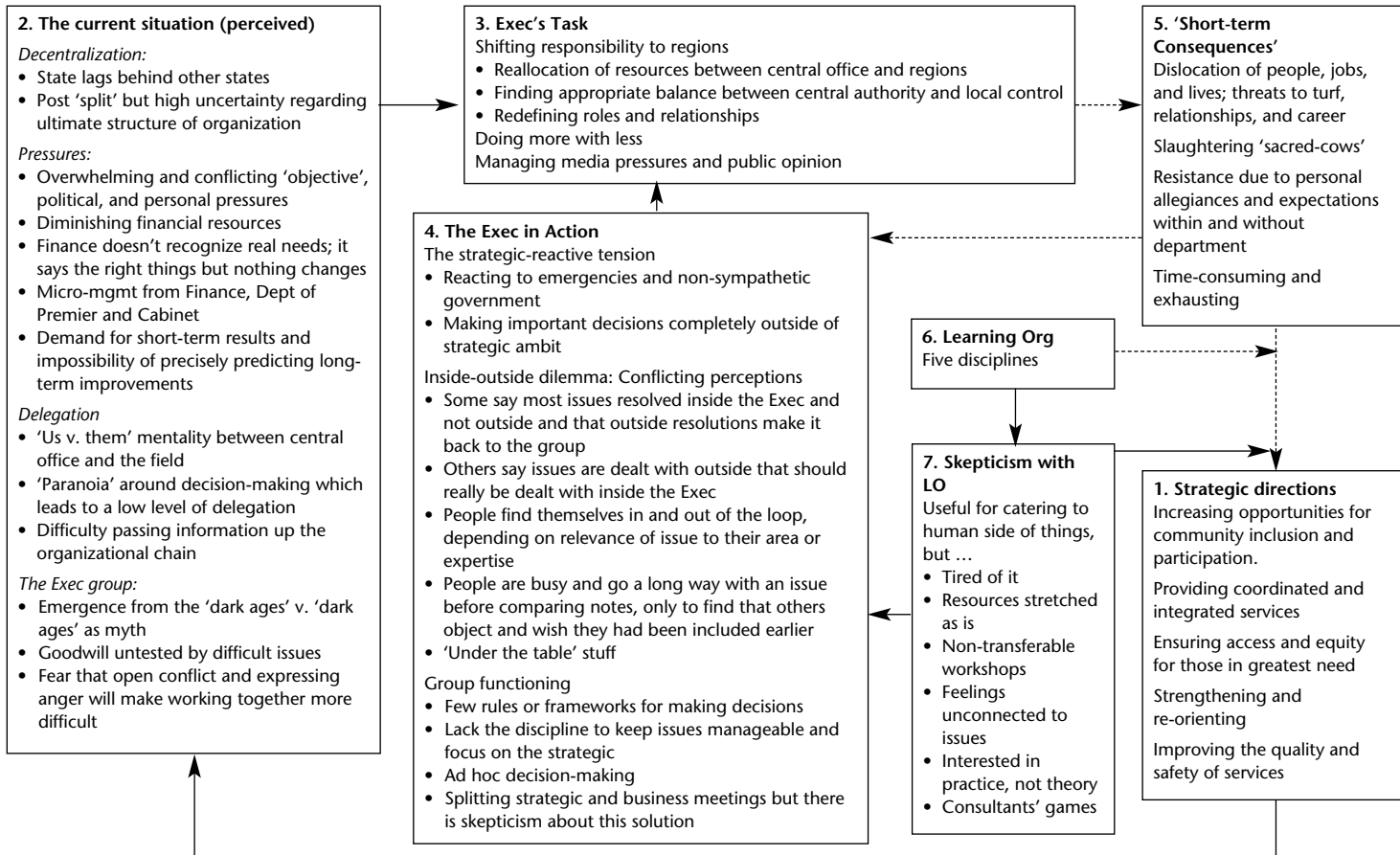
2. The current situation (perceived)

Decentralization:
- State lags behind other states
- Post 'split' but high uncertainty regarding ultimate structure of organization

Pressures:
- Overwhelming and conflicting 'objective', political, and personal pressures
- Diminishing financial resources
- Finance doesn't recognize real needs; it says the right things but nothing changes
- Micro-mgmt from Finance, Dept of Premier and Cabinet
- Demand for short-term results and impossibility of precisely predicting long-term improvements

Delegation
- 'Us v. them' mentality between central office and the field
- 'Paranoia' around decision-making which leads to a low level of delegation
- Difficulty passing information up the organizational chain

The Exec group:
- Emergence from the 'dark ages' v. 'dark ages' as myth
- Goodwill untested by difficult issues
- Fear that open conflict and expressing anger will make working together more difficult

3. Exec's Task
Shifting responsibility to regions
- Reallocation of resources between central office and regions
- Finding appropriate balance between central authority and local control
- Redefining roles and relationships
Doing more with less
Managing media pressures and public opinion

4. The Exec in Action
The strategic-reactive tension
- Reacting to emergencies and non-sympathetic government
- Making important decisions completely outside of strategic ambit

Inside-outside dilemma: Conflicting perceptions
- Some say most issues resolved inside the Exec and not outside and that outside resolutions make it back to the group
- Others say issues are dealt with outside that should really be dealt with inside the Exec
- People find themselves in and out of the loop, depending on relevance of issue to their area or expertise
- People are busy and go a long way with an issue before comparing notes, only to find that others object and wish they had been included earlier
- 'Under the table' stuff

Group functioning
- Few rules or frameworks for making decisions
- Lack the discipline to keep issues manageable and focus on the strategic
- Ad hoc decision-making
- Splitting strategic and business meetings but there is skepticism about this solution

5. 'Short-term Consequences'
Dislocation of people, jobs, and lives; threats to turf, relationships, and career

Slaughtering 'sacred-cows'

Resistance due to personal allegiances and expectations within and without department

Time-consuming and exhausting

6. Learning Org
Five disciplines

7. Skepticism with LO
Useful for catering to human side of things, but …
- Tired of it
- Resources stretched as is
- Non-transferable workshops
- Feelings unconnected to issues
- Interested in practice, not theory
- Consultants' games

1. Strategic directions
Increasing opportunities for community inclusion and participation.

Providing coordinated and integrated services

Ensuring access and equity for those in greatest need

Strengthening and re-orienting

Improving the quality and safety of services

Figure 1 Initial map: Restructuring Department as 'greenfields' exercise, July 2004

theories were at work (along with their potential distortions), as were those of the participants, forming a potentially complex web of uncertainty that made an accurate assessment of the environment very difficult to arrive at. Thus, we were testing to see how accurately and fully the map captured the essential features of the situation according to the participants' different perception of their reality.

After several corrections were made, the map was affirmed by the executives. Indeed, one of the executives called the map a fair representation of the 'shitty system' they were in. The executives where then asked to use it as the basis for formulating action research questions they would like to work on during the seminar. Each executive was then asked to write a personal case study related to one of the questions. The case studies were written on the spot and included a sample of discussion or interaction using a two-column format in which one column includes the words that were spoken and the other column includes the thoughts and feelings of the case writers as they or others were speaking/acting (Argyris, Putnam, & Smith, 1985; Rudolph, Taylor, & Foldy, 2001). These cases were used as the data for the inquiry over the next two days of the seminar, which was devoted to the analysis of each case in turn.

All of the executives participated in this inquiry process, which was facilitated by the faculty using an action–evaluation–discovery–invention–action cycle. We began with the case written by the CEO that illustrated a conflict with the Minister over the relationship between the Executive and the Ministry. One of the research questions that most interested the executives was how to more effectively manage the difficulties they encountered dealing with the Ministry of Finance, the Premier's Department and the Minister of their own Department. These powerful others were seen by the executives as not understanding the needs of their Department, or in the case of the Minister, not understanding the needs of the Executive. The executives saw themselves as relatively powerless to change this situation and felt unfairly blamed for budget overruns and the mismanagement of the Department under a previous Executive.

In the past the Minister had met regularly with the whole Executive and the CEO's case portrayed the moment when the Minister announced that she wanted to meet only with the CEO. In the early part of the case discussion, both the CEO and the group focused on the Minister's behavior, which they saw as problematic. They explained the Minister's behavior through a number of attributions (e.g. 'suspicious', 'doesn't trust us') and by describing some of the pressures she was under. A number of 'puzzles' were apparent in the case that offered rich potential lines of inquiry. For instance, there was a significant gap between what the CEO was thinking and what he was saying. Also in the introduction to the case, the CEO stated a number of high level attributions about the Minister that were not grounded in the data of the case. We began to draw out more of the CEO's thoughts and feelings – things he had not written into the case – including his feelings of anger at the Minister. At one point we pointed out to the CEO that he was doing to

the Minister (blaming but not saying what he was really thinking) what he felt the Minister was doing to the Executive. Furthermore, he negatively evaluated the Minister for this behavior and was unaware of doing the same thing himself.

At first neither CEO nor the group seemed to grasp our evaluation and continued making attributions about the Minister. We, however, focused the group's attention on this apparent inconsistency. The CEO became aware that he was blaming the Minister and that there was a contradiction between his own behavior and the standard by which he judged the Minister. Once the CEO acknowledged that the cause of his ineffectiveness could reasonably be seen in his strategy for dealing with the Minister, other executives began to recognize and articulate problematic features of their own behavior vis-à-vis the Minister. Rather than seeing the Minister as inconsistent or suspicious, they could now see that her desire not to meet with them made sense and that it actually reflected a high degree of trust rather than suspicion. It also became clear that the CEO was blaming the Minister for not attending to his needs even though he had never made those needs explicit. These discoveries led to a general discussion about 'blame' – in relation to their subordinates as well as among themselves.

The foregoing account illustrates two features of good theory. First, the inquiry process was aimed at constructing a local theory to explain the problem presented by the CEO in his case, but our inquiry and the theory building process *used concepts that were not in the original description give by participants or, perhaps, not even in their vocabulary*. For example, we analyzed the case data and searched for additional data using three categories supplied by the theory: the perceived situation (including feelings), explicit and implicit goals, and action strategies. These categories enabled us to construct a causal theory in terms very different than those used by the CEO and the executives themselves ('lack of trust'). Furthermore, the theory of action approach guided us in the inquiry process by making us alert to gaps between the CEO's espoused theory and his theory-in-use as well as the fact that he would most likely be unaware of these gaps. Furthermore, it helped us anticipate that bringing these gaps into his attention would take some effort and, perhaps, involve engaging defensiveness. Second, our use of theory also p*rovided a powerful set of causal concepts that enables participants to reinterpret their surface perceptions and theories*. The theory of action approach guided us in testing the local theory with the participants, who confirmed that it was actually more plausible than their initial theory about 'lack of trust' because it corresponded much more closely to the actual data and required fewer inferential leaps.

It is important to point out, however, that building the local theory was thoroughly inductive and framed in common, everyday language. Although we were guided by theory of action concepts, we did not impose them upon the data nor did we ever ask participants to look for differences between their espoused theories and theories-in-use. Rather we broke the 'theory of action' conceptual

Abstract

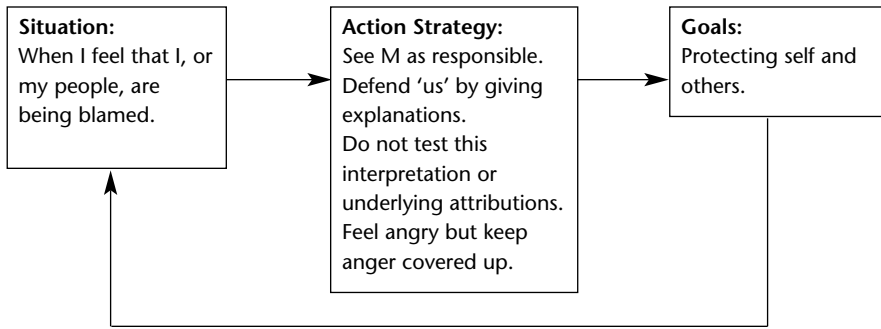|	
Generalizations, Mental Models, "Theories"	M is suspicious, lacks confidence, and doesn't trust us. She listens to her advisors in matters in which they are not competent.
'Jumping' to conclusions	M is blaming us but it's her fault, not ours. She doesn't know how to manage these meetings and keeps changing her mind. This makes me angry!
Interpreting, Attributing, Evaluating	M's not just dissatisfied with meetings and the lack of timely outcomes, but also with Exec performance generally.
Literal Meaning	M is dissatisfied with the Exec meeting and not getting the desired outcomes.
Directly Observable Data (M's words)	'I want to change the way my meetings operate with the Exec as they are not achieving what I want.'

Concrete

Figure 2 The ladder of inference

framework into small portions, which we presented gradually, usually in between cases. We did this to provide a common set of tools for reading the map and building theories.

The theory we used also *provided tools for disconfirmability; that is, for helping participants discover when they, or we, were mistaken.* For example, after the CEO's case, we presented the 'ladder of inference' (Figure 2) as a means of showing how the CEO's and the other participants' reasoning processes led them to make high-level attributions that got them in trouble in interacting with the Minister and were difficult to change. The introduction of formal theory of action concepts provided causal explanations of ineffectiveness. These explanations were reassuring in the sense that the executives could see that their errors were not unique and quite predictable under the given circumstances. Finally, these concepts pointed directly to specific ways of thinking and acting that were within their direct control and held a high potential for changing the situation in ways they intended (i.e., actionable knowledge).

The theory building process did not end at the level of the individual case but rather *went beyond categorizing events and connected participants' percep-*

Situation:	Action Strategy:	Goals:
When I feel that I, or my people, are being blamed.	See M as responsible. Defend 'us' by giving explanations. Do not test this interpretation or underlying attributions. Feel angry but keep anger covered up.	Protecting self and others.

Implications:
- Mutual blaming. Lack of learning for self and others.
- Technical problems taken personally.
- Underlying concerns, issues, remain undiscussed and undiscussable.

Figure 3 Blame cycle theory-in-use

tions to hitherto unrecognized aspects of their reasoning, behavior and the environment, and the systemic interaction of the three. During the evenings, we reviewed and analyzed the data and discoveries generated during the case discussions so as to conceptualize and hypothesize about the work of the Executive. For example, we came up with the 'blame cycle' theory-in-use (see Figure 3), which was shared and tested with the executives on the following day. Thus, we presented and tested a model of a local theory-in-use that we hypothesized was a powerful causal determinate of the conditions these executives found so disagreeable. This model was confirmed and they were able to generalize it to their relationships with each other and with their subordinates, which then became a central plank for a general reframing of their situation.

In this way, we jointly constructed an actionable theory of the situation, which eventually we called 'Recycling the Shitty Environment' – a set of hypotheses that presented an almost inverse framing of their situation in comparison to their initial perspective as reflected in the map. In this reframing, Finance and their Minister were no longer seen as uncaring or not understanding the needs of the portfolio or the Executive itself. On the contrary, they could now see the sense of the behavior of the Minister and of the representatives of Finance in light of a better understanding of the impact of their own actions. This theory not only significantly changed the way the executives defined the problems and their causes, but was designed in such a way that it *placed increased causal responsibility for the situation into the hands of executives themselves.*

Conclusion

The argument we are forwarding here is that empowering clients to make practical and sustainable changes means co-creating a shared knowledge of the causal conditions of their social world and its attendant difficulties, and that this knowledge is theoretical. It is an uncontroversial point these days to say that theory determines observation (Chalmers, 1982; Frisby et al., this issue; Sterman, 2000). Researchers and participants alike already interpret the world through cognitive and social rules and patterns acquired through enculturation. Theory is embedded in the most basic of perceptual functions and cannot be quarantined from action. The six features of 'good' theory are not meant to be exhaustive nor to imply that there is only one good theory. Rather our hope is that they will stimulate action researchers to think differently, and more positively, about theory and to engage in theory building and meta-theory building as an integral part of their practice.

One of the reviewers of our paper wrote that our approach 'seem(s) to operate in a neo-positivist world that sits uncomfortably between positivism and constructivism'. While we do not identify with positivism, this observation accurately points to two fundamental tensions embraced by our approach. The first is the tension created by adhering to both constructivism and realism. It is beyond the scope of this article to delve deeply into this issue, which elicited the strongest negative reactions to our argument, particularly in our use of the word 'reality'. Suffice it to say that we believe that such a position has strong ontological (Bhaskar, 1975, 1998) and epistemological (Searle, 1995) foundations and that we welcome further discussion on this issue.

The second is the tension between meaning-making and causality. A 'good' action research theory will be able to operate as a meta-theory that helps researchers and participants alike evaluate and improve, or even replace, the theories they already hold. It will also be a causal theory that can systematically incorporate apparently disparate, or perhaps invisible, elements of the field, creating a gestalt which both simplifies the field and creates opportunities for new understandings. In this way participants may uncover patterns of forces that are operating in their social world and come to see the deeper, generative structures that were previously invisible. Being able to perceive these forces is the first step in controlling them, rather than being controlled by them. The corollary of all this is that whatever tacit or explicit theories participants initially held may be seriously mistaken.

Our focus on causal theory led one of the reviewers to wrongly associate our approach with the positivist emphasis on covering laws and broad generalizability. While we certainly reject the covering law model, we cannot ignore the importance of generalizability. If every theory were only relevant to the immediate context, what could we learn from the experience of others and what would

be the point of a journal like *Action Research*? Schön and Rein (1994) suggest the concept of 'reflective transfer' to provide an alternative to generalization as commonly understood. They noted that practitioners employ generalization in the sense that they learn from their past experience and the vicarious experience of other people's practice. 'Reflective transfer', then, refers to 'the process by which patterns detected in one situation are carried over as projective models to other situations to generate new causal inferences . . .' (p. 204). The key to reflective transfer, however, is not simply seeing the new situation in terms of the old one, but using the comparison to become more sharply aware of the key differences that need to be addressed.

Action research is about the needs of the people, sometimes couched in terms like emancipation (e.g., Reason & Bradbury, 2008). The question is: 'emancipation from what?' Causal theories help participants uncover false beliefs and uncover the source of those beliefs. This causal explanation of both the social world and the forces maintaining that world is really the precondition for any emancipation, which ultimately must be undertaken by the participants themselves. Gergen and Gergen are absolutely correct when saying that, in contrast with the positivist project, the task of action research is not 'to describe the world as it is, but realize visions of what the world can become' (2008, p. 167). In our view they are mistaken, though, if they think that causal theories are an impediment to this project: they are the condition for its success.

Note

1   For a detailed discussion of the philosophical basis for our approach see *The Construction of Social Reality* by linguist John Searle (1995), especially the last chapters, entitled 'Does the Real World Exist?' and 'Truth and Correspondence'.

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Victor J. Friedman is Co-chairperson of the Action Research Center for Social Justice at the Max Stern Academic College of Emek Yezreel. *Address*: Action Research Center for Social Justice, Max Stern Academic College of Emek Yezreel, Emek Yezreel 19300, Israel. [*Email*: victorf@yvc.ac.il]

Tim Rogers is a Lecturer in the School of Management at the University of South Australia. His principal research interest is the application of Action Science concepts in organizational learning. He also has an interest in the philosophy of the social sciences in general and Critical Realism in particular. This interest sprung originally from two sources: first, working in community-based organizations that seemed to be caught in cycles of self-sabotage; second, from working in a university teaching development unit where he came to feel that the trick to organizational learning wasn't in policy and planning (as important as these indeed are) but in working out why it is so hard to implement policies and plans. *Address*: School of Management, Division of Business, University of South Australia, EM4–34, City West Campus, North Terrace, Adelaide, SA 5000, Australia.