

Theories of Action

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The term *theory of action* figures prominently in several literatures, including the philosophy of action and practical reason, sociology, artificial intelligence, and policy analysis. This entry focuses on the theory of action approach developed by Chris Argyris and Donald Schön, which has made seminal contributions to professional education, organizational learning, and action research. These contributions include the concepts of double-loop learning, theories-in-use, organizational defensive routines, and action science. They also include practices for helping individuals and organizations improve their ability to double-loop learn and for creating knowledge that can be used for this purpose.

The theory of action approach begins with the premise that human beings design action to achieve intended consequences. These designs can be seen as theories of action of the form 'In situation S, to achieve consequence C, do A.' Theories of action include the assumptions under which the actor believes the causal connection to hold and the values that make the intended consequence desirable. A theory of action consists of a complex set of interrelated propositions, a kind of master program for producing action.

Theories of action are of two kinds. Espoused theories are those that individuals believe they follow and are able to state. Theories-in-use are those that can be inferred from actual behavior. For example, an individual's espoused theory for handling a disagreement might be, "get all the issues on the table and talk it through." Observing what that individual actually does might lead to inferring the theory-in-use, "emphasize facts that support my position and downplay facts that support the other's position, while presenting myself as an even-handed seeker of truth." Individuals are usually unaware of discrepancies between their espoused theories and their theories-in-use.

Seeing our behavior as determined by theories of action directs attention to the knowledge we hold about people, situations, and what causes what, and also to the reasoning by which we bring our knowledge to bear as we design action in particular situations. But the theory of action approach does not presume that we are consciously aware of all this. Rather, in Donald Schön's phrase, when we act intelligently the knowing is *in* the action. We rely on tacit knowledge, much as native speakers utter sentences that are grammatically correct without thinking about or even being able to state the rules of grammar that govern their speech. Or, to switch analogies, we are like someone who knows how to ride a bicycle. We can maintain balance, make turns, and dodge obstacles without thinking about how we are doing it. What we are not doing is thinking step-by-step through a set of rules of

the kind that would be necessary if we were to program a robot to ride the bike. If we tried to do that, we would fall.

What, then, do we gain by understanding behavior in terms of theories of action? One answer is that it offers a way to reflect on our behavior in order to become more effective. The idea that there is a design, a theory-in-use, that is governing our behavior, that it may differ from our espoused theory, and that we are probably unaware of discrepancies between the two, provides a template for productive reflection. It tells us that we have to begin with the data of our actual behavior and infer the theory-in-use, rather than only introspecting on what we were trying to do or what we think we did. Then we can reconstruct and critically reflect on the assumptions and reasoning embedded in the theory-in-use that we have discovered in our action. We become researchers into our own practice.

Single-loop and double-loop learning

Theories-in-use are a means for achieving intended consequences. When there is a mismatch between intended and actual consequences, the actor may seek to correct the error by trying a different action strategy while leaving unchanged the governing values, norms, and action frames of the theory-in-use. Argyris and Schön called this single-loop learning. Double-loop learning, in contrast, occurs when the actor reflects on and alters underlying values, norms, or frames and acts accordingly. For example, a manager who finds that workers are not complying with a directive may shift from the strategy of “announce it in the group” to the strategy of “call them in one by one and tell them if they don’t, they’re in trouble,” or perhaps the strategy of “publicly praise those who do it.” These are instances of single-loop learning in the service of getting workers to comply with what the manager has determined is the right thing to do. Double-loop learning might occur if the manager reflects on the possibility that there may be good reason the workers are not complying, that perhaps the directive is flawed, and therefore inquires into what barriers they are encountering and entertains their suggestions for how to proceed.

Learning processes for double-loop learning differ in important respects from learning processes for single-loop learning. Double-loop learning entails questioning assumptions that may be part of one’s sense of competence, identity, or code of behavior. In the above example, the manager may have to reframe the role of manager from “one who knows, decides, and tells” to “one who engages others in coming up with good solutions.” This can be deeply unsettling and may elicit defensive reactions.

Single-loop learning is prevalent, while double-loop learning is rare. A primary concern of the theory of action approach is to enable individuals, groups, and organizations to become better at double-loop learning.

The Behavioral World

Human beings live in behavioral worlds created by our own behavior in interaction with the behavior of others. For example, if we think we are among friendly people, we are likely to act friendly. Our behavior elicits more friendly behavior from others. Over time, friendliness may come to be seen as a characteristic of the community, influencing the behavior of new arrivals.

Theories-in-use determine behavior, and therefore shared features of the theories-in-use of individuals shape the behavioral world. At the same time, the effectiveness of a theory-in-use is partly determined by the behavioral world in which it is situated. Trusting behavior in a low-trust behavioral world is often punished rather than rewarded. The behavioral world therefore shapes the theories-in-use that individuals come to hold. This interdependence, indeed co-creation, between theories-in-use and behavioral worlds is a point of emphasis in the theory of action approach.

Model I and model II theory-in-use

While espoused theories vary widely, under conditions of embarrassment or threat almost everyone exhibits some variant of the interpersonal theory-in-use that Argyris and Schön called model I. The governing values of this theory-in-use are: define goals and try to achieve them, maximize winning and minimize losing, minimize generating or expressing negative emotion, and be rational. The predominant action strategies are to design and manage the environment unilaterally, own and control the task, and unilaterally protect self and others. This theory-in-use has predictable consequences for the behavioral world, for learning, and for effectiveness. The actor is likely to be seen as defensive, controlling, and incongruent. People are unlikely to give each other clear feedback both because doing so would violate the governing values of minimizing negative emotion and unilateral protection, and also because they perceive each other as not open to learning. Therefore actors remain unaware of their incongruence and the impact of their behavior. It is rare for people to reflect on their underlying assumptions. Learning tends to be single-loop, not double-loop, which leads to decreasing long-term effectiveness.

Argyris and Schön developed an alternative theory-in-use, model II, with the governing values of valid information, free and informed choice, and internal commitment. The predominant action strategies are to define and control tasks jointly, to make one's reasoning explicit and testable, and to encourage inquiry. The consequences of model II are that the actor is seen as minimally defensive, reasoning is publicly tested, and learning-oriented norms develop. These conditions favor double-loop learning as well as single-loop learning. Problem solving and decision making are more effective, especially for difficult problems.

Most people readily espouse model II, except for situations requiring unilateral control such as protecting young children from risky behavior. But most are unable to produce it as theory-in-use, especially under difficult conditions, and are unaware of this limitation.

Organizational Theories of Action

Organizations and their sub-units can be seen as having theories of action, both espoused theories and theories-in-use. For example, an espoused theory in one organization was that there is no pre-set budget for bonuses; if every employee performed at a high level, they could all get large bonuses. But in practice there was a target number for the total bonus pool, although it was not published. When bonus recommendations exceeded this number, they were returned to the individual departments to be re-worked. So the theory-in-use was to set a budget for bonuses, to deny that this was the case, and to enforce it by requiring re-submissions. We can speak of this as *organizational* theory-in-use because the individuals involved were acting in their capacity as agents of the organization—as a finance manager, as an executive approving the budget, and so on—and because it continued even as different individuals came to hold each role.

The instrumental theory-in-use of an organization includes its task system, processes and procedures, and norms for performance. It is enormously complex, and some parts may be inconsistent with others. As the organization's environment changes, so must its theory-in-use, or its performance will deteriorate. Often these changes involve particular action strategies or procedures, for example increasing or decreasing production, correcting defects, or changing advertising campaigns. Making such changes requires organizational single-loop learning. Some changes, however, involve governing values, norms, and underlying assumptions—the organization must, in some sense, re-make itself. These changes require organizational double-loop learning.

Organizational Learning

The theory of action perspective on organizational learning focuses on the process of organizational inquiry. "Inquiry" is meant in the sense of John Dewey's theory of inquiry, as a process of thought and action that proceeds from doubt to the resolution of doubt, restoring the flow of action. When members of an organization encounter a problematic situation, they seek to understand what is causing it and what they or others in the organization can do to make it better. They inquire on behalf of the organization. If their inquiry leads to changes in the behavior of people acting in their capacity as agents of the organization, it changes organizational theory-in-use and we can say that organizational learning has occurred.

Putting organizational inquiry at the center of organizational learning directs attention to the quality of that inquiry and the factors that influence it. People may be more or less aware of data relevant to the inquiry that reside in other parts of the organization. They may have difficulty talking openly with people in other departments because of intergroup rivalries. They may be reluctant to give a full account of their findings to superiors because of possible repercussions. Factors like these inhibit organizational learning.

Organizational inquiry, as a form of organizational action, is governed by organizational theory-in-use. We can distinguish between the organization's instrumental theory-in-use (how it designs and produces products, sets prices, organizes the sales force, and so on) and its theory-in-use for the process of organizational inquiry. We can further distinguish between single-loop and double-loop learning in each of these domains. Of particular interest in the theory of action approach is double-loop learning in the theory-in-use for organizational inquiry, because this increases the capability for double-loop learning in the organization's instrumental theory-in-use.

Organizational Learning Systems

An organization's learning system is formed by the behavioral world that grows around the structure, information network, and incentive systems of the organization. The behavioral world includes norms and expectations that affect organizational inquiry such that, for example, some issues are treated as undiscussable, or discussion is largely about scoring points or avoiding blame.

As noted earlier, individual theories-in-use and behavioral worlds are interdependent. The theory of organizational learning developed by Argyris and Schön describes how individuals with model I theories-in-use, acting as members of an organization, create a limited learning system, designated O-I ("O" for "organization"). An O-I learning system is characterized by dysfunctional group and inter-group dynamics, undiscussable issues, and the proliferation of organizational defensive routines. These factors reinforce model I theories-in-use.

The preferred entry point for changing these dynamics is the theories-in-use of senior leaders in the organization. Changes in structure, incentives, and policies can be helpful but are unlikely to achieve their intended effects in a sustained way unless there is change in the theories-in-use of the people whose behavior shapes the behavioral world. The reason for starting with senior leaders is that changes in their behavior are often a precondition for others to use new behavior, and also because they are better positioned to alter organizational factors that otherwise inhibit change. It is also necessary to help people at the next levels to see their responsibility for contributing to the behavioral world and to learn to change their behavior. As members of the organization develop skill in model II theory-in-use,

the learning system of the organization shifts toward what Argyris and Schön described as model O-II.

Intervention and Research

The theory of action approach developed out of the long experience of its founders as interventionists, educators, and consultants as well as university-based scholars. Argyris was involved in the early years of laboratory education (T-groups) and conducted some of the first studies of increasing organizational effectiveness through laboratory education with intact leadership teams. Schön founded and led consulting organizations in technological innovation and social research before joining the MIT faculty. In his 1970 book, *Intervention Theory and Method*, Argyris proposed that the primary tasks of the interventionist were to create conditions for valid information, free choice, and internal commitment. When Argyris and Schön published the first statement of the theory of action approach in 1974, these showed up as the governing values of model II theory-in-use. It was this history of involvement in helping organizations change that led to the emphasis in the theory of action approach on altering the defensive patterns in the organizational behavioral world that inhibit learning and change.

To create knowledge that is useful for practice, researchers and practitioners should join in collaborative action research. The role of the researcher is partly to understand and describe what practitioners do as they inquire into problematic situations and strive to make organizations more effective. But the action research role also includes intervention and coaching to help practitioners go beyond what they already know how to do and to study what then happens. This means that the researcher is also a practitioner and must develop requisite skill. From the perspective of the theory of action approach, this means reflecting on one's own theory-in-use and becoming capable of producing model II responses in the face of defensive patterns embedded in the behavioral world of the client system.

See also: action science, double-loop learning, ladder of inference, advocacy and inquiry

Further reading:

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