

Lewin's Field Theory as Situated Action in Organizational Change

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Abstract

Lewin's Field Theory has been oversimplified into a mechanistic three-step process. In reality, it is a complex mental model adapting the field theories of physics to psychological and organizational process. Lewin's Field Theory is explained in detail and placed in the context of Lucy Suchman's ideas of Situated Action. How they relate and form the basis of theory that guide in the development of models for analyzing actions within a systematic and feedback driven framework is explored.

8

There is nothing so practical as a good theory.

-Kurt Lewin
(Bronfenbrenner, 1977)

Kurt Lewin's Field Theory is often summed up as 'Unfreeze - Change - Refreeze'. In this formulation it is frequently criticized as being somewhat rigid and inflexible. I believe that this is a gross oversimplification of Lewin's work, and that indeed, he understood the importance of context and the fact that as any process happens, it is continually informed and changed by the unfolding situation. Lucy Suchman (1987), the originator of the situated action view of working behavior, compares the two concepts of planning, situated action planning and following a predefined plan, to the differences in the way Polynesians and Europeans navigate:

"The European navigator begins with a plan - a course — which he has charted according to certain universal principles, and he carries out his voyage by relating his every move to that plan. His effort throughout his voyage is directed to remaining 'on course.' If unexpected events occur, he must first alter the plan, then respond accordingly. The Trukese navigator begins with an objective rather than a plan. He sets off toward the objective and responds to conditions as they arise in an ad hoc fashion. He utilizes information provided by the wind, the waves, the tide and current, the fauna, the stars, the clouds, the sound of the water on the side of the boat, and he steers accordingly. His effort is directed to doing whatever is necessary to reach the objective."

In the same manner, while someone may start out with a plan to implement a change in

an organization, it rapidly becomes subject to and changed by the unfolding situation. As the process unfolds, new actors emerge, and known ones may wax and wane in significance. Factors that were anticipated to be of great importance may prove trivial, others, initially considered minor may be revealed as crucial. Thus, the actual actions become situated within the context and situation as it exists within and changes with time. The nature of context is such that it is impossible to know or plan in advance every significant detail. One of Suchman's key points is that feedback is built into the fundamental nature of actions. The point of being 'situated' is that feedback from action as it reacts to situation (and context) loops back to inform subsequent action (Suchman, 1987) and thus any model that proposes to describe how real people perform real actions must take this into account.

Lewin's model has been criticized for failing to account for any feedback, and for not accounting for the situated nature of actions. Orlikowski & Hofman (1997) feel that Lewin's model treats change as a discrete event to be managed over a limited period. Cummings & Worley (1997) state that force field analysis derives from the three step change model, and show it as a nonsituated straight-line model incorporating no feedback. Palmer & Dunford (1997) describe Lewin's model as linear and mechanical. These are only a few of many examples of this mechanistic interpretation.

I believe that these criticisms do not do justice to Lewin's ideas. Lewin was well aware of the situational nature of actions. When writing over fifty years ago, he was limited by the fact that the language and concepts describing the interaction of context and situation were yet to be developed. His efforts laid much of the groundwork that these concepts were ultimately built upon, and his unfortunate death at age 57 prevented him from completing the work that I suspect would have led to a much firmer rooting of Field Theory in an understanding of context and situation.

Lewin wrote extensively describing various aspects of his Field Theory. Only in the last year of his life does he introduce the 'unfreeze - change -refreeze' concept (Lewin, 1951, Lewin, 1947). He makes it quite clear that his concepts of 'un & refreezing' involve changes in the force field. He ends the section in 'Frontiers in Group Dynamics' (Lewin, 1951) with the cryptic comment "Sometimes it is possible to establish an organizational setup which is equivalent to a stable circular causal process." This seems to foreshadow Senge's approach to system thinking (Senge, 1990), and further highlights the tragedy of Lewin's premature death.

To understand the situated nature of Lewin's theory, we need to unfreeze our concepts of what field theory is about. Unless otherwise noted, all concepts are from Lewin (1951).

Lewin conceived of all behavior as arising from a field that changed state over a given unit of time. He represented it as a differential dx/dt relating a psychological distance construct (dx) to time (dt). The fact that he employed differential calculus implies that he was thinking of field changes as smooth, continuous, and analyzable at very small, approaching zero, time intervals. This notation further indicates that he did not think of these forces as subject to discontinuous jumps.

This equation models a force whose strength varies as a function of distance to a 'goal' and with time. Any individual is at any moment subject to a number of these forces, which form a field 'around' them. The aggregate of all the forces in the field was called the 'life space' consisting of the person and their psychological and physical environments. He also states that there was an analogical 'life space' that exists for groups which also consists of the group and its environment which can be thought of as all factors that influence the group's psychological/cognitive functioning.

Just as our personality is one single 'entity', not an unconnected bundle of behaviors,

affects, and attitudes, the 'life space' is also one unified construct. It represents the integrated individual or group reality, not an assemblage of independent, isolated psychological and physical factors. The factors are mutually influential, not mutually exclusive. The resultant 'life space' is continuously constructed on a moment-by-moment basis from the interaction between the individual and the environment, in Lewin's own words psychological processes are: " *always to be derived from the relation of the concrete individual to the concrete situation.*" (Deutsch, 1954).

Deutsch goes on to cite the emphasis on the interrelatedness of the person with the environment as one of Lewin's major contributions to psychological theory.

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Lewin further defines two other regions of psychological interest. First, there are those processes that do not affect the 'life space' of an individual at a given time. Then, there is the boundary zone of the 'life space'. This is the region where things transition from having no influence upon the life space to exerting an

influence. These three zones of life space, boundary, and those regions beyond any influence, define the Lewinian universe.

A static snapshot of an individual as situated within this universe would show a defined region of 'life space' with fuzzy borders. The fuzziness is due to the fact that there is not a sharp demarcation between those factors that affect an individual and those that do not. This is analogous to the astronomical concept of the edge of the galaxy. There is no defined edge, just fewer and fewer stars as one transits the galactic rim.

The individual's relationship to their life space is never static. As a person moves through the world different factors are continually entering the 'life space'. The boundary zone is the activity area where those factors enter awareness and first exert influence. As this transition occurs, those factors transform into the forces that affect the person or group. These forces then alter the trajectory of motion as the individual or group processes and responds to them. There is no way to predict the final trajectory that is the result of this processing until after it has occurred. The trajectory at a given moment is entirely situational as it is the resultant of the reaction to all forces in the 'life space' and as one is always in motion, new factors are continually entering the 'life space' through the boundary. As what exists outside the boundary is unknown, actions arising within the 'life space' result in new and unanticipated changes in the trajectory, which in turn brings new and unanticipated factors into view and so on. Thus life is full of surprises.

Lewin's concept of 'locomotion' and its relation to 'force' along with 'goal' describe this process. His paper 'Behavior as a Function of Total Situation' (Lewin, 1951) details the process. He conceives of people being able to move within their 'life space', referring to this motion as 'locomotion'. Behavior is a change of position (i.e. locomotion) and that in turn changes the situation. The structure of the 'life space' at a given point in time determines which locomotions are possible. The actual change, both direction and velocity depends on the force field as it exists at that moment.

While Lewin conceives of people moving within their 'life space', I prefer to look at a person remaining stationary at the center of the 'life space' which gives the illusion of moving around them. This is much like a ship's radar screen. While the ship is actually moving, on the screen one sees the illusion of various objects entering and moving around the stationary ship, which

remains fixed in the center. Likewise, we all see ourselves as the centers of our unique worlds, and thus tend to frame and evaluate everything in terms of its relation to us (Lecky, 1945). Rather than Lewin's concept of individuals' locomoting through their 'life space', it makes sense to think of locomotion as the various forces and factors moving around a stationary person.

While Lewin does not make the point explicitly, for analytic purposes we usually are dealing with a subset of the total 'life space' relevant to a specific goal. In the totality of an individual's existence there are always multiple goals exerting their attractions. This forms a 'life space' network. Lewin draws a distinction between forces and goals. When viewed from a network perspective, goals transform into forces.

When we focus on one goal, the others then exist as forces relevant to that goal. For example, if we focus on a goal "eat a candy bar", then the goal "lose weight" which also exists in the 'life space' acts as a negative force pushing the individual away from the desired goal. The goal "have pleasure" exerts a positive force moving them toward the goal. This positive or negative characteristic Lewin refers to as the force's valence. Forces that impel motion are called driving forces. There is a second type of force called a restraining force. By itself it does not cause motion toward a goal, but it acts to restrain one of the driving forces. For example, motion toward 'eat candy bar' might be restrained by 'do not have money'.

This example shows the contextual nature of this force analysis. From the point of view of 'eat candy bar', 'do not have money' is a restraining force. It might become a driving force for a goal of 'borrow money from a friend' or 'go to ATM'.

All the various factors relevant to a specific goal that exist within the life space exert their valences, positive pulling toward the goal, negative pushing away from it, and the

restraining acting as brakes in either direction. They all sum to some resultant force that then controls movement with relation to that goal.

The final key demonstrating Lewin's understanding that all action is situated is his approach to what Cartwright (Lewin, 1951) calls Lewin's approach to 'contemporaneity'. Lewin believes that the only determinants of behavior at a given time are the properties of the field at that same time. This is a clear statement of situated action in which action is situated in and determined by the present state of the field. The field's state is then changed in ways that could not have been predicted in advance. This new, unpredictable state gives rise to further action, which could not have been predicted a priori, but arose through the situational interaction between action and field.

Action at any given moment is a function only of the field at that moment, which includes what Lewin refers to as past and future perspectives as forces within the field. These are the individual reactions to their specific memories of the past and anticipation of the future as filtered through psychological frames. Action is not a function of any actual past or future state of the 'life space' (Lewin, 1951) but arises only from the presently existing state of the field. Memory and anticipation coexist solely as forces in the present identical with other forces within the field.

Lewin used the latest thinking in Physics to create his mental model. Modern researchers have also adapted this approach. Margaret Wheatley with 'Leadership and the New Science' (1992) led the charge. She

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showed how a number of the concepts in modern physics and mathematics might be profitably applied to organizational thinking. Gareth Morgan (1997) revealed the usefulness of adapting multiple points of view in constructing complex models to guide organizational analysis.

Lewin's current intellectual heirs are those researchers who are attempting to adapt complex adaptive systems analysis and chaos theory to organizational theory. Like Lewin, they seek to use mathematical models, not for actual quantitative measurement, but as metaphors to guide the creation of mental models that describe psychological and sociological processes. Pascale (1999) summarizes much of this thinking in his analysis of the corporate thinking at Royal Dutch Shell. His description of a complex adaptive system as consisting of multiple agents, non-hierarchical, continuously shuffling its building blocks in response to changing conditions, and having the ability to recognize patterns in the environment and then use them to adapt to changes are descriptions that relate to both field theory and situated action. While Complex Adaptive Systems Theory does a good job of describing what systems do and how they are organized, Field Theory does, I believe, give a deeper understanding of the forces that motivate them to action. The two theories compliment each other to give a much deeper understanding than either one alone.

Arndt and Bigelow (2000) reiterate these points and apply them to healthcare management. Lichtenstein (2000) points out that all elements of a system are interdependent and mutually causal, again a statement of both field influence and the fact that actions are situated in context. He also discusses the nonlinear nature of systems and the fact that the magnitude of the output can bear little resemblance to the input, both concepts implied by Field Theory.

Thus, in Lewin's universe individuals navigate through their world much like

Suchman's Trukese sailor. They do not set out to follow a rigid mechanical path, but set off with some objective in mind responding to forces as they arise. The very nature of the world and of action make it impossible to have a mechanistic plan that is blindly followed to a successful conclusion. Thus, Lewin's concepts describe the foundation of a situated and contextual view of plans and actions. Lewin's Field Theory should form the basis of theory that guides in the development of models for analyzing actions within a systematic and feedback driven framework.

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