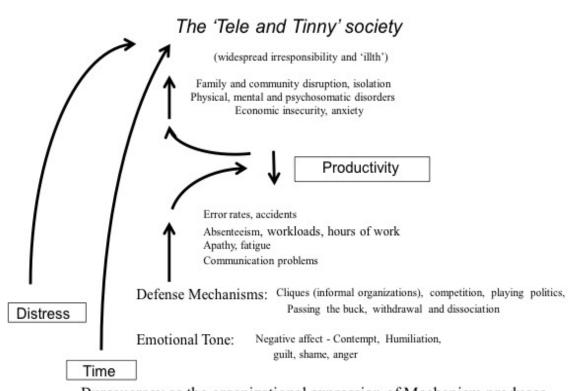
Open Systems Theory and the Two-Stage Model of Active Adaptation Donald W. de Guerre

Introduction

The main purpose of the version of *open systems theory* developed primarily by Fred Emery, referred to as OST(E), where (E) stands for Emery, is "to promote and create change toward a world that is consciously designed by people, and for people, living harmoniously within their ecological systems, both physical and social" and "to develop an internally consistent conceptual framework or social science, within which each component is operationally defined and hypotheses are testable so that the knowledge required to support the first purpose is created" (Emery. 2000).

OST(E) understands that most of our societal problems are expressions of the mechanistic paradigm of organizing called "bureaucracy" and develops an alternative solution that offers a way to move forward toward achieving more desirable futures. Figure 3.1 summarizes the current situation. Treating people as parts in the "big machine" results in negative feelings about the workplace, which starts an irreversible process leading to distress, which over time creates a dissociated, superficial society in which fewer and fewer people vote and we are vulnerable to a new kind of feudalism. Emery calls that society "tele and tinny," meaning coming home from work and picking up a bag of potato chips and a beer to "zone out" on television for the night.

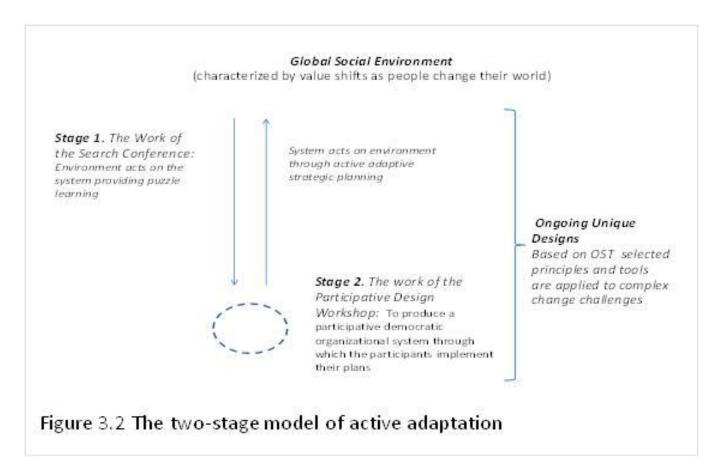


Bureaucracy as the organizational expression of Mechanism produces

Socioecology simply means "people in environment," and if the social environment is structured as a hierarchy of personal dominance, then changing that social environment to a more participative, democratic, appreciative one would create a healthier and more effective society.

When we say that OST(E) is a socioecological systems theory that includes sociotechnical systems, we mean that the unit of analysis and design is always the "system in environment," and it is always about more positive and less negative effects and better human relations at work. Research shows that this is what leads to productivity, quality, innovation, and human health (de Guerre and Emery. et al. 2007, de Guerre and Emery 2008, Emery 2008). Figure 3.2 describes the practical reality of how to create a new, more stable environment populated by true active, adaptive learning organizations that are good for people, the economy, and the planet.

Stage 1 of the two-stage model of active adaptation is the "search conference" (SC). It examines the system in environment over time and elicits ideal seeking behavior, creating an alignment between organizations and their environments. SC is a participative, active, and adaptive planning process. The active, adaptive enterprise actually proactively plans and prepares to improve the environment socially, economically, and ecologically (person, planet, profit), not just the organization. In today's world, actively adapting person, planet, and profit by planning to improve the environment is the new reality for organizations as members of larger innovative ecosystems. At the same time that active, adaptive, innovative organizations begin Stage 2, the participative design workshop (PDW), to align people and the work they do, thus making the organization agile, resilient, and healthy for people.



Combined, SC and PDW create the two-stage model of active, adaptive planning to democratize our paradigm of organizing that permeates how we design workplaces, schools, health care systems, families, etc. This two-stage model is very flexible and can be used in organization design, community development, and larger social systems. To do this both requires and develops a new paradigm of organizing that is contextual rather than mechanistic. In this complex structural change process, many unique participative events are required. Keeping a common set of

principles, notions, and values helps members of the organization or larger social system develop a common language and common understanding—a new paradigm.

The Search Conference

The first step of the two-stage model of active adaptation is a *search conference* (SC). In organization design and redesign, the people who are going to redesign their organizational structure in the second step need to be involved in the SC because it is here that the organizational strategy and business model are developed. The purpose of Stage 2 is to design an organization to deliver on that strategic model, and the designers need to understand it. The SC is also often the first experience of working in a democratic organization structure and thus provides the opportunity for learning about how to participate collaboratively to make decisions and choices.

Because the SC is based on open-systems theory, the key elements of the planning and design process are understanding the system, learning about the environment, and integrating what is learned about these into action plans to produce an active, adaptive system and environment (fig. 2). The process is one of integrated learning and planning. The implicit structure underlying this process is designed to develop high trust levels and ideal seeking. When done well, this results in collaborative creativity and innovation. Figure 3 shows the explicit structure of an SC from environmental scanning to diffusion after the search.

Diffusion is an essential distinguishing characteristic of a search because without effective diffusion, any time spent developing strategic plans is virtually worthless. In a search, the participants develop action plans in such a way that their implementation includes effective diffusion of the goals and their underlying ideals. This strategy of diffusion is an important element of performance for world-class systems.

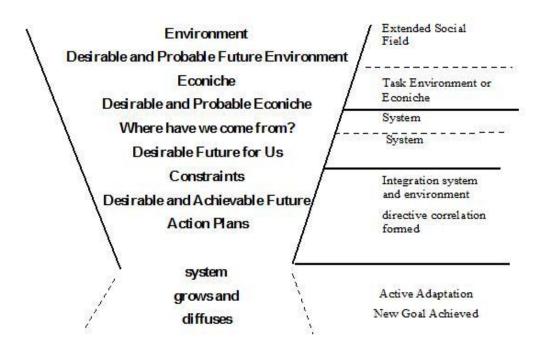


Figure 3.3 Search Conference Schematic Framework

The picture of a funnel is a good analogy because at the start of a search, participants consider all possibilities and gradually focus on their choices, most effective strategies, and actions. They start broadly from possible implications of changes in the social field, and as the search progresses, they gradually narrow their focus to a set of specific ends and the means to achieve their future as an adaptive system that influences its surrounding environments.

The SC is a community-building event, not a small-group event. Any small-group work must be integrated in large-group plenary sessions to become community property. Integration includes the process of rationalizing conflict so that the common ground is crystal clear (Emery, 1999).

Conducting an SC does not necessarily result in a transformational path of significant change for the entire organization. It does, however, represent a fundamental change in the way most organizations do strategic planning. The one overriding guiding principle is that the SC is an opportunity for people to start taking more control over their affairs and their destinies. Every aspect of theory and practice is geared to this end.

Strategic-planning searches for organizations usually consist of senior management—those who get paid to take responsibility for the health and direction of the organization. Other participative events or unique designs may be required before and after the organizational search. However, organizations also use search conferences for kicking off major projects, as the first stage of important organizational redesigns and to establish organizational networks and ecosystems to tackle big issues in interorganizational domains. Since the development of the two-stage model of organizational and community change in the early 1990s, most searches have added a participative design workshop (Emery and de Guerre 2006).

The Participative Design Workshop

While the SC establishes an active, adaptive enterprise strategy, that is not enough to create a new, more stable environment for people in environment to be healthy and wise. A learning organization that is agile, resilient, innovative, and productive is required to deliver on today's active, adaptive strategies. The PDW is the tool for that purpose. It is participative because the people doing the work are their own best designers, and usually every employee is involved in the participative design exercise. It usually consists of at least one SC, several PDWs, and other participative unique events to adapt support systems, develop new technologies, and establish new policies aligned with the new paradigm. For organization design and redesign, the most important elements of OST(E) are the organizational design principles and the intrinsic motivators (six factors for productive human activity).

There are only two genotypical organization design principles or paradigms. The first one (DP1) is bureaucratic and has the key characteristic that work is always controlled and coordinated at least one level above where the work is done. This principle is the organizational expression of mechanism and creates a hierarchy of personal dominance and at scale and, over time, the tele and tinny society (fig. 1). It is called "redundancy of parts" because spare parts (people and machines) are always available. The organization always has more parts available to it than are required and thus can add and subtract parts quickly.

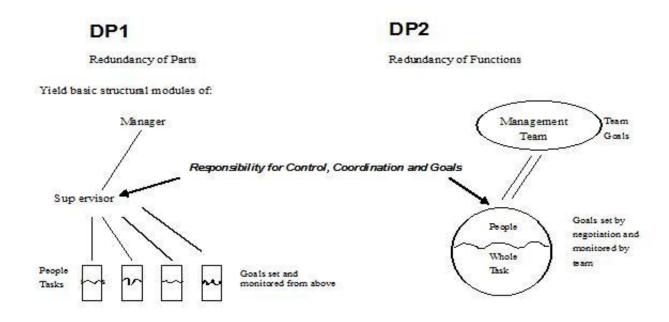


Figure 3.4 Organization Design Principles

The second organization design principle (DP2) is called "redundancy of functions" (or skills) because people always have more skills than are used in any one task and can carry out different functions when the organization needs to be flexible and adaptive. This is a jointly optimized sociotechnical system rather than the fragmented and segmented one seen in DP1. The work team sets its own goals in negotiation with management and then not only does the work but also records, analyzes, and plans to improve the way work gets done. Thus, when applied, this principle yields a flat hierarchy of functions in which people are learning and growing all the time, and no one is in charge of anyone else. Rather, people work together, feel good about themselves and their organization, and develop good human relations. As mentioned, the design process used to create this organization is called a "participative design workshop" (PDW) and is the second stage of the two-stage model of active adaptation.

The PDW is an organization design process with the single purpose of producing an organizational structure based on the second participative democratic design principle. When it is applied, it yields a hierarchy of functions or skills in which people design back into their organizations the human dimension of work that is summarized by the psychological requirements of productive activity. These six criteria, described below in table 3.1, are the *intrinsic motivators* (Emery 2000). When these are present, there is much positive, appreciative affect and better human relations in the workplace. In these structures, people are motivated to produce quantity and high quality, regardless of whether they are producing widgets, services, or ideas. Because the PDW entails a transfer of all the conceptual knowledge and tools required for organizational design and redesign, the participants also learn how and why to maintain DP2 and its consequences.

The intrinsic motivators for employee engagement and productive human activity are as follows:

1. **Adequate elbow room**. This is the sense that people are their own bosses and that, except in exceptional circumstances, they do not have some boss breathing down their necks. The tension between too many and too few degrees of freedom has to be managed.

- 2. **Opportunity to learn on the job and keep on learning**. Such learning is possible only when people are able to do the following:
 - a. Set goals that are reasonable challenges for them.
 - b. Get feedback of results in time for them to correct their behavior.
- 3. **An optimal level of variety**. People can vary the work to avoid boredom and fatigue and to gain the best advantages from settling into a satisfying rhythm of work.
- 4. **Mutual support and respect**. Conditions should exist in an organization such that people can and do get help and respect from their coworkers. This means that it is important to avoid the creation of conditions in which people do not assist one another, where people are entangled in destructively competitive relationships, and where the group interest denies the individual's capabilities.
- 5. **Meaningfulness**. This characteristic refers to a sense of one's own work meaningfully contributing to the "greater good." People see the whole product and their contribution to it, and they have pride in knowing how they have added value.
- 6. A desirable future. People want work that allows personal growth and increases skill levels.

The PDW comes in two basic forms, one for redesigning existing DP1 structures and the other for designing a new structure from scratch. For employing organizations with an existing structure, the PDW follows an agreement that the design principle will be formally changed and that this will result in a participative democratic organizational structure to which all policies and support systems such as pay will be adapted. For large organizations, a series of PDWs is designed for a total systemic structural redesign (de Guerre, 2000; Purser and Cabana, 1998). The form for design rather than redesign is used to create a new organization where none existed before.

If people are to accept responsibility for self-management, it is important that they have been involved in designing the organization of their section or area of the company. In a one- or two-day PDW, participants analyze their existing work organization, develop a new proposal, and outline detailed changes that need to occur before the new design can be implemented. Through the process, all participants learn a great deal about the work that others do and learn about organizational choice—that there is not one best way and that the choice of how to organize ourselves to get work done is critical to business success, people's health, and planetary survival. With this kind of learning, skill development, and appropriate support systems, self-managing groups are more effective on all measures than one-person/one-task DP1 structures (de Guerre, Emery, et al. 2007).

In a PDW, the first phase is an analysis of what currently exists, phase two develops a new organization design proposal, and phase three covers all of the practical matters that need to be in place to ensure the new organization's effectiveness.

In phase 1, the PDW manager does a briefing on the six criteria, DP1, and its consequences. In design teams, the participants then analyze the effects of the existing structure in terms of human motivation and current distribution of skills. In phase 2, the manager does a briefing on DP2 and its consequences and the DP2 structures appropriate for specialist, as well as potentially multiskilled self-managing organizations. Participants briefly draw up the work flow through their section of the organization to ensure that everyone knows what happens in the section as a whole and where critical decisions about control and coordination are made. They then draw up the formal legal structure of their section and redesign that structure. When they have the best possible DP2 structure, they move on to phase 3. In phase 3, they prepare a first draft of the goals that will control the work of that section or the groups within it and then work out their detailed training requirements and anything else required to make the new structure work in practice. They also prepare a first draft of a new career path based on skills, as it would apply to them in their work. These drafts are later negotiated and agreed on with whatever designated organizational authorities. A professional career-path designer will design a final career path based on payment for skills. The final system design will be individual to the organization of the implementation of the second design principle aligned to the business environment and the planet. The design principles are genotypic and descriptive,

not prescriptive. There are many variations or phenotypes that get built up through the participative design process (de Guerre 2000).

Implementation is usually seamless because everyone has been involved in creating it, and almost everyone understands and is committed to the structure that has been agreed to be implemented. Sometimes it is implemented as a prototype to be tested, validated, and refined over a year, with the final decision a year from the implementation date. Sometimes teams need to meet to complete a kind of detailed design for their team—ho does what, when, and with whom—the kind of operational and tactical planning any self-managing group would have to do. Sometimes in the final part of the PDW, new technologies are suggested, or perhaps new products or services are identified in the SC and worked through in the PDW so that there is some work to do before the new organization structure (socially and technically) can be fully implemented. Because people have learned through the process how to work together and make decisions using the rationalization of conflict, it is pretty easy for them to design a staged implementation process that integrates ongoing learning and planning into the process. Each situation is unique, and each organization has to write its own story.

Case Example

An open-pit mine with three hundred employees redesigned itself using the two-stage model. After some time exploring OST and its methods, management communicated to all employees a set of principles and minimal critical specifications for the new design and the design process. After some time discussing these, the employees agreed to engage the design process to create a new DP2 organization. Not every employee thought this was a good idea because being able to blame management would no longer be an option, but enough were prepared to engage that management decided to go forward.

Four participative strategic planning search conferences were held with about thirty-five employees in each. A set of eight desirable future themes were agreed to, and these were posted for everyone to see. However, the implicit learning that occurred through the process about the need to change to meet future business demands was invaluable and deeply appreciated by all who participated.

PDWs were explained to all employees in small groups as working sessions in which the people who work there redesign the social and technical structures, the work and the decision-making processes of the organization. The number of workshops held was not predetermined. Rather, it was agreed that they would continue until all employees had a chance to participate. After each PDW, the designs were published as proposals and consequently formed an ongoing conversation about the relative merits of each design.

After three PDWs, a diagonal-slice management group made up of managers, area supervisors, and frontline supervisors held their own PDW, from which two quite different redesign proposals were put forward into the mix. However, like the shop-floor redesign proposals, both of these had significantly fewer supervisors than the existing organization. Following a few more frontline PDWs in which the management redesign was discussed, a second management PDW was held. In this PDW, only supervisors were involved, and they designed themselves into teams to support the shop-floor teams, with a monitoring and mentoring role, aimed at assisting the workers in taking control of their own work.

Following the PDWs, an implementation team used a simple affinity process to sort the designs into three basic design themes. These were discussed with all employees in small groups to validate that their input had been included and nothing was left out. However, all three basic designs were incomplete, none had placed people into the work teams, and there were areas of work that were not agreed on. Modified PDWs were held to modify the incomplete designs.

When all three basic designs were complete, management withdrew a design that did not meet the minimal critical specifications; it was not based on the second design principle. Management was surprised that no one complained about them taking that unilateral decision, but when everyone has been involved in the process, everyone knows

what is right. The participants saw management as simply doing what had been previously agreed to in the SC process of stage 1. A town-hall meeting for all employees was planned to choose between the two remaining designs.

At the town-hall meeting with about three hundred people present, the key criteria for choosing a design was that all people had to be able to support the new design in a fashion that would enable them to work hard to make it work well. To accomplish this, table groups developed rationale for their preferred design choice, and three reasons for their choice. All of the table groups were polled for their choice, and their rationales were tallied. Of the thirty-one groups, twenty-seven favored design "A." The meeting participants were then asked if anyone present could not live with design "A." No one indicated that they could not live with it. Following a bit more dialogue to make minor adjustments, the new organization was chosen and was implemented soon after the town-hall meeting.

As a consequence of an ongoing organization dialogue through preparation to search, four search conferences, and an integration conference, eleven PDWs produced forty-four proposed designs. An implementation task force found the designs to have three main themes in common: the rejection of one design because it did not meet the minimal critical specifications, a couple of additional PDWs to complete design details, and a town-hall meeting involving all employees. Organization choice had been made with consensus to proceed. What is important to stress about the design process is that it was not an intellectual engineering exercise; it was very much a political and emotional process for all involved. Some called it "painful learning." However, the euphoria and commitment to the new organization design, not to mention the pride of accomplishment and sense that this new organization was theirs gave management the confidence that they had a high-performing organization. In other words, the participative redesign process used was a generative learning process involving individual, team, and organizational learning at the operational, business, and political levels.

Conclusion

Search conferencing and participative design have been used around the world in every industry since the 1970s, and the two-stage model have been used since the 1990s. Marv Weisbord popularized SC in North America with his version called "Future Search." There are many other copies and adaptations of the original SC that were developed primarily by Fred and Merrelyn Emery. Today the two-stage model is very popular in community development for innovation and sustainability because it is one of the most reliable methods to design and develop innovation ecosystems that are sustainable. It can reliably help communities adapt to global climate change. Merrelyn Emery and her colleagues in Australia have developed a new version specifically for ecological strategy development. SC or unique variations are used often in organizations to integrate learning and planning in strategic direction, project design, and management for example. The theory and method are very flexible and can be adapted in many ways.

For organizations, the main legacy of OST(E) and its methods is the notion of organizational choice and the insight that organizations are perfectly designed to deliver what they do. Consequently organization design and redesign are now established fields of study and practice, and there are lots of different approaches, both conceptual and methodological. However, with a good understanding of OST(E) and its methods, one can see whether the organization theories and models being touted are truly participative democratic models (DP2) or not. OST(E) has established over the years that participative democracy is more effective than autocracy or representative democracy (DP1). Consequently, a multitude of participative practices are shaping the future of governance. OST(E) gave us the principles, notions, and methods to pursue truly inclusive and diverse democracies. The challenge to implement remains, and OST(E) and its methods continue to be of value as we create a positive, appreciative future for everyone.

To learn more about OST(E) and its methods, contact the author. The classic textbook is *Searching: The Theory and Practice of Making Cultural Change* by Merrelyn Emery. A good introduction for practitioners is *Participative Design*

for Participative Democracy, edited by Merrelyn Emery. For an application to a big issue in today's world, see The Future of Schools: How Communities and Staff Can Transition Their School Districts by Merrelyn Emery.

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