



Sociocratisch Centrum



THE CREATIVE FORCES OF SELF-ORGANIZATION

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THE CREATIVE FORCES OF SELF-ORGANIZATION

Introduction

Consider a group of workers. If they act jointly to produce some product or service, we consider their behavior organized. We would consider them self-organized if they worked as a team through some kind of mutual understanding without external orders.

People self-organize all the time: business associates create partnerships, children invent games, students organize elaborate pranks, and an employee takes the initiative to handle an unusual problem during a supervisor's absence while in a different organization employees invent a subtle, collective way to resist an unpopular supervisory policy.

We have tried with only moderate success to understand such phenomena from the standpoint of behavioral psychology, military science, management science, and even operations research. However, recent discoveries in systems theory are giving new, clearer insights into self-organizing phenomena, insights that offer managers powerful new tools for increasing productivity. Remarkably, they can implement these tools through simple additions to currently existing organizational structures.

In this article, we will first provide an overview of the genuinely new method of organizing work and governing organizations whose technical, scientific name is "sociocracy" but which is under other names such as "dynamic self-governance," or "nonviolent governance" by various using organizations. For the purposes of ease with familiar words, in this paper we will use primarily "dynamic self-governance." The overview will introduce a few key concepts such as consent decision-making and double-linked hierarchies. Then, after presenting two real life examples, we will discuss dynamic self-governance methods in more detail, contrasting them with more familiar forms of management. Finally, we'll synopsise some of the new mathematical and systems theory concepts related to this innovative management strategy.

Background

The term dynamic self-governance (or sociocracy) refers to a decision-making and governance method that allows an organization to manage itself as an organic whole. To make this possible dynamic self-governance enables every sub-part of the organizational system to have a sovereign voice in the management of the organization. In contrast, modern corporations are legal persons with certain rights, but the exercise of their corporate rights is the sole authority and responsibility of a majority of the board of directors – not the organization as a whole or even the board of directors as a whole.

The original name, "sociocracy," was coined by August Comte, an early nineteenth century French philosopher and founder of the science of sociology. Sociocracy literally means rule by the "socios," people who have a social relationship with each other. In contrast, democracy means rule by the "demos," the general mass of people who have little in common other than basic values. And, autocracy means rule by an "auto," a single person. Comte proposed a system of thought and organization known as positivism that he hoped would provide the basis for a stable society and personal fulfillment in the context of the then emerging industrial revolution. However, Comte was not able to suggest a practical structure for his ideas.

Later in the 1800's John Stuart Mill advocated worker cooperatives in which the workers controlled all equity and selected their own management, the beginning of the co-op movement that has had some limited success. In the 1920's, a **pioneering management scientist** Mary Parket Follett noted that in the most productive companies workers strongly identified with the organization as "their" company, allowing them to focus without conflicting feelings on the work of the company and how to make it run effectively. **She discerned, however**, that no structure existed which allowed such identification to be founded on anything other than a difficult to maintain illusion. It remained for work later in the 20th century for leading scientists, most notably Wiener, Nash, (featured in the movie *A Beautiful Mind*), and Peregrine (who won a Nobel prize for his work on self-organization), to lay the intellectual foundation for such a structure, the structure offered by dynamic self-governance.

Beginning shortly after World War II the famous American social psychologist, Rensis Likert, integrated extensive empirical social science research into a concept dubbed "system 4." His ideas, which both promote upward feedback and recognize the importance of hierarchies, have been very influential. A number of recent American plant start-ups, particularly joint ventures with Japanese firms, have been patterned on System 4 concepts. Before he died in 1981, Likert was beginning to articulate ideas for "system 5," including such concepts as greater managerial authority vested in the work force. Professor Robert Ackoff of the Wharton School of Business suggested a similar idea in the early 1980's. He suggested a scheme for the establishment of a corporation's long range planning by multi-staged majority vote of management and workers.

More recently, John Naisbitt popularized such ideas as participatory corporations, networking as an alternative to traditional hierarchical organizations, and "intrapreneuring." Naisbitt and other writers seem to reflect a general societal mood that reaffirms basic capitalist values while pushing for a broader base in the management of our businesses and institutions. Legislation passed over the last few decades that promotes employee ownership reflects this mood. In *Leading the Revolution*, Gary Hamel makes a strong case for getting everyone involved in developing new business strategies. In mid 2004 American Airlines has announced a profitable quarter after teetering on bankruptcy two years ago. Why? Their new CEO, Gerard Arpey, found ways to involve the workers and unions in finding new, innovative, and more profitable business strategies. **Prior to the development of dynamic self-governance's practical structure, however, cultivating an environment that consistently maximizes the potential of an investor-manager-worker partnership has, in general, remained in the hands of a few gifted managers.** Dynamic self-governance takes that sort of partnership out of the realm of such genius and into the hands of ordinary people.

In other words, dynamic self-governance solves the problem of how to organize sustainable and holistic worker involvement with management and investors. Gerard Endenburg developed this simple, logical structure, inspired by experiments by Kees Boeke, a Dutch educational reformer and management scientist. In practical operation for more than thirty-five years, the method has progressed past the experimental stage and is serving very successfully in The Netherlands in organizations as diverse as an electrical contracting company, a municipal police department, a Buddhist monastery, a nursing home, a chain of hairdressing shops, a local public school system, and numerous others. It is also being used in a variety of organizations in other European countries, Latin America, and the United States. In formal studies, organizations using dynamic self-governance are reporting increased innovation, productivity increases of up 30% to 40%, reduction in the number of meetings, decreases in sick leave, and higher staff commitment to the organization. Both workers and managers like working in dynamically organized

companies. Quite simply, they are easier to manage and seem to have an unusual capacity for initiative, self-regeneration and repair. The method is operating well in organizations of up to 1500 people and substantially larger organizations are trying it out on a limited basis.

Although Endenburg developed the dynamic self-governance methodology with no direct knowledge of Likert's work, it has several striking similarities to his System 4 and 5 ideas. These similarities are very remarkable if one considers that dynamic self-governance, based on applied systems theory, relies very little on the social psychology theories used by Likert. Dynamic self-governance is quite unlike the ideas underlying quality circles, socio-technical analysis, organizational development, cooperatives, or employee stock ownership plans because it focuses on modifying the power structure that underpins all modern organizations – whether profit or nonprofit.

Introduction to the Defining Elements

The dynamic self-governance method relies on four critical components derived from recent discoveries in the science of cybernetics, including systems theory, fractal concepts, and the phenomenon of self-organization. (Cybernetics is the science of steering and control; see: <http://pespmc1.vub.ac.be/>). The four defining elements are quite simple, and once understood, are easy to follow. Any company or organization can implement them without changing its existing organizational structure. Once in place they provide a flexible means to develop that structure. Figure 1 lists the defining elements and gives brief definitions.

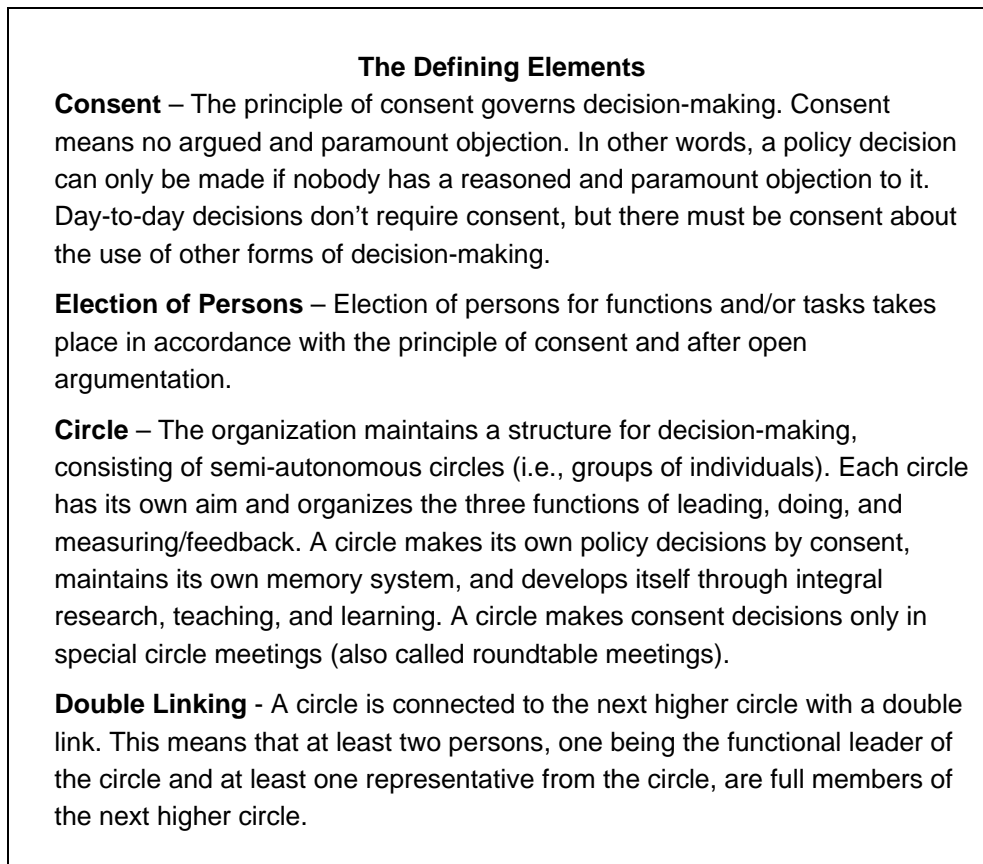


Figure 1 The Defining Elements of Dynamic Self-Governance

Dynamic self-governance provides specific procedures for these defining elements – much the same as *Roberts Rules of Order* guides majority-vote, decision processes. We will illustrate these procedures with two detailed examples based on actual companies. The first example focuses on the consent, election, and circle components. The second example illustrates the double-linking component.

First Example: A Hairdressing Shop

Right after closing time, the staff of a hairdressing shop gathered for a circle meeting. The shop was part of a growing, dynamically organized franchise company. Nine of the ten full time workers and one part time person were present and ringed the room.

It had been six weeks since the last meeting. Donna, an experienced stylist and regular facilitator of the meeting, followed the dynamic self-governance format for a circle meeting. (See Figure 2). Starting with an *opening round*, she asked each person in turn to say briefly how they were doing and, if they wished, to make any comments on the agenda. As each person spoke, bringing him or herself into the meeting, there were nods, some good-natured laughter, and a few clucks of sympathy. The opening round complete, Donna dealt *administrative* matters. She asked if everyone had received a copy of the decisions made in the previous meeting. Susan, an apprentice, said she'd forgotten hers, and Charles, a stylist and secretary of the circle meetings, handed her an extra copy.

The Order of a Dynamically Governed Meeting

- A. Opening round** – a time to attune – like an orchestra just before the concert.
- B. Administrative concerns** such as announcements, time available for the meeting, consent to minutes of last meeting, date of next meeting, acceptance of the agenda.
- C. Content**
 - Agenda item
 - Second agenda item
 - Etc.
- D. Closing round** – a time to measure the meeting process – e.g., use of time, did the facilitator maintain equivalence, how could the decision-making could have been more efficient, did everyone arrive prepared. Also, this is a time to mention agenda items that should be on the agenda for the next meeting.

Figure 2 Format of a Dynamic self-governance Circle Meeting

The circle was experienced in consent decision-making and handled its proceedings with deceptive informality. Donna watched them scan the list of decisions and after seeing several nods said, “Since no one seems to have a problem with the minutes, let’s go on to the agenda. As all of you know, I’m getting a promotion and will be managing the new shop opening over by the lake (some good natured cheers erupt); so, we need to elect a new circle chair. Second, several of you mentioned that you’re concerned about our competitor’s salon that’s opening in the other wing of this shopping center. The only other agenda item I have is Mildred’s request to

others spoke in favor of Mildred, Joyce, and Charles. This *Explanations round* highlighted positive qualities about each.

After everyone had given an initial opinion without discussion, Donna asked if anyone wanted to *Change* their vote based on what they'd heard, the fourth step. Two people said that they liked what the reasons given for Charles, including a person who had objected to him in an election several months earlier on the basis of his inexperience. This "self-organized" movement toward Charles occurs frequently in dynamic self-governance elections. That and the strength of the arguments for him convinced Donna to propose Charles. She then initiated a "*Consent Round*," asking each person in turn, "Do you have any objection to Charles as the new chair?" She asked Charles last. As no one objected, she announced that the circle had selected Charles. Donna paused for a moment, as everyone in the room seemed to experience a moment of quiet satisfaction at the completed election.

Charles suggested that Donna chair the rest of the meeting, and she moved on to the next topic on the agenda: the new competition. Following the template for making policy decisions by consent, Figure 5, Donna asked Michele to give her report.

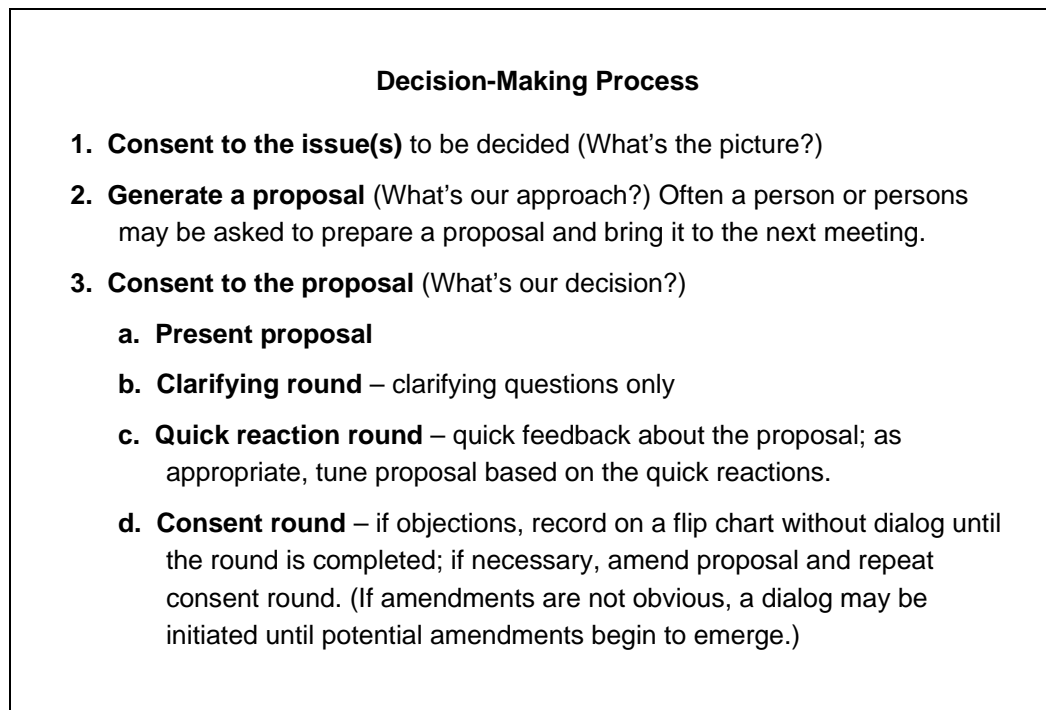


Figure 5 *Template for Making Policy Decisions by Consent.*

In the previous meeting, the circle had decided it was very concerned about a competitor's new styling shop that would be opening on the next block (Step 1 of Figure 5). It had asked Michele, a stylist and the shop's elected representative to their franchising company, to investigate and propose what they should do to handle the new competition. (Step 2 of Figure 5). Michele said she'd spoken with the franchising company main office and to a number of other people, and it seemed that the competition was coming in because their own shop had so many customers. The new shop would try to take their customers by offering manicures, and other extra services, free – at least for a time. She proposed (Step 3a in Figure 5) that their shop offer special promotions for the first few months after the other store opened and that they talk with

their customers about what new services they might like to have. After some clarifying questions (Step 3b), Donna asked for quick reactions (Step 3c) to Michele's proposal. Most felt it was a good idea, and some asked how much the special sales promotions would cost. Donna asked Michele if she wanted to amend her proposal based on the quick reactions.

Michele thought for a moment and said, "I imagine the advertising and specials will be pretty expensive, and I'm not sure how expensive. But, it is really important that we keep as many customers as we can during the other store's big opening extravaganza. So, I will add to my proposal that we authorize Mildred to spend up to 20% of our expected profits over the next three months on advertising and special promotions. She can tell us if she needs even more money than that." Michele glanced at Mildred, the shop manager, to try to gauge her reaction. The others were quiet a moment as they considered the effect on their own monthly profit-sharing payments.

Donna broke the silence saying, "Alright let's see if we have consent for Michele's proposal." She "did a consent round" (Step 3d), that is, asked each person in turn whether they had any paramount objection to Michele's proposal. To Michele's surprise, no one had an objection to the money part of her proposal, but Charles objected because he felt it wouldn't give them enough information about the services of the other shop – what they were really offering and their quality – and a way to react quickly if there was some new gimmick. Donna summarized Charles' objection on a flip chart and continued the round without further discussion.

In the end, the only objection was Charles'. Donna initiated a dialog focused on Charles' objection by asking Charles if wanted to elaborate further. "Well," he said, "We don't have any way to research or learn from them – what they're doing better than us – what they're not doing as well."

Several other people made comments. After a bit, Donna saw that a strategy was starting to take shape (self-organizing). She cut off the dialog and said, "So, we're saying that in addition to Michele's proposal, we want Mildred to organize an on-going effort to check out the other shop. Each of us will take turns going to the other shop as customers to make our professional assessments of what they are doing. Mildred will get other people to go, too, who will talk to their other customers to find out what they think and why they are going there rather than here. We'll get training or change our advertising depending what we find." Donna did another consent round, and this time no one had any objections. The decision was made.

Donna then moved to the third topic, coverage of the shop on Sunday afternoons – an unpopular time to work. In its previous meeting the circle had created a new assignment schedule after intense dialog. Mildred reported that she had received no complaints so far except her own: namely, the new schedule was difficult for her to manage. To keep dissension at a minimum the circle had closely limited her authority to modify the schedule unilaterally. She said she now objected to those tight reins because the schedule was unworkable without more latitude. She described the changes she wanted. As no one seemed against the idea of giving more flexibility or inclined to discuss it extensively, Donna did a consent round that encountered no objections.

Donna concluded the meeting with a closing round (See Figure 2, Step D) in which she asked each person for a short evaluation of the meeting without discussion. The meeting then broke up after running for an hour and fifteen minutes.

This hairdressing shop example illustrates the dynamic circle meeting format and the consent decision-making processes for electing people and for making policy decisions. It also alludes to the fourth defining element, double linking, when it mentions Michele's role as representative to

the franchise's regional general management circle. Double-linking (Refer to Figure 1) particularly sets dynamic self-governance apart from other management strategies. It allows organizations larger than a single circle to use consent decision-making holistically, greatly improving upward feedback and facilitating managerial delegation.

What the example doesn't illustrate is the “dynamic engineering” of the shop's work. That is, there are other templates that help a circle articulate “its own aim, organize itself using the three functions of leading, doing, and measuring/feedback, maintain its own memory system, and develop itself through integral research, teaching, and learning.” (Refer to Figure 1, Circle.) Dynamic engineering is a bit like industrial engineering except that, unlike traditional industrial engineering, control of the work structure is in everyone's hands. The result is that every person has the chance to be an entrepreneur in his or her own domain of responsibility.

The second example, based on a real-life event, illustrates the defining element of double linking.

Second Example: An Alternate Idea in a Crisis

Gloom reigned among the more than one hundred members of a company that manufactures and installs heavy-duty electrical equipment. A local shipyard had suddenly shut down, unable to keep up with foreign competition. The shipyard accounted for almost all of the Boat Department's business.

Figure 6 shows the Boat Department's place in the company's day-to-day functional structure (simplified for illustration). In this figure, each department box represents a single manager in the management structure, with the exception of the Board, which contains several people.

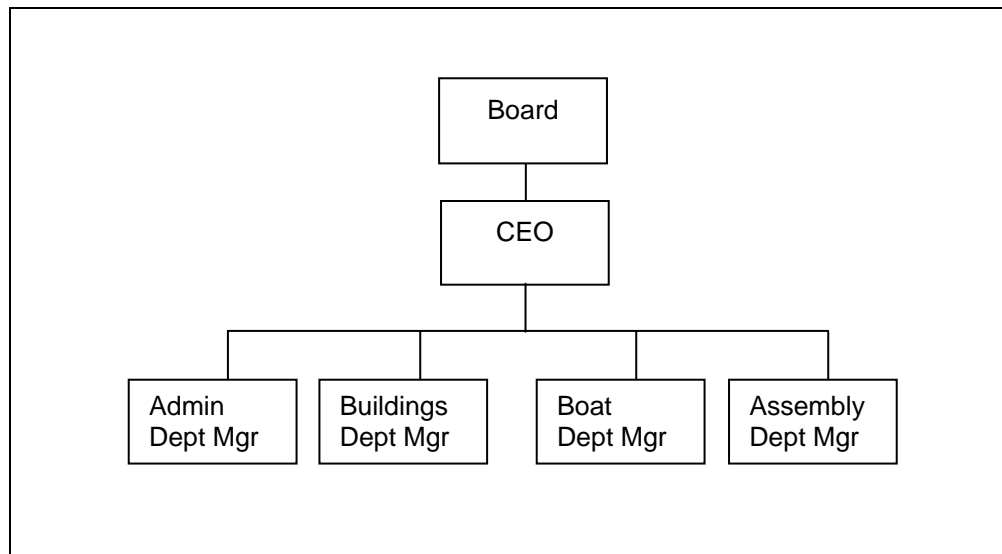


Figure 6 *Electrical Company's Functional Structure*

Fortunately, however, the company was a governed dynamically. Every four to six weeks it would shift into the structure shown in Figure 7 to adjust its policies. Unlike the boxes in Figure 6, the triangles in the bottom row of Figure 7 include each department supervisor *plus* everyone reporting directly to that supervisor. (As explained below, the triangles reflect a circular, dynamic process and so are also referred to as “circles” or “roundtables.”) The General Circle includes

the CEO plus the four supervisors reporting to the CEO plus a representative elected from each department, nine people in all. (The left hash mark at the top of each triangle (“circle”) signifies an elected representative and the right hash mark represents the functional supervisor. The hash marks at the top of the Board Circle represent outside expert members.) Because each circle connects to the next higher circle through two people – the supervisor and an elected representative – we say the circles are double-linked. This feature is unique to the dynamic self-governance method. The company uses this circle structure to set policy. In normal times, each manager and his or her immediate subordinates hold circle meetings every four to six weeks.

Returning to the crisis, when word came of the shipyard closure, the Board Circle held an emergency meeting and decided to begin a layoff of most of the Boat Department. The other departments had work for the moment.

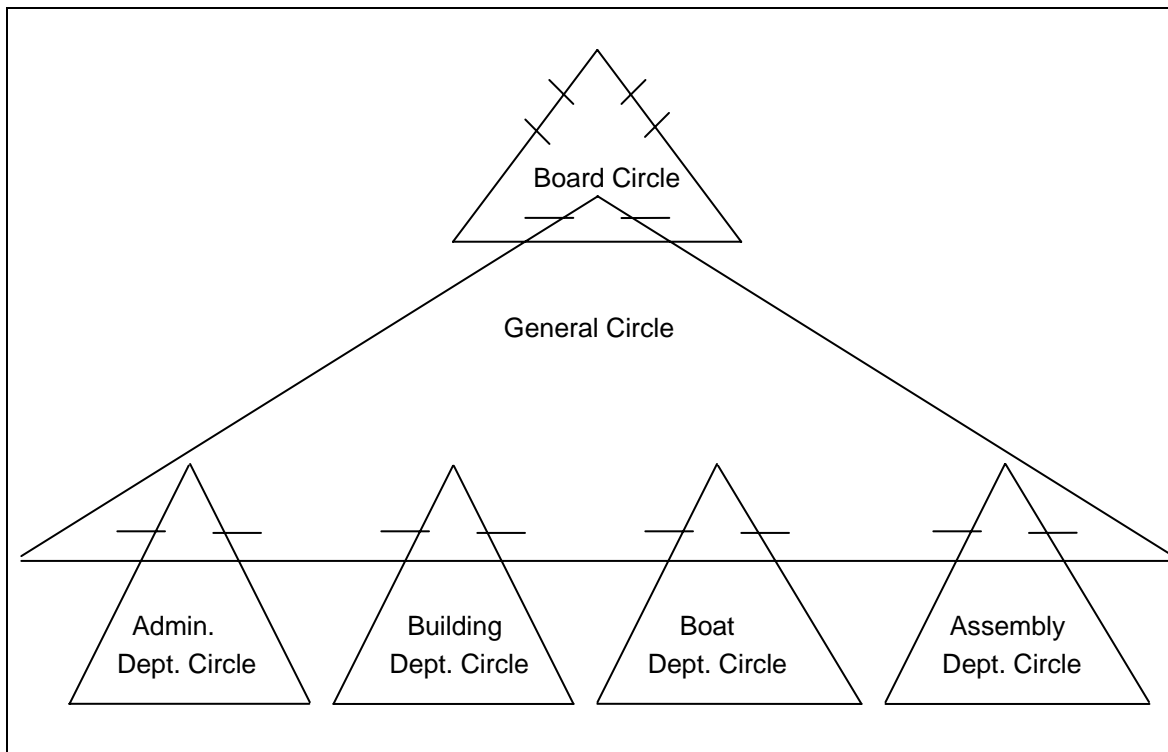


Figure 7 Electrical Company's Dynamic "Circle" Structure

A day after the Board announced its decision, Max, one of the electricians in the Assembly Department, asked Henry, the Assembly Circle secretary, to call a special meeting of the Assembly Department Circle. The layoff did not immediately affect him, but he had an idea for another way to handle the sudden crisis. Henry, the circle secretary, was able to arrange a meeting for the next day, and when everyone had gathered, Max explained his idea.

"It seems to me," Max said, "that we'd do a lot better if we delayed the layoff for a few weeks and shifted everyone who would be laid off into a marketing effort. There just has to be more business out there. I'm sure the guys in Boats would rather not knock on doors with a suit and tie on, but I'll bet they'll do it if it means keeping their jobs. If they succeed, we'll all get bigger long-term incentive checks."

Marvin, an apprentice electrician, spoke up, “It’s a nice idea, but I couldn’t see myself doing it, and I can’t see those guys in Boats doing it either. I’d just stand there on some dude’s thick office rug and stare at my shoes. I’m not a very fast talker.”

“That’s not what the women say about you, Marvin,” George quipped. (Good-natured laughter erupted at the allusion to Marvin’s Casanova reputation.) George, the circle’s non-management representative to the General Circle, continued, “I like Max’s idea. I think the Boats guys would rather stand on a carpet than in the unemployment line. What’s more, we have been doing some work for Boats making special electrical cabinets. If they don’t bring in more work, we could be next for a layoff.”

The dialog continued informally for several more minutes as the circle fell in behind Max’s idea. Gene, the circle’s facilitator then summarized their thinking by making a proposal for a decision. “Ok, it sounds like this is what we want to do: We designate Max as a temporary second circle representative to the general management circle. He will propose that we delay the layoff for one month while the Boats Department and anyone else who can be spared concentrates on marketing. The regular marketers will have to give some fast marketing and sales training. Max and I will get Administration to help us calculate how much of the company reserve we’d have to spend to delay the layoff.”

Gene glanced at Henry who was scribbling Gene’s words in the official circle notebook. Henry nodded to indicate that he did not need Gene to repeat the proposed decision. “Ok,” Gene continued, “let’s go around the circle to see if anyone has objections.” No one did. As the meeting broke up, Alex, the supervisor of the Assembly Department, said he’d report the decision to the company’s general manager at once and ask the general management circle’s secretary to call an emergency meeting for the next afternoon.

After the dialog resolved members’ initial reservations, the General Circle decided to support the idea. However, the General Circle could not make a final decision because of limitations on their authority to spend the reserve fund. They decided to make Max their temporary second representative to the company’s Board Circle (Board of Directors). After some very heated debate, the Board gave its approval to a slightly modified plan, and the General Circle launched the plan into action. The idea worked splendidly. Within three weeks, there were enough new customer commitments to justify further postponement of the layoff. The layoff never occurred, and the company thrives today with a more diversified customer base.

In this second example, we saw how the fourth defining element, double-linking, facilitated upward communication of an idea all the way to top management. Normally a circle has only one elected representative to the next higher circle, but procedures are flexible. In this case, the Assembly Circle and the General Circle decided to add a second representative. The double-link process catapulted Max to a temporary position on the Board of the company. The self-organizing process identified the real leader of the moment and put him in the right position.

New Corporate Structure

The next portion of this article shows how the four defining elements apply to the larger organizational context. We analyze conventional corporate models of governance and compare them with the dynamic self-governance model shown in Figure 7.

Conventional businesses almost universally rely on a formal combination of majority vote and autocratic decision-making. Figure 8 expands Figure 6 to illustrate that a majority of the Board

selects the Chief Executive Officer who, acting as the operational arm of the Board, functions as an autocratic decision maker.

By “autocratic” it is not meant that the CEO is dictatorial – that’s only one autocratic style. In fact, the CEO and his subordinate managers may employ a wide range of autocratic styles including “telling” (direct orders), “selling,” “participative,” and “joined” styles (the manager tries to abide by the consensus of staff or peers – reserving final decisions to him or herself only when necessary). These are all autocratic styles because, regardless of collaborative appearances, the “auto” (or single person) retains the power to ignore all other persons’ voices in rendering decisions. Each of these autocratic styles has positive and negative qualities and none is inherently more desirable. Each may be the most appropriate depending on the circumstances and personal preferences of the manager.

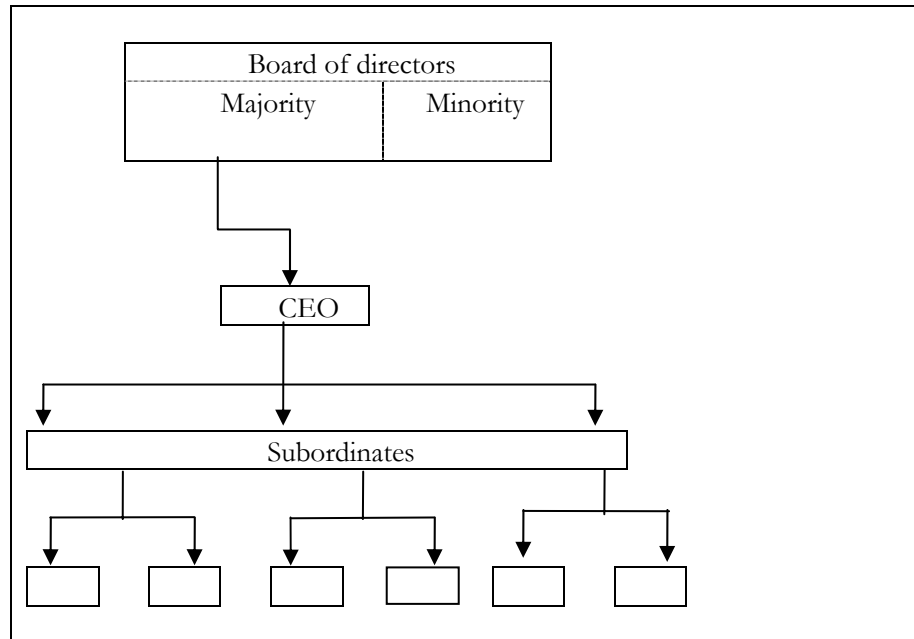


Figure 8 The Classic Corporate Model Uses Majority Vote and Autocratic Decision-making

In contrast, it is important to understand that dynamic self-governance is not a method of participative or joined management. It is not a management style. Rather it modifies the basic structure of power in support of whatever day-to-day style of management seems most effective within the given context. It makes leading, regardless of a manager’s personal style, easier.

The evolution of business organizations has tended toward greater equivalency of all people in the company. One stage in that evolution was the development of unions. Figure 9 adds a “union feedback loop” to the corporate model depicted in Figure 6.

By law an employer, displeased with an employee’s statements, can reprimand or fire the employee. The law, however, protects the employee if he or she speaks as a representative of a recognized union. Many brave and dedicated persons struggled for decades to win workers the power to negotiate with management from a position of collective equality. From a systems viewpoint, unions could perform a valuable feedback service. Since union representatives have protection, feedback from them may be more accurate than from individual employees. Unfortunately, the majority vote politics within the union may tend to distort that feedback.

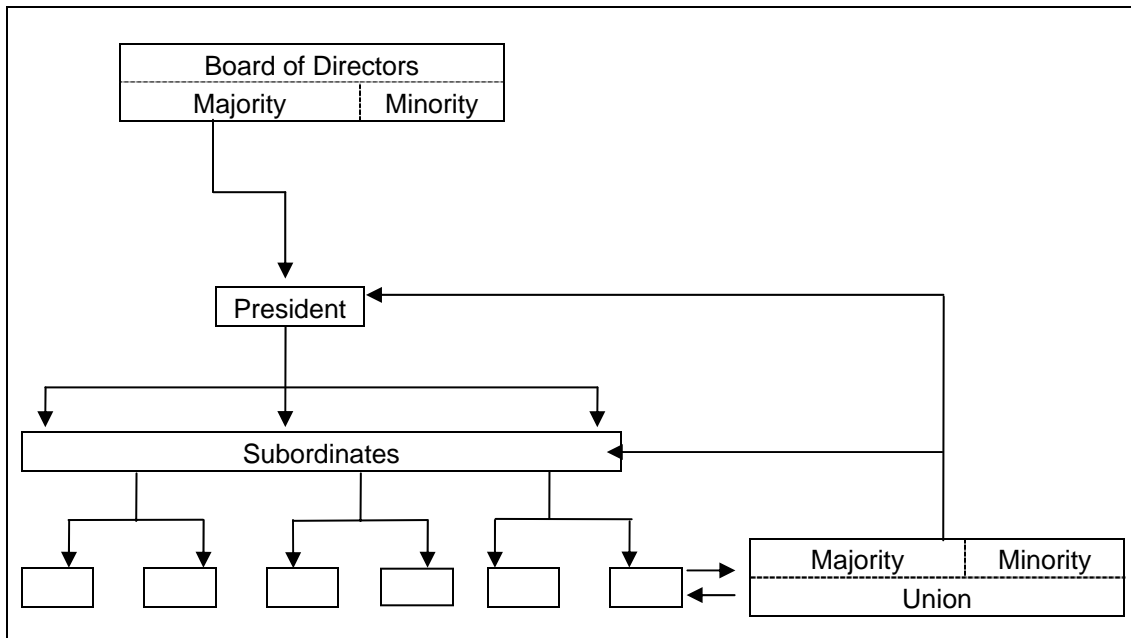


Figure 9 The Classic Corporate Model with Union Feedback

These politics, plus the fact that the union stands outside the functional structure of the company, make the union feedback loop effective only in reflecting matters of broad and general concern. The feedback operates on democratic principles, which means the flaws of the democratic process vex it, viz, the majority of the union has the “autocratic” right to override the opinions of the minority. Furthermore, unions derive much of their strength from their right to strike or to require arbitration of disputes. Arbitration and strikes inhibit rather than promote communication with management, often making it strained, legalistic, and “us versus them.” Strikes especially can lead to bitterness and are rife with distorting and troublesome mass emotions.

A more recent development in the evolution of the corporate form of organization is employee stockownership plans. Figure 10 slightly modifies Figure 9 to depict the systems configuration created by such schemes. It replaces the word “Union” with “Employee Stockholders” and redirects the feedback loop to go directly to the box marked “Stock holders” rather than to “President.” (Often it goes just to the “Minority” sub-box.) Since this loop is even further from the day-to-day worker-supervisor communications and decision-making than the union feedback loop, it is ineffective as a means of providing day-to-day feedback to management. Its only value is to provide a general positive incentive to the workforce that is linked to overall performance.

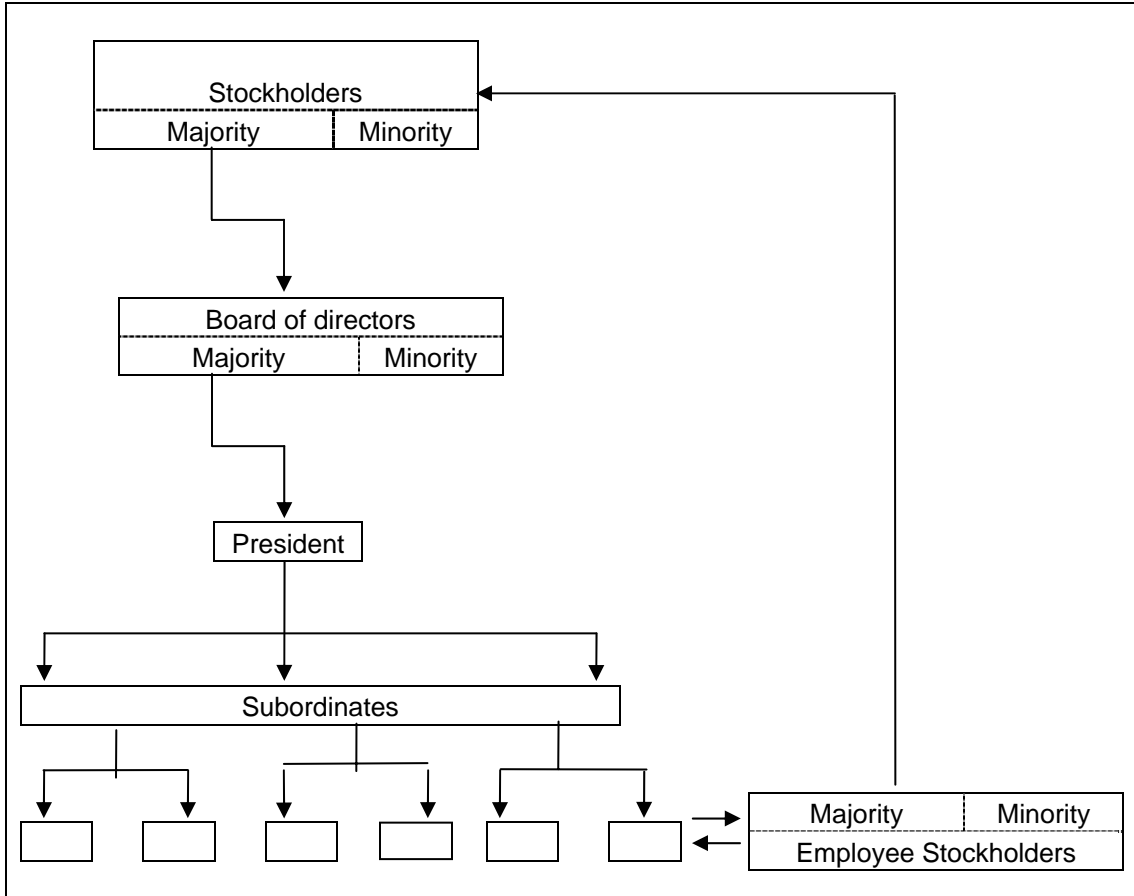


Figure 10 Classic Corporate Model with Employee Stockowner Feedback Loop

Contrast Figures 8, 9 and 10 with Figure 7, which depicts the dynamic self-governance power structure. Because of the double-linking principle, Figure 7 includes a feedback loop at each level in the hierarchy, including the Board. For that reason, it is a wholly dynamic structure.

Figure 11 illustrates that the “circles” in Figure 7 are drawn as triangles both for ease of illustration and to symbolize the systems concept of dynamic steering: leading, doing, and measuring that follow each other in a circular fashion. The triangle apex represents the leading, the right corner represents doing, and the left corner – measuring.

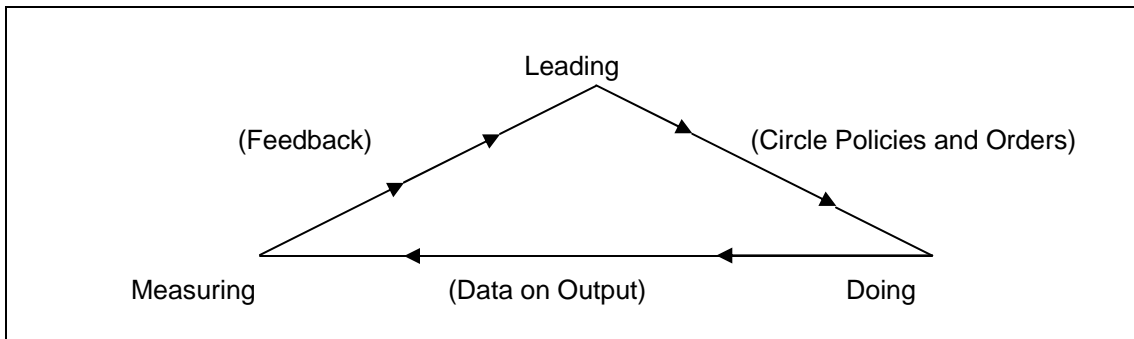


Figure 11 Dynamic self-governance Circle Functions: Leading-Doing-Measuring

For example, a person riding a bicycle from point A to point B is a dynamic system. The leg muscles push the pedals and the hands steer (the doing component). The senses (the measuring component) such as the eyes and inner ear give feedback to the brain (the leading component). The brain assesses the feedback and issues new guidance to the muscles. If we remove any one of the three components, we no longer have a system that can be steered dynamically. Without dynamic steering, the odds that the cyclist will reach point B efficiently, or at all, are very low. Dynamic self-governance places great emphasis on making both work processes and over-all, corporate guidance dynamically steerable. Thus, a “circle” of people is one whose work processes and power structure respond dynamically to both the internal and external environment of the organization.

The consent decision-making process provides the measurement component that is missing or weak in the classic models shown in Figures 8, 9, and 10. In the classic models, the boss can choose to ignore feedback. In a sociocratic roundtable meeting, consent decision-making removes the possibility of ignoring. Double linking then extends the reach of the feedback creating an integrated and dynamically steerable organization at every level.

The dynamic self-governance circle structure overlays the classic structure. In other words, Figure 7 embeds Figure 6: Specifically, the lines that are the right-hand side of each triangle in Figure 7 are identical to the lines in Figure 6. They represent the top down command structure: leader-doer. The remaining part of each triangle is the feedback loop. It represents power going from the bottom upward in a circular relationship with the top-down power. These feedback loops are much more immediate, accurate, and practical than the feedback loops shown in Figures 9 and 10.

Finally, in a fully dynamically governed corporation, the composition of the Board changes. The hash marks at the upper side of the Board Circle in Figure 7 reflect participation by outsiders. One of these outsiders represents the stockholders. The other outsiders include an expert in the company’s business area, an expert in the local government, and an expert in management methods. Including a wide range of expertise keeps the organization in intimate touch with changes in the company’s environment.

Implementation

Top management should lead the implementation of dynamic self-governance to ensure that it proceeds holistically. Attempts by factions to implement it from the bottom or middle of their organizations can lead to considerable friction. Some people mistakenly perceive dynamic self-governance as a revolutionary tool to use against management, to get rid of the boss. It’s not. The boss stays put. The logic of dynamic self-governance sets aside the “either/or” logic of old conflicts such as workers versus management. Dynamic self-governance logic is often expressed in “both/and” statements. For example, a dynamically governed business places control of a company in the hands of *both* management *and* workers; it typically uses *both* autocratic *and* egalitarian decision-making; it provides *both* a security assurance *and* a creative stimulus; it is concerned with *both* profit *and* human values. By combining seemingly incompatible concepts, both-and thinking stimulates creative thinking and causes that seemingly chaotic thinking to self-organize into very practical solutions.

Since the implementation process is both emancipating and motivating, conflicting feelings of caution, elation, frustration, relief, fear, and appreciation may arise during implementation.

Careful planning can minimize this discomfort and avoid disruption of the ongoing work process.

Implementation begins in the imagination of those in currently in charge, the owners or the board. They have to see dynamic self-governance as a possible strategy for achieving their values and vision for the business or organization. Gaining this insight is the first step in implementation. Those in control might not express their vision in grand terms. They are likely to say they are looking for better communications, more creativity to stay ahead of competition, a more stable labor force, or simply more profit. These are all valid reasons for starting experimentation with dynamic self-governance, but it helps if those in control can articulate their dream for the company. Having a clear idea of their vision helps them integrate dynamic self-governance with their other strategies for realizing their vision. It is important for top management to make a clear commitment to support experimentation with dynamic self-governance. Because management retains the power to stop any dynamic self-governance procedures during the implementation process, the organization will sense any violation of the consent principle by management and see it, correctly, as the latest autocratic manipulative trick.

The second step is usually to form a special Implementation Circle consisting of the CEO, other selected top managers, and persons from other levels of the organization. The Implementation Circle receives training in dynamic self-governance and deepens its learning by applying the training to its own operations. The Implementation Circle's job is to plan, guide, and evaluate a series of implementation steps. For example, the Circle might decide to try implementing dynamic self-governance in one specific department of the organization and gauge the results. If successful, the Circle would probably expand the method to more departments. The second step ends once the whole organization has a double-linked circle structure and in-house trainers are able to train newly elected circle meeting facilitators and new staff in the dynamic self-governance method.

The third step, that can partially overlap the second step, is to install "dynamic engineering" methods. These methods organize all work processes on a dynamic basis and create a structure to guide the organization's own evolution. Once these methods are in place, the organization will likely be ready for ISO 9000 quality certification. The quality methods will feel integral to the normal work processes and not imposed from outside, as is so often the case when companies and organizations seek certification.

The fourth step focuses on the Board Circle. The dynamic self-governance method includes simple formulas that let everyone feel the "profit measurement" – both profits and losses. The formulas ensure that each staff member or investor, each circle, and the company as a whole all have explicit financial feedback about their performance. The formulas include a regular minimum payment for investors, management, and staff as well as short-term and long-term incentive payments. The formulas divide income for each group in proportion to their contribution to the company so that all participants in the organization receive a fair share - as would any group of partners. In addition to financial system adjustments, the Board Circle may wish to revise its incorporation and by-law structure in accordance with the dynamic self-governance corporate model. This ingenious approach to incorporation makes consent the legal basis of decision-making. The corporation retains an ability to raise money through sale of stock and because the basis of decision-making is consent, not ownership, a hostile takeover becomes impossible.

One attraction of dynamic self-governance is the freedom it offers to use it in whole or in part. The implementation process can be paused at any of the steps just discussed. It is also

possible to make limited functional areas of a large organization operate with a circle structure. Doing so offers a practical way to gain experience with the model. For example, an organization could organize all of its safety officers in a circle structure, or everyone who deals with computers, or everyone participating on a special project, etc.

Thus, if a large, geographically dispersed organization with several regional offices planned to launch a big automation project using dynamic self-governance principles, its first step would be to establish management support for the idea. Then, it would create circles in the targeted regional offices, consisting of users and automation systems support staff, at least one circle to each region. It would establish a national level circle and double link the regional circles.

On the other hand, on a small scale, a church committee or a group of volunteer parents supporting a children’s soccer team might select a meeting facilitator and assign tasks to each other using the dynamic self-governance election process.

Benefits of Self-organization

It is natural to ask, “Why bother to make my company self-organizing? What are the benefits?” The summary answer is that the self-organizing process spurs creative thinking and catalyzes new structures, forms and ideas. Although a circle meeting might seem a formula for endless argument and indecisiveness, in practice it is not. It is more reminiscent of a stock market or a folk market place where prices and exchanges emerge spontaneously. Figure 12 summarizes the major advantages and disadvantages of dynamic self-governance.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Promotes creativity and problem solving throughout the organization • Supports the interests of investors, management, and staff • Speeds adaptation to change • Engages and utilizes the energy of every member of the organization • Generates high quality products and services • Increases staff commitment to and identification with the organization • Results in fewer, more satisfying meetings • Reduces sick leave • Improves safety record • Raises awareness of costs • Improves client orientation • Decreases the odds of burnout • Builds program self-discipline • Supports leadership among peers 	<ul style="list-style-type: none"> • Requires careful implementation planning • Necessitates training in new concepts • May arouse varying intense emotions during implementation (skepticism, elation, anxiety, excitement) • May, at first, be uncomfortable for those not accustomed to sharing the responsibility of difficult decisions

Figure 12 Summary of Advantages and Disadvantages of Dynamic self-governance

Systems Theory and Dynamic Engineering

Some readers will be interested in the theoretical background of the four defining elements. Dynamic self-governance draws on knowledge from many disciplines, particularly systems theory. Dynamic self-governance has probably emerged only recently because the crucial insights provided by the science of cybernetics were simply not available until recently. Cybernetics is the science of steering and control. Systems theory, one product of cybernetics, explores the fundamental similarities between seemingly unrelated phenomena. By establishing reliable analogies, the insights gained in one area of study can to accelerate understanding and discoveries in other fields. The most powerful analogies are mathematical because they are the most precise. For instance, as schoolchildren we learned to think of electrical circuits as being “like” water pipes. That analogy is a very good one because the equations that describe hydrodynamic volume and pressure have the same algebraic form as the equations related to watts and voltage, except that the names of the terms are different. Gerard Endenburg derived the four defining elements by making analogies with phenomena that are understood in technical fields, especially electronics and biology.

Turing, Prigogine and others laid the foundation of systems theory during the 1950’s by generalizing the principles of mechanics and thermodynamics to other fields of study. Their initial work spawned new disciplines such as operations research and has found numerous practical applications in manufacturing and management science. It underpinned the design of computers and generated such now familiar tools as PERT charts and flow diagrams. Some organizations are better organized than others. One of the tasks of the systems approach to management is to understand why they are better organized and to provide a rigorous methodology for improving organizational design and evaluation.

Prigogine, a Russian-born Belgian chemist, became particularly interested in self-organizing systems. In 1977, Prigogine received the Nobel Prize in Chemistry for his “contributions to non-equilibrium thermodynamics, particularly the theory of dissipative structures.” In lay terms, he advanced our understanding of how order can arise from chaos. By mathematical reasoning, he widened the scope of his work from purely physical sciences to ecological and sociological studies. Others have used these ideas to examine such diverse topics as the origination of life on Earth, the dynamic equilibrium of ecosystems, and even the prevention of traffic jams.

In 1978, Herman Haken, a renowned professor at the Institute for Theoretical Physics at the University of Stuttgart, extended the mathematics associated with gases in Prigogine’s work and used the term “synergetics” to describe the new discipline he founded, which studies self-organizing phenomena. Haken’s showed that self-organizing activities as far apart as lasers, the regular streaks of cirrus clouds, certain rhythmic chemical reactions, patterns in slime mold, regular fluctuations in the number of hare and lynx pelts received by the Hudson’s Bay company over a 90 year period, and formation of public opinion are mathematically all one process.

Prigogine and Haken showed that, to be self-organizing, a system must meet two conditions. First, the elements of any self-organizing system must be equivalent, that is, not controlling each other. A system in which the elements do not limit or control each other is without form; it is chaotic. Second, to be self-organizing, a system must have an external source of energy. These

conditions are true for all self-organizing systems, whether the system elements are people freely uniting around a common activity or atoms harmonizing to one frequency in a laser.

The four defining elements of dynamic self-governance create the conditions needed for self-organizing to occur. The components of consent, elections, and double linking establish the first condition, that of “not controlling” each other. For example, in the election process, the procedure in which each person makes his or her nomination privately on a piece of paper intentionally creates a chaotic situation. (Refer to Figure 3, Step 2)

The other element, the circle component, provides the required external energy source, viz, the common aim. The common aim creates tension: “We must work together to produce a specific product or service, and we must do so in the face of competition.”

In contrast, we can see that conventional organizations do not create the conditions needed to release the phenomenon of self-organization. Neither autocratic nor majority-vote decision-making allows the elements (people) of the system (company) to be “not controlling each other.” For example, if each person on a board of directors has one vote, the majority of votes on any one issue controls the minority. Thus, the majority vote procedure destroys the initial equivalence. Or, for example, managers in a conventional company may try to promote creative thinking by “flattening” their organization or by adopting a joined autocratic style. However, the reality is that the manager alone retains the real power. Thus, conventional businesses are organized, but they are not self-organizing. Only a dynamic self-governance structure, that is, one in which all the members are fundamentally equal, fundamentally not in a boss-servant relationship, supports the natural phenomenon of self-organization.

Conclusion

This article introduced dynamic self-governance, a new method of decision-making and organizational governance. It included two detailed examples of the decision-making method in day-to-day operation and outlined the governance system. It made brief mention of the discipline of dynamic engineering that develops existing work processes to make them more easily steered.

Dynamically governed businesses, educational institutions and nonprofit organizations are significantly different from their conventional counterparts in many ways, ranging from job satisfaction to overall financial viability. The dynamic self-governance method is an “empty tool,” – useful where and whenever people are organized.

Still relatively new outside of the Netherlands, dynamic self-governance is a methodology with tremendous untapped benefits. It lends itself well to partial use or full implementation.

Dynamic self-governance has considerable unexplored potential for many areas of human endeavor. Those who are able to see the potential gains from dynamic self-governance will be invaluable to their organizations. These early adopters will be responsible for transforming their associated institutions in ways that enable everyone involved in the organization, as well as the organizations themselves, to achieve their full potential.

Selected Bibliography and Related Resources

Much of the literature on dynamic self-governance is in Dutch; however, there are magazine articles in other languages, including English, French, German, Spanish, Italian and Arabic. Readers may obtain copies of these articles through the Sociocratisch Centrum in Rotterdam,

Netherlands. Also available in English are two books by Gerard Endenburg: *Sociocracy: The Organization of Decision-making*, and the more recent book *Sociocracy as Social Design*. The Internet site: <http://www.dynamicgovernance.biz> contains further articles and information.

C. A. Cannegieter's book *The Human Aspects of Economics: A Treatise on Unemployment, Inflation, and World Poverty* (Exposition press, Smithtown, New York 1982, pages 150-184) gives a good overview of various early sociocratic initiatives and contains an extensive bibliography.

While a number of books are available on general systems theory, we particularly suggest *General Systems Theory: Essential Concepts and Applications*, by Anatol Rapoport (Abacus Press, Cambridge, Massachusetts); *Cybernetics, Artificial Intelligence and Ecology: Proceedings of the 4th Annual Symposium of the American Society for Cybernetics*, edited by Herbert W. Robinson and Douglas E. Knight (Spartan Books, New York); and *The Macroscope*, Joel de Rosnay, translated from French by Robert Edwards (Harper & Row, New York).

For more information on the scientific approach to synergetics, we recommend Herman Haken's *Synergetics: Non-equilibrium Phase Transitions and Self-Organization in Physics, Chemistry, Biology, and Sociology*, (2nd Edition, Springer Verlag, New York 1978); and Erich Jantsch's *The Self-Organizing Universe* (Pergamon Press, New York 1979) which discusses Prigogine's work with self-organizing dissipative structures. Jantsch's book does not require facility with mathematics; however, familiarity with calculus and linear algebra are helpful for both of Haken's books. These scientific approaches contrast to more philosophical treatments of synergetics such as Buckminster Fuller's *Synergetics* (MacMillan Publishing Co., New York 1975), which seems less subject to empirical verification and practical application.

Dynamic self-governance carries the modern drift toward power equalization in employment to its logical conclusion. The power equalization milieu can be seen from a number of perspectives, and the following list is a selection of various viewpoints: *Introduction to Management Science* by Thomas M. Cook and Robert A. Russell (Prentice-Hall Inc., New Jersey 1977); *Megatrends: Ten New Directions Transforming Our Lives* by John Naisbitt (Warner books, inc., New York 1982); *The Social Science of Organizations – Four Perspectives* by Henry A. Latane, David Mechanic, George Strauss, and George B. Strother (Prentice-Hall Inc. New Jersey, 1963); *In Search of Excellence* by Thomas J. Peters and Robert H. Waterman, Jr. (Harper and Row, New York 1982); *Another Way of Life* by Patricia Baum (G.P. Putnam's Sons, New York 1973); *Utopian Thought in the Western World* by Frank E. Manuel and Fritzie P. Manuel (The Belknap Press of the Harvard University Press, Cambridge 1979); *What do Unions Do?* By Richard B. Freeman and James L. Medoff (Basic Books, Inc., New York 1984); *The North Will Rise Again* by Jeremy Rifkin and Randy Barber (Beacon Press, Boston 1978); *A Piece of the Action* by Stuart M. Speiser (Van Nostrand Reinhold company, New York, 1977); *Creating the Corporate Future* by Russell Ackoff (John Wiley and Sons, New York 1981); *Beyond Majority Rule: Voteless Decisions in the Religious Society of Friends* by Michael J. Sheeran (Philadelphia Yearly Meeting of the Religious Society of Friends, Philadelphia 1983); and *Dynamic Administration: the Collected Papers of Mary Parker Follett* edited by E. Fox and L. Urwick (Pitman Publishing, New York 1973). Finally, there is the pioneering work of Rensis Likert. One can follow the development of his thought in three books: *New Patterns of Management* (McGraw-Hill, New York 1961); *The Human Organization* (McGraw-Hill, New York 1976) and *New Ways of Managing Conflict* (McGraw-Hill, New York 1976). Likert and Associates, Inc., of Ann Arbor, Michigan, are continuing Likert's work.

More recent publications of interest include: *Quest for Prosperity* by Konosuke Matsushita (PHP Institute, Kyoto, Japan, 1988), *The Rise and Fall of Strategic Planning* by Henry Mintzberg (Free Press, New York, 1994) and *Built to Last* by James Collins and Jerry Porras (Harper Business,

New York, 1994) for a discussion of a broader vision for businesses; *Planning for Quality* by Joseph M. Juran (Free Press, New York, 1988) for a discussion of quality concepts with a human face; *The Fifth Discipline* by Peter Senge (Doubleday, New York, 1990) for insights into systems thinking applied to a business environment; *Managing on the Edge* by Richard Pascale (Viking Books, New York, 1990) and *Leading the Revolution* by Gary Hamel (Harvard Business School Press, Boston, 2002) for descriptions of the need for dynamic steering and development to cope with constantly changing environments; *Complexity* by Mitchell Waldrop (Simon & Shuster, New York, 1992) and *Competing for the Future* by Gary Hamel and C.K. Prahalad (Harvard Business School Press, Boston, 1994) for a review of concepts of chaos, complexity, and self-organization, and strategic thinking as they apply to business; *Reengineering the Corporation* by James Champy and Michael Hammer (Harper Business, New York, 1993) for techniques that are related in part to dynamic engineering; *Emotional Intelligence* by Daniel Goleman (Bantam, New York, 1997) and *The Living Company: Habits for Survival in a Turbulent Business Environment* by Arie de Geus (Harvard Business School Press, Boston, 1997) for an in-depth analysis of the importance of human-to-human skills – a strong rationale for using dynamic self-governance to govern.

About the Authors

Gerard Endenburg

A citizen of The Netherlands, Gerard Endenburg received his high school education at De Werkplaats, in Bilthoven, an innovative and influential school. The school, founded by educational and social theorist Kees Boeke, operated under a consensus decision-making system patterned after the Quaker model. On completion of his college studies in electrical engineering and radar technology and his mandatory military service, Gerard worked for a while for Philips Electronics where he was instrumental in obtaining a patent for the flat speakers now used in many personal electronic devices including cell phones. He then joined Endenburg Elektrotechniek, Inc., the electrical engineering company headed by his father. His parents established the company shortly after World War II as a practical laboratory to try out their ideas about management and industrial reform. Gerard became general manager in 1968, a position he held for 30 years. He remains on the board of the company.

Inspired by Boeke's ideas, his engineering training in systems theory, and work in the field of synergetics, Gerard developed a system of decision-making based on the principle of consent, which could be added to the existing functional structure of any organization, regardless of its size or objective: dynamic self-governance, known in the Netherlands as the sociocratic circle-organization method. In 1970, Gerard started to introduce this model into the factory. The first reports on the dynamic self-governance experiment appeared in the prestigious Dutch daily newspaper "NRC-Handelsblad" in 1974. A year later, he published his first book, *Sociocratie, een redelijk ideaal (Sociocracy, a Reasonable Ideal)*.

He helped found the Sociocratisch Centrum in 1977 to coordinate and to encourage the growing number of Dutch organizations that were adopting dynamic self-governance and to support the interest expressed from countries throughout the world. The Center now organizes lectures, seminars and training courses on dynamic self-governance and has overseen its implementation in numerous organizations.

In 1981 Gerard published his second book, *Sociocratie, de Organisatie van de Besluitvorming (Sociocracy, the Organization of Decision-making)*. This book was launched at a press conference

attended by Dr. W. Albeda, then Netherlands Minister of Social Affairs. The succeeding Minister of Social Affairs, Dr. J. de Koning, launched Gerard's *Sociocratisch Manifest (Sociocratic Declaration)* at a press conference in 1984. In 1991 Gerard was awarded a PhD for his work with dynamic self-governance (sociocracy). His thesis is published in *Sociocracy as Social Design*. Today, Gerard continues to direct the activities of the Sociocratisch Centrum from his seat on the Board and teaches in the business school of the University of Maastricht.

John Buck

John is a certified dynamic self-governance consultant. After receiving a BA in English from Brown University, John worked for the Boeing Corporation as a technical writer and then for the U.S. Federal Aviation Administration (FAA) in Washington, D.C., where he managed a large automation program for FAA aviation safety inspectors. Originally hired by the Government as a management intern specializing in personnel management, he also established a large, pioneering computer-based training system for FAA's air traffic controllers and electronics technicians, which earned him the Secretary of Department of Transportation's Award for Meritorious Achievement.

He earned a Masters Degree from The George Washington University in 1999 in Quantitative Sociology. His thesis examined several dynamically governed organizations in the Netherlands. It demonstrated statistically that the staff of those companies had a significantly higher commitment to their organizations than typical Dutch workers. His publications include numerous professional articles about aspects of personnel management and automation, including techniques for establishing upward mobility programs, new concepts for human resource program evaluation, and strategies for designing and implementing new technology systems.

John lives in Silver Spring, Maryland with his wife and one of their three children.

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