A Systems Approach to Leadership Theories

by

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This is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning.


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Executive Summary. This paper presents a perspective for gathering ideas about leadership. It organizes popular leadership principles around a systems approach framework, which consists of the classical input-process-output paradigm coupled with control and design elements.

A system approach is a productive means of presenting complex leadership theories, especially given the volume of home-grown literature on leadership. Several examples illustrate the usefulness of having a framework for collecting ideas on leadership. After a simple high level application to FranklinCovey’s The Four Roles of Leadership, the paper presents a more complex application to the Office of Personnel Management (OPM) tool known as the □ Key Leadership Competencies.□ Then, a real-world treatment is applied to an often overlooked historical figure. Subsequent examples focus on describing perhaps the most difficult aspect of leadership, that of identifying □ the vision thing□ and relating it to the organization.

A fundamental finding is that a successfully working system requires attention to design aspects as well as human behavioral aspects.
INTRODUCTION.

Background. The field of leadership theory includes a wide range of approaches varying from the systematic (Argyris, Ackoff) to the sophisticated. Too often, the leadership theories resort to simple listings of insights. Fortunately, the listings are based on experience but unfortunately reveal little internal coherency. This paper presents a perspective for gathering ideas about leadership using the systems approach, which is an outgrowth of the classical paradigm of “ways, means, and ends.”

Overview of the Systems Approach. Choosing from among the variants of systems approaches, I included the standard input-process-output components and also added components for control and—in an across-the-board fashion—design.

The Systems Cookie-Cutter

Design. Each of these systems components has an architecture that fits into a broader overall systems architecture. The design aspect is called “hierarchy” in the information systems approach called HIPO (Hierarchy-Input-Process-Output) described by Martin (1976). However, I prefer the term “design,” having discovered that the hierarchy aspect is often misinterpreted, especially among military audiences. The concept of design is important to Leadership Theory because of my argument that leadership includes not only the human element, but also must address design elements.
**Input.** By conceptually grouping resources of men, money, machines, and materials as inputs, the designer emphasizes the dependence of outputs on the quantity, quality, and interdependencies of resources. The identification of less tangible inputs such as information and motives is also critical. The human element is a pervasive input appearing throughout the design of the system. The business of motivating humans to participate as inputs often may appear as an output objective. Further, the ultimate output of a system usually is the result of human demands (which are not to be confused with the human inputs). While inputs are crucial, leadership can fail by collecting inputs without attention to outputs. That is, a leader will fail if he drives his car looking solely at its interior.

**Process.** While making a smooth flow of procedures is important to success, this systematic depiction of flow processes is often overlooked. Leaders may preach about the interoperability of parts, but then fail to identify exactly how organizations and networks interconnect with each other. For example, in the field of intelligence, progress is being made by focusing not only on the paradigms of photos and maps but also by new techniques of influence diagramming. The hierarchical nature of subsystems is another aspect of the process component. For example, information diagrammers depict subcomponents in terms of bubble-diagrams that explode a subcomponent into sub-subcomponents. These hierarchical layers speak to a system-of-systems approach (SOSA). As such, the outputs of any system are, in turn, inputs to higher-level systems. While maintaining the flow of work is a key function of managers, the design of processes often falls to leaders or external consultants who have a broader vision of the system.

**Output.** The purpose of a system is the ultimate reason for its existence. The determination of the quantity and quality of outputs determines all other features of the system. Often, the ends are multiple, leading to a complex systems design. The design of the output component is hierarchical, with the visionary ideal at the top and the actual, tangible outcomes lying beneath (Nadler, 1972). Outputs are improved by carefully articulating the vision and the supporting, organizing principles that direct the system towards the vision.

**Control.** In a world where the environment never changes, it would be a simple matter to build outputs from inputs without any adjustments to the system. By recognizing the variability of things, the designer of a more sophisticated system identifies the sources of variance and ways to compensate. The role of accounting is a minimal requirement for the control component. That is, it necessary to measure the current state and know how far it is from the target. Given this comparison, the control elements then change inputs and processes to re-align the system so that output targets are still attained. As the number of control elements increases with the sources of variance, a system becomes a complex adaptive system (CAS). Thus, it is intuitive that any system with humans is a CAS (Glen, 2003). As such, a familiarity with control principles is critical to high quality leadership (Senge, 1990; Kaplan, 2004).
APPLICATIONS.

Example One: FranklinCovey’s *The Four Roles of Leadership*.

The FranklinCovey people identify the importance of pathfinding, aligning, empowering, and modeling (FranklinCovey, 2003):

- Pathfinding: Creating the blueprint.
- Aligning: Creating a technically elegant system of work.
- Empowering: Releasing the talent, energy, and contribution of People.
- Modeling: Building trust with others—the heart of effective leadership.

Using the framework of the systems-approach, pathfinding obviously is part of the output component; aligning refers to the overall system design but focuses on the process component; empowering looks to the human inputs; and modeling speaks about human aspects. However, close inspection reveals that modeling’s aspects of trustworthiness and responsibility in fact compare goals with outcomes—giving modeling a strong flavor of the control component.

Example Two: Key Leadership Competencies of the Office of Personnel Management (OPM).

OPM has identified 18 key competencies that serve as criteria for developing government leaders. These are grouped by the Pacific Leadership Academy (PLA) into the three sessions of Leading People, Leading Organizations, and Leading for results. It is an interesting exercise to group these competencies according to both the systems approach used here and according to PLA’s practice—recognizing, of course, that each person may have interpretational differences. (See table.) Here, I distinguish between humans interacting as part of production (e.g., placing customer service and entrepreneurship in the output component), while the singularly human aspects such as interpersonal skills and conflict management are listed in the human, input component.

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Example Three: Gustavus Adolphus – an Historical Example.

The Swedish general Gustavus Adolphus (1594-1632) is presented here as an example of an ideal leader that deals not only with people-issues but also with overall systems design (Haythornthwaite, 1992). He not only led men to the ultimate sacrifice, but he also developed systems that lasted well after his own death. While setting an example to his men by demonstrating weapons, he also established standard sizes of cannon balls to ease logistics problems. While being a master strategist and tactician, he introduced a standard operational order format to ease communications and information problems. While engaged in the often unprincipled religious warfare of the Thirty Years War, he required church attendance of soldiers, prohibited rape and pillage, and tolerated other religions in his armies. He thereby gained a moral highground among occupied populations that helped the mobility of his campaigns. Thus, he showed concern for his inputs of men and machines; he radically altered processes; and he developed a systematic vision not only of warfare but of the sovereignty of nations. A result was the Treaty of Westphalia of 1648 concerning non-interference in the internal affairs (i.e., religions) of sovereign nations—which stills forms a basis for modern international relations.

Example Four: The Seven-Level Change Model.

Greg Zlevor’s Seven-Level Change Model starts with the leader defining the output component by (1) identifying the unsatisfied need—often as an urgency or a pain—and (2) creating a vision implying great profits to be made. Then, (3) he designs a general path (or process) and leads the way (back to output). Before going much further, he (4) develops coalitions so that a critical mass of supporting resources (or inputs) is available. The remaining four levels flush out the system, by (5) improving the system and structure (process), and enhancing controls by (6) communicating progress and (7) ensuring the sustainability of the effort.

Such a model can be successfully applied because it links together outputs and processes,—not because of the business acumen of it’s originator.
Example Five: A Digression on Vision.

Ideas are a fundamental output of the top-level leader. He carefully selects influential ideas and communicates them to outsiders and insiders alike. Leaders inculcate these ideas in their public affairs offices and repeat them among the staff. Some researchers have gone beyond Zlevor’s observations regarding urgency and pain. Thomas Sowell of the Hoover Institution examines a typology of ideas that are often used by leaders. Often leaders may exploit these ideas, concentrating fully on the ends and ignoring the means to get there. To validate the credibility of such a leader, one can apply a system approach to match the leader’s processes to his output objectives.

Ideological leaders find a resonance in the topics of justice, power, and freedom.

• By exhorting justice, a leader can complain about differences and seek equality for followers. A credible leader may complain about unfair processes, seeking higher standards. The unscrupulous leader may just seek to eliminate those causing the unfair conditions.

• By advocating power, an unprincipled leader may seek to consolidate power and subject other groups to his will through the means of force. A credible leader, on the other hand, assesses the degree of power needed for the mission and then collects power through coalition building and moral persuasion.

• By promoting freedom, leaders appeal to innate feelings of many people, especially those in open societies. The appeal is aimed directly at a basic human need and helps gloss over nuances of an issue.

Other motivating themes include the appeal to common values and interests. For example, almost every speech given by the president of my home organization, the Asia-Pacific Center for Security Studies, appeals to treating all people humanely. This resonates well among faculty and fellows, who come from countries across the region.

Part of the calculation of the ideological leader lies in amassing supporters and building coalitions. Two aspects of game theory are pertinent here: (1) determining whether the issues at stake are competitive, zero-sum or mutually profitable, plus-sum activities and (2) whether there are more than two sides or players, i.e., the n-player game. While some leaders may not like the existence of multiple players or multiple winners, it remains a great insight of the designers of the U.S. government that a system is more likely to survive if it has many participants of varying size along with an assortment of contested issues.
Example Six: Digressions on Hierarchy.

The tree-like aspect of design called hierarchy helps in the study of complex systems by sorting out similarities and differences. A common hierarchical picture is that of the individual→group→operation→organization, whose levels are often depicted in concentric circles. Building on this picture, Dr. Stephen C. Schoonover defines a leadership process as (1) defining the process, (2) clarifying and mobilizing, (3) applying practices, and (4) driving to outcomes. (Note that this model compares well with the psychological profiles of the visionary, the elaborator, the applicator, and the executor.) Schoonover’s picture below brings the two hierarchies together, helping to explain complex behavioral systems in an understandable, systematic fashion.

Schoonover’s Leadership System

The concept of achieving breakthrough is an overlooked aspect of hierarchies (Nadler, 1998). Often, significant strides in design can be achieved by looking at higher level, unconstrained purposes. By focusing on ideal situations, creative ideas may be generated that create a new working system. The unanticipated breakthrough may then achieve better targets with a new mix of resources (Nadler, 1970).
ASSESSMENT.

It is a fashion in government and political circles to claim that practices in the profit-making business sector can be applied to socially oriented government programs. The systems approach framework helps address this phenomena.

On the surface, for example, the outsourcing solution simply appears to substitute one set of inputs for another. Outsourcing is often sold by implying that the private sector performs processes more efficiently. However, savings are more likely in the area of inputs, where worker benefits are cut. Private sector costs are confused by attributing process costs (e.g., overhead costs) to input costs. The systems approach reveals areas for improvement regardless of whether the business is private or governmental.

The President’s Management Agenda focuses on results. Government organizations and personnel systems are converting from a functional to a results orientation. The emphasis shifts from the personal level to the organizational level (i.e., the design element), such that managerial leadership is less critical than achieving outcomes. The systems view presented here integrates leadership and processes by linking ideas to action and by capitalizing on the human element.

SUMMARY.

The foregoing discussion illustrates that human behavioral aspects appear throughout the design of a system. This paper has focused on two points.

(1) A systems approach is a productive means of presenting complex leadership theories, especially given the volume of home-grown literature on leadership. By using this intuitive framework, the student of leadership has a handy file-system for collecting and explaining ideas. The student is not trapped by memorizing the myriad of acronyms being flogged about, but he has an intelligent framework for identifying the value added by each theorist.

(2) A successfully-working leadership system requires attention to design aspects as well as human behavioral aspects. By observing the design of the overall system and its elements, the student of leadership learns whether leadership is both credible and productive.

The true leader will not only have profound insights into the craftsmanship of using tools to accomplish his masterpiece, but also he will lay out the picture in such a way that the outside world recognizes the painting’s merits.
While attending the three weekly programs of the Pacific Leadership Academy I occasionally took notes that re-analyzed the presentations in terms of this systems approach. I only wish I had been more diligent! I would then have described the proverbial elephant in a little better detail. Three years ago I used the approach to write a paper about Gustavus Adolphus leadership, and so I’ve found that the framework helps to integrate my learning experiences.

Of course, this approach can be rather dry and uninspiring sometimes, so I discovered that the dynamism of PLA’s instructors and their use of hands-on experiences also contributed to learning. Rather than thinking that the material is dry, it may only be the fault of the presenter! For example, in the old PBS series Connections, James Burke does an inspiring job about showing the connectivity and influences among seemingly unrelated events.

The newer parts of the bibliography represent areas for future study for me. While constructing the bibliography, I was encouraged by the fact that the intellectual genealogy of many leadership theorists derives from systems approachers. For example, MIT’s guru on organizational learning, Peter Senge, was a student of MIT’s systems dynamics creator, Jay Forrester. Robert Kaplan, co-creator of activity-based costing and the balanced scorecard, was trained as an MIT electrical engineer and in Cornell’s operations research department.

I applied PLA understandings to several projects at work. In the first project I organized the attendance of seven American presenters at an operations research symposium in Japan. Now that I am no longer working in that office, it is easier to say that it is difficult to write about leadership when one’s immediate supervisor is a counter-example to the humanist side of modern leadership theory. On the other hand, my subsequent applications at my new office were encouraging. I learned that my freedom of movement was limited more by my own internal attitudes than by external constraints.

My ultimate finding from the PLA experience was that people have different, but identifiable, motives and skills. A good leader should be a multi-faceted person who ensures that people and things mesh together productively.
BIBLIOGRAPHY


MENTOR’S COMMENTS  Dr. Leif Rosenberger, PACOM Economic Advisor

Nice piece. Some excellent research you didn't cite is the work by Ron Haifetz at Harvard. See his blurb. http://ksgfaculty.harvard.edu/ronald_heifetz  I think Haifetz is the best scholar I know on leadership. Ron stands most leadership stuff on its head. For instance, the US military like to think of leadership as a dynamic leader riding in on his white horse and whipping his unit into shape. This is top down leadership that seldom lasts beyond pep talks and short term indicators of "success." Too often followers simply tell the leader what he wants to hear. Haifetz says if you really want change in an organization, that change cannot be top down. It must be a grass roots phenomenon and bottom up. Most military folks hate to hear this. Most military guys like to brag about how they inherited this terrible unit and whipped it into shape by getting ass. Haifetz talks about leadership with authority versus leadership without authority. Haifetz argues that most military folks are used to leadership with authority. But Haifetz argues that real change involves changing the culture and leadership without authority. That means organizing and building capacity at the grass roots level. That takes time. But when this is done properly, the folks below develop ownership and the changes are structural, fundamental and will outlast the superficial and temporary changes ... coming from guy on the white horse.

Hope this helps. Maybe you can utilize this capacity building at the grass roots level in your model. At a minimum, I recommend Pacific Leadership folks use Ron's research.

SUPERVISOR’S COMMENTS

IAP CONSULTANT’S COMMENTS  Linda A. Newton COMPACFLT N6, DCOS C4I

Grade: PASS

Very well developed paper of diverse studies of leadership theories to the systems approach. Good mapping of the core leadership competencies into matrixed models. Paper allows the reader to quickly grasp the summary of different leadership theories and put into context of understanding how different leadership competencies can be applied. In depth discussion of many leadership theories and how it is applied at current location. Good realization of how different leadership styles exists and are/are not effective. Needs more personal observation of own leadership lessons learned, and how to continue to develop and apply one's own leadership skills.

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