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## THE LEARNING ORGANIZATION PORTFOLIO

### Hierarchy as a Learning Platform

Dr. Alex Bennet

*Mountain Quest Institute, Frost, West Virginia, USA*

[www.mountainquestinstitute.com](http://www.mountainquestinstitute.com)

#### Abstract

**Purpose**—The purpose of this article is to build a new frame of reference for exploring the value of hierarchy as a learning platform as organizations move away from bureaucracies and toward complex adaptive behavior.

**Design/methodology/approach**—Observations of the behaviors of horses and the hierarchal structure within which they function are introduced to explore the value of hierarchy as a learning platform. The concepts of bureaucracy and hierarchy are juxtaposed based on a literature review. Moving to individual learning, functioning space is introduced and then extrapolated across to organizations. Finally, these interwoven ideas are used to pose questions.

**Findings**— The author posits that recognition of the distinction between hierarchy and bureaucracy places us in a framework to reap the benefits of hierarchy in our thinking, talking and acting as our organizations move toward complex adaptive behavior.

**Originality/value**—This paper discusses important distinctions between hierarchy and bureaucracy in support of a learning framework. It also introduces the relationship of thinking, talking and acting to our functioning space.

**Keywords** Bureaucracy, complex adaptive behavior, functioning space, hierarchy, leaders, organizational learning, synchronicity, systems and subsystems, values and beliefs

**Paper type** Observation and literature review

#### Horses and hierarchy

Horses have a strong hierarchal social structure, one that simultaneously provides the feeling of safety while honing their periphery awareness in terms of ensuring they acquiesce to any horse higher in the pecking order. To “acquiesce” might be reactive (such as moving out of the way), or proactive (such as staying in the background or taking a later turn at the salt lick). Generally, once established they seem to be comfortable with their placement and the repetitive behaviors that come along with that placement, with the subsequent consequence of few “reactive” events and ever-increasing “proactive” behavior.

This keen awareness of “each” and “other” goes beyond the comfort of hierarchy. The other day as I watched four of our Arabians stream down our mountain pasture (different ages, different sizes, different places in the hierarchy of the herd), they matched each

other's gaits, gliding in perfect harmony through the grass, simultaneously stopping in an even line perpendicular to where I stood, turning 90 degrees to the right in unison, and arching their necks back to the right. As I stood in amazement (my first-born for a camera!) the only thing I could discover that had caught their attention was a soft breeze coming from the direction of their attention. Nostrils flaring and manes blowing, they held this pose for an unbelievable ten seconds before each moved in their own direction.

### **Enter the bureaucracy**

Hierarchy and bureaucracy are not exchangeable words or concepts. A hierarchy is "an order of some complexity, in which the elements are distributed along the gradient of importance." (Kunz, 1968, p. 162) In a hierarchy the dominant structural element may be a central point such as in a circular structure or have an axial symmetry. Wherever the central point (dominant structure) is located in the hierarchy (middle, top, bottom, etc.), each part is determined by where it is located in relation to the central point. From one perspective, the central point or dominant structure might well be the overarching system itself. For example, in the human body, while working independently to some extent, systems and subsystems all contribute to levels of functioning (and hopefully wellness) of the body. While it is true that in a radical version of hierarchy the entire pattern may depend directly on one center, most hierarchies consist of groups of subordinate hierarchies who in turn have groups of subordinate hierarchies, with each group having its own particular relation to the dominant center point. (Kuntz, 1968) The key points here are (1) there is a central theme to the system with a dominant center point, and (2) the function of any one part can only be understood in its relation to the whole. While dependency (and potentially interdependency) are elements of hierarchies, the relationship of subordinate hierarchies to higher level groups need not be one of control. They are subordinate in terms of location, in terms of focus. For example, in the human body there are subsystems which process matter-energy (such as the mouth, lungs, heart, stomach and liver); subsystems which process information (such as the eyes, postsynaptic regions of neurons, network of neurons interconnecting centers of the central nervous system, temporal auditory cortex, and larynx); and subsystems which process both matter-energy and information (such as the genitalia and skin). (Miller, 1978)

The bureaucratic framework developed by Max Weber (1864-1920) called for a hierarchical structure, clear division of labor, rule and process orientation, impersonal administration, rewards based on merit, decisions and rules in writing, and management separated from ownership (Cummings and Huse, 1989). Conflict is a recurring theme throughout this model, postulating that forces exist within organizations that perpetuate conflict and class separation. Weber dealt primarily with the conflict between capitalist and worker, the owner of the means of production versus the producer of labor, differentiating these "classes." He also believed that the ever-increasing importance of expert and specialized knowledge created a conflict between the "specialist type of man" and the older type of "cultivated man" [management]. Weber states, "This fight intrudes into all intimate cultural questions," then continues, "During its advance, bureaucratic organization has had to overcome those essentially negative obstacles that have stood in the way of the leveling process necessary for bureaucracy" (Gerth and Mills, 1946, p. 243).

Yet the bureaucratic model was built on management power over workers in what Weber called imperative control, with legitimacy as the common ground for maintaining imperative control. “Although domination or authority may be based,” Weber says, “on custom, interest, effectual or ‘value-rational’ motives, a secure order is usually characterized by a belief in its legitimacy” (Outhwaite and Bottomore, 1993, p. 328). Although Weber did not see knowledge as a form of legitimacy, he did link knowledge with power. He believed that “Every bureaucracy seeks to increase the superiority of the professionally informed by keeping their knowledge and intentions secret” (Gerth and Mills, 1946, p. 233). Weber felt that since the pure interest of the bureaucracy is power, secrecy would increase with the increase of bureaucracy. This legacy is still at play in many of today’s organizations. (Bennet and Bennet, 2003; Bennet and Bennet, 2001)

In light of the discussion above, two overarching observations become:

- Hierarchies are structural; bureaucracies are operational.
- Bureaucracies are always hierarchical; hierarchies are not always bureaucratic.

### **Hierarchies as platforms for learning**

Both bureaucratic and non-bureaucratic hierarchies can serve as learning platforms. The origin of hierarchies lies in their ability to withstand or survive shock. This comes about when a given part of an organization is shocked, if it is hierarchical it only damages the local level of hierarchy and allows the organization to rebuild itself because of that hierarchy. Perhaps the best-known example was forwarded by Herbert Simon in his parable of the two watchmakers, Hora and Tempus. They both manufactured very fine watches, were highly regarded, and had phone orders throughout the day. However, Hora prospered while Tempus became poorer and poorer (finally losing his shop). The watches both made had the same level of complexity, about 1,000 parts each. The difference was in their approach to creating the watches. Tempus constructed his watches such that his work fell to pieces every time he had to answer the phone. Hora designed his watches so that he could put together subassemblies of about ten elements each, so that when he had to put down a partly assembled watch to answer the phone he lost only a small part of his effort. (Simon, 1969) The implication for biological forms, and organizations as living systems, is that “the time required for the evolution of a complex form from simple elements depends critically on the numbers and distribution of potential intermediate stable forms.’ This is a hierarchy of potential stable “subassemblies,” what Simon says is “nothing more than survival of the fittest—that is, of the stable.” (Simon, 1969, p. 93)

Since hierarchies create quasi-independent systems and sub-systems, then one would expect each of these systems or sub-systems to perhaps have its own mode of learning that operates semi-independently of other sub-systems. Because of the hierarchy, of course, lower level sub-systems must support and respond to higher level systems. The *nature of this support and response* determines whether the hierarchy is bureaucratic or non-bureaucratic—such as complex adaptive. Complex adaptive systems are partially ordered systems that unfold and evolve through time. (Bennet and Bennet, 2004) They are constructed in a hierarchy of levels, or in a boxes-within-boxes form. The idea

underlying this concept is that some components in a complex system will perform specific sub-functions that contribute to the overall function of the system, which become semi-independent subcomponents of the system. (Simon, 1969) In a complex adaptive system, components at every level are mostly self-organizing, learning, and adaptive with semi-autonomous agents. To survive they are always creating new ideas, scanning the environment, trying new approaches, observing the results, and changing the way they operate. (Bennet and Bennet, 2004) Examples of complex adaptive systems would be culture, ecologies and some organizations.

If you have a bureaucratic hierarchy, it will encourage individuals to limit their learning within the space of their clear, well-defined job responsibilities. On the other hand, if you have a complex adaptive hierarchy, one in which employees become involved in a variety of tasks related to a common objective, the natural tendency may bend toward learning over a broader range of interests and competencies. This difference significantly aids the complex adaptive organization by providing a wider diversity of competency, and a more flexible workforce, ergo the capacity to adapt to changing requirements.

Moving for a moment to the individual as learner, imagine yourself as a worker/learner in the two different organizational settings described above, bureaucratic and complex adaptive. What we believe in and how we view the world is always reflected in what we think about, what we talk about, and what we do, i.e., we express what we believe to be important, our *values* and *beliefs*. (In this context “talking” represents our voice, expressions in spoken or written words or something likened to speech as conveying impressions to the mind.) Simultaneously, what we think and talk about and act upon drives our perceptions of the things around us *within our threshold*, a functioning space within which knowledge and events make sense to us. At any given moment in time, each individual and each organization functions from a very definable band or region of thinking, talking and acting. If a proposed new idea (or strategy or initiative) is outside our functioning space—beyond our comprehension space which reaches out slightly beyond our functioning space—it is not understood and has no perceived value. Conversely, a proposed new idea (or strategy or initiative) may be so far within our functioning space that it is dismissed as unimportant or obvious. (See Figure 1.)

Our level of knowledge and the frame of reference from which that knowledge is driven define this space. In a bureaucratic organization where knowledge is controlled and limited, the functioning space (and therefore the comprehension space) will be small. Conversely, in a complex adaptive organization where knowledge flows freely and learning is encouraged the functioning space will continuously expand and contract in a process of rebalancing. This rebalancing results from pushing the edges of the functioning space threshold, which in turn expands the comprehension space. These processes produce discomfort as we seek to bring our environment and our values and beliefs back into balance. As we are able to integrate new experiences and knowledge into our thinking, talking and doing, our understanding increases and, by definition, our functioning space expands.

Now extrapolate this process across to a hierarchical organization free of bureaucratic restraints. Given alignment, as subgroups focus, learn and rebalance, not only do they expand their capacity to interact with their environment, but they increase their capability to support the central theme (dominant structure) of the organizational hierarchy. As the threshold rises and the functioning space expands, the organization is able to comprehend and perceive value in areas that previously appeared periphery and unimportant.

### **Where does this lead us?**

As another extrapolation, let's use this model to understand the behavior of the horses described in my introductory analogy. There's no question some form of patterned learning was occurring as their behavior moved from a reactive to proactive mode. Since horses are social animals (like people), maybe there was a common goal (running), and a common direction (in terms of running together). But what caused the fluid unity of movement? What level of alignment was at play to achieve matched gates, cohesive turns, and focused attention? Certainly there had to be a heightened awareness of the others. While mimicry is considered a common way of learning, who was central? Who was leading? Who was providing the cues? I wonder if we couldn't ask those same questions about our organizations.

One element that appears to come into play is the power of synchronization. What is the source behind this common effect? Most likely there is a biological basis. For example, when people live together for long periods of time they adapt each others habits and rhythms, minimizing differences and friction, lowering anxiety, and perhaps losing some advantage of independence. Is it the basic desire of people to collaborate and achieve something greater than they could individually? Perhaps this phenomenon is derived from the need for socialization for survival and growth, or perhaps it could be some form of minimizing energy. It is often much easier to work with someone than to work independently. Synchronization may provide feelings of safety—there is safety in numbers—and major decisions then lie with the group rather than the individual. But perhaps it's psychological. When we work in groups we often get faster results, usually at a higher quality, and with the added benefit of feelings of connectedness and belonging. Simon contends that it is the organization of components—and not their physical properties—that largely determines behavior. (Simon, 1969) In our analogy, this would appear to mean that the hierarchical structure within which the horses operate largely determines the synchronicity evident in their actions. Questions that emerge would be: When the horse at the top of the hierarchy starts running, does the rest of the herd match his pace? Or, alternatively, when any horse starts running does the herd match that horse's pace? For the herd under observation, the answer is yes to both questions. And while each horse in the herd—including the youngsters—periodically start and lead the process, the hierarchy stays intact. The analogy here parallels what we are discovering in organizations. Leaders do not just reside at the central point of the hierarchy; they emerge throughout the organization and are often situation and context dependent in the flow and ebb of decision-making.

Our history of organizations demonstrates that hierarchal structures have led to control and abuse of power. (Nystrom and Starbuck, 1984; Osborne and Gaebler, 1993;

Pinkerton, 1995) Herein lays the rub. The terms hierarchy and bureaucracy are often used interchangeably, and the hierarchal structure of organizations has been used to support bureaucracy. The recognition of the distinction between hierarchy and bureaucracy places us in a framework to reap the benefits of hierarchy in our thinking, talking and acting as our organizations move toward complex adaptive behavior.

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