

# Hegelian Learning Organization

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## Abstract

This paper complements the work of Courtney et al. in viewing learning organizations as inquiring systems. Hegelian inquiring systems are based on the dialectic. Dialectic can not exist without dialogue. The guarantor of this system is conflict. Hegelian inquiring systems would facilitate multiple and contradictory interpretations of reality. Hegelian synthesis of two opposing models-thesis and antithesis-is the epitome of open systems and double-loop learning. Knowledge gained from the Hegelian inquiring systems may result in an entirely new strategic direction to organizations.

This paper reviews some guidelines and principles of Hegelian learning organizations and IT support of it. Also it proposes the immediate deployment of Hegelian learning organizations in the wicked business environments and finally suggests the development of new, flexible information technologies and systems for Hegelian organizations.

## Introduction

In order for organization to maintain a competitive edge, they must be capable of continuous learning. The ability to learn faster than your competitors may be the only sustainable competitive advantage. The concept of learning organization is increasingly becoming popular among many researchers and practitioners. Its concept is increasingly relevant given the increasing uncertainty and complexity of the organizational environment.

This paper complements the work of Courtney et al. in viewing learning organizations as inquiring systems. Churchman introduced the concept of design of inquiring system through interpreting the viewpoints of the philosophers Leibniz, Locke, Kant, Hegel and Singer in the history of Western epistemology as starting points. Mason and Mitroff had suggested for designing information systems based on Churchman's models of inquiry. Courtney et al. followed their works and provided a new perspective on learning organizations by viewing them as inquiring systems whose actions create knowledge. Based on their previous work, they

proposed guiding principles and design guidelines for learning organizations through Lockean inquiring systems and presented the uses of information technology to support those principles and guidelines.

The following passages present overviews of organizational learning, inquiring systems, Hegelian inquiring systems, principles and guidelines of Hegelian organizations, and the role of information technology in supporting those principles and guidelines.

## Organizational learning

There are a variety of perspectives about organizational learning. But, even though they differ on other important matters, most scholars view organizational learning as a process that unfolds over time and link it with knowledge acquisition and improved performance. Organizational learning is the development of new knowledge or insights that have the potential to influence behavior. All organizations in dynamic and turbulent environments must pursue the processes of learning, behavior change, and performance improvement. The greater uncertainty, the greater the need for learning.

Organizations learn through individuals acting as agents for them. As Aristotle's synergy is more than the sum of parts, organizational learning is more than the sum of individual learning. An organization does not lose out on its learning abilities when members leave the organization. Organizational learning occurs through the shared insights, knowledge, and mental models. It builds on past knowledge and experience. The process of organizational learning is influenced by a very broad set of social, political, and structural variables. Organizational learning is the "wicked" process of improving actions through better knowledge and understanding.

## Inquiring systems

Based on Churchman's work, Mitroff (1993) gave us a clear view of what inquiring systems are. An inquiry system is a system of interrelated

components for producing knowledge on a problem or issue of importance. Basically, every inquiring system consists of four components.

First, Every IS has or accepts distinctive inputs from the outside world. For an IS inputs are the basic entities and starting points for knowledge. The inputs that a particular IS recognizes as legitimate are not necessarily recognizable by other IS's. The basic entities are raw facts, observations, or the various judgements of experts. Second, Each IS employs different kinds of operators. The operator is the mechanism that works on the basic inputs to transform them into the final output of the system, or knowledge. Third, the output of an IS is a valid knowledge for action on an issue of importance. Fourth, the most important component in an IS is the guarantor. The guarantor guarantees the operation of the entire IS itself. Therefore, the guarantor argues why one should start with a particular kind of input, why use a particular operator, and why a particular out is regarded as knowledge. The guarantor is the most critical aspect of an IS because it literally influences everything it does.

#### Hegelian inquiring systems

Hegelian inquiring systems are based on the dialectic. Dialectic is strictly a participative process meant to dissolve conflicts rather than to find a compromise. X, Y, and Z represent three purposeful individuals or groups; X and Y represent opposite sides-thesis and antithesis-of the issue, and Z is the third person or group. X and Y's view is characterized as *Weltanschauungen*. The purpose of the debate is for X and Y to inform Z of their views and thus to allow Z to form its own view-synthesis on the issue. Churchman asserts that in Hegel, the antithesis is not the contradiction of the thesis, but rather its "deadliest enemy" whose concept can be found clearly in politics. Synthesis is the development of the opposites. Churchman describes it as a "bigger mind."

Both X and Y argue their views with the same data set. The data only takes on meaning through the model; by itself, the data are meaningless. That means the data become transformed into facts (conclusions) through operation. The purpose of data is not to settle issues, but rather to surface the intense differences in background assumptions between two or more divergent positions. The result of the debate is to allow Z to form a synthetic view of the issue. The debate is not over facts but over the *Weltanschauungen*. *Weltanschauungen* constitute the basis of a world-view, an image of reality, a belief-system, or a theory from which the facts can be derived or inferred.

The inputs into a dialectic are complex. These

inputs consist of the common data set plus the opposing assumptions (models) that characterize the deep positions of the two proponents. The decision-maker or observer of the debate is the operator in the system. He or she must adopt one of the two pure positions (sets of assumptions) or form a new position through synthesis or some other process as a result to witnessing the debate.

The guarantor of this system is conflict. In fact, conflict is a fact of life. It is hoped that as a result of witnessing an intense, explicit debate between two polar positions that the observer will be in a much stronger position to know the assumptions of the two adversaries and as a result clarify his or her own assumptions. It is also hoped that the observer or decision-maker will be in a stronger position to form his or her own position on a key issue.

#### Hegelian organizations

Systems thinking tells "structure influences behavior." Structure operates as a powerful directive force on an organization's life and members. The adoption of certain structures encourages learning. In the Hegelian organizations structure is so critical to guarantee multiple and antithetical views or interpretations and to debate them in organizations. The structure of Hegelian organizations must be streamlined, flat hierarchy, seamless, holistic and boundaryless. Hegelian organizations must adopt a more flexible and organic structure. This requires new roles of leaders (or management) as designers, teachers, and stewards. Hegelian organizations can not exist without such a structure, which can support learning connected to the purpose of the dialectic debate.

Bureaucracies, inflexibility, and rigid boundaries are the "deadliest enemies" of Hegelian organizations. They discourage continuous changes and multiple interpretations in organizations. Boundaries inhibit the flow of knowledge. A centralized, mechanistic structure tends to reinforce past behaviors or single-loop learning. Centralization creates a more fragmented structure which does not support people to think for themselves. Thus, individuals do not have a comprehensive picture of the whole. Therefore, organizations must move away from mechanistic structures and adopt a more flexible and organic structure.

Without dialectic Hegelian organizations fail. Hegelian inquiry is based on dialectic. All dialectic is group decision making. But not all group decision making is dialectic. Dialectic refers to the developmental transformation of systems over time, via constitutive and interactive relationships. Thus, whereas formal thinking is systematic, dialectical

thinking is metasytematic. Dialectic applies when the use of hard irrefutable data does not exist, for example, strategic management.

Dialectic cannot exist without dialogue. Dialogue is different from discussion. Discussion is used to put forth positions and opinions and try to convince others of logic and rightness of our ideas. A crucial element of dialogue, however, is the deliberate inclusion of critical reflection and inquiry into assumptions. Senge points out that the purpose of discussion is to produce decisions and is a converging process, while dialogue is a way to explore the many facets of complex issues and is a diverging process. Dialogue inquiry does not seek the correct answer. Dialogue is a core process of Hegelian organizations. The discipline of team learning, suggested by Senge as one of the disciplines for learning organization also, starts with dialogue, the capacity of members of a team to suspend assumptions and enter into a genuine "thinking together."

Courtney, et al. views Hegelian synthesis of two opposing models as the epitome of an open system and generative learning. Constant change is the essence of all open systems. Closed systems cannot survive in dynamically changing world, because they cannot achieve ubiquity, have high costs, and are inflexible. In order for organizations to survive in the new world of business, organizations must change constantly in response to the new business environments. The need of constantly changing is growing in this era of turbulent economy and accelerated technological change. Hegelian organizations actively respond to the external environments and collaborate with other organizations to take advantage of the core competencies of other organizations.

Senge asserts that organizations need double-loop learning (generative learning) which requires new ways of looking at the world. It emphasizes continuous experimentation and feedback in an ongoing examination of the way of organizations. Underlying assumptions and governing variables cannot be effectively questioned without another set against which to measure them. In other words, generative learning always requires an opposition of ideas for comparison.

In addition, Hegelian synthesis-a new whole-underlies the notion of unlearning. Unlearning is a process through which learners discard obsolete and misleading knowledge. Unlearning is functional, and perhaps intentional. One of the possible effects of unlearning is that unlearning opens the way for new learning to take place.

Hegelian organizations must support their members to provide their views of certain information and accept different simultaneous views of reality. They de-emphasize the adherence of the

company view of "how things are done" and "best practices" so that such ways and practices are continuously assessed from multiple perspectives for their alignment with the dynamic environment. Consequently, it offers more intellectual solutions to the organization.

By seeing explicitly two or more positions operating on the same data set, people have the opportunity to witness systematically the background assumptions that the proponents of different positions bring with them to convert data to information.

More learning occurs when more and more varied interpretations are developed, because such development changes the range of the organization's potential behaviors, and this is congruent with the definition of learning.

Hegelian organizations encourage greater involvement of human imagination and creativity to facilitate multiple, contradictory interpretations of the focal information. Churchman points out that knowledge resides in the user and not in the collection of information. The importance of human beings in Hegelian organization must be emphasized. The ability of a Hegelian organization is not measured what it knows (that is the product of learning), but rather by how it learns – the process of learning. Thus, management practices encourage, recognize, and reward openness, systemic thinking, creativity, a sense of efficacy, and empathy.

### **IT Support**

Hegelian inquiry in organizations has little structure or formal mechanisms to guide it and Hodges' Dialectron prototype system to manage the dialogue necessary to generate synthesis and software for negotiation can be examples of IT support for Hegelian inquiry. Dialectron is a "Dialectic Engine" or multiple purpose software module to facilitate the execution of different types of dialectic.

Emerging technologies such as multimedia communications, computer-aided learning, information dissemination and training would help to flatten the structure of organizations and promote dissemination of information to all members.

Turoff points out that a high rich medium of communication would be more critical to the successful performance of group tasks involving conflictual approach. That is, Hegelian inquiry requires a high rich medium of communication. Because of its high equivocality, it needs face-to-face meeting. Face-to-face meeting can be simulated these days with multimedia conference systems which enable members of an organizational unit or project to collaborate across time and distance barriers sitting in the comfort of their offices. Such

systems enable transmission of live video, joint-authoring of documents, and online discussions. Such systems enable inquirers with different views or interpretations to debate and to generate synthesis. In addition, with the advent of conferencing systems, members can openly discuss controversial issues or ideas and it increases objectivity and produces more "stories". This atmosphere helps organizations experience double-loop learning.

It seems appear that "computational dialectics", a new sub-field of computer science in AI field whose subject matter is computational models of norms of rational discourse can serve to support Hegelian inquiring systems. For example, Zeno designed to be used in mediation systems, an advanced kind of electronic discussion forum with special support for argumentation, negotiation and other structured forms of group decision-making, is a mediating system for supporting discussion, argumentation and decision-making in groups. The ZENO system offers assistance to mediators and other trusted third parties by providing an issue-based discussion forum or conferencing system

Visual tools are extremely useful in helping see the processes and interactions within complex systems like Hegelian learning organization. For example, concept maps can make people's thinking visible and they are very effective in working with groups to discover all the elements of concern. There are a variety of computer tools that have been developed for concept mapping and illustration feedback loops. For example, *STELLA* is a software program developed specifically for modeling the feedback loops in systems thinking. *Inspiration* is useful for showing and hiding multiple levels of information.

However, many researchers agree that many information technologies are designed for single-loop learning and using information technology for organizational learning has the problem from its rigid structures. Mason and Mitroff note that relatively little attention had been given to MIS for strategic planning problems and their associated organizational structure. Most extant information systems focus on the convergence of interpretation and not geared for multiple interpretations. According to Malhotra, Mason and Mitroff had noted that the Lockean and Leibitzian characteristic of the dominant MIS model as its limiting characteristics. These designs are based on convergence of information. In contrast, Hegelian inquiry systems are needed for facilitating multiple interpretations.

Thus, the new paradigm of information systems is needed for facilitating multiple interpretations. It is needed to implement new, flexible information technologies and systems that enable to deal with the more complex and ill-

structured problems and support the multiple interpretations of reality. For example, well-designed information systems such as DSS might be able to facilitate double loop learning and support Hegelian learning organization.

## Conclusions

The concept of designing of inquiring system seems to provide a philosophical basis for the future roles of information technology. Many studies have suggested that organizations must be capable of learning continuously to have a competitive edge and information technology helps them to achieve their goals.

Hegelian inquiring systems are based on dialectic seeking synthesis from conflicts and are considered to be best suited for the most wicked environments which require multiple and contradictory interpretations of the reality. It is promised that greater learning occurs when more and more varied interpretations are developed. Therefore, there exists the need of an imperative adaptation of Hegelian inquiring systems in organizations. Hegelian synthesis of two opposing models is the epitome of open systems and double-loop learning. Hegelian organizations allow multiple and contradictory interpretations of the focal information. In today's organizational environments many problems are shown to require Hegelian, conflictual approach to be resolved. Strategic planning has been an example of Hegelian inquiry in organizations.

Based on the increasing importance of Hegelian inquiring systems in organizations, information technology can be applied to facilitate multiple and contradictory interpretations of the focal information. However, because of its little structure or formal mechanism and the reinforcement of the rigid structures of information technology, still the implementation of information technology for Churchman's model of Hegelian inquiry is not fully developed. Therefore, future study is needed to explore this world.

## References

Available upon request from the author