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Implementation Of Interactive Planning

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Submitted to the Program of Organizational Dynamics in the Graduate Division of the School of Arts and Sciences in Partial Fulfillment of the Requirements for the Degree of Master of Science in Organizational Dynamics at the University of Pennsylvania
Advisor: John Pourdehnad

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Implementation Of Interactive Planning

Abstract

This capstone describes how Interactive Planning, a methodology of Systems Thinking, was implemented to address complex organizational problems. The paper focuses on how a group of scholars from the graduate program of Organizational Dynamics in the School of Arts and Sciences at the University of Pennsylvania addressed the systemic problems of the International House of Philadelphia through the process of Situational Analysis, an activity of Idealization, which is part of Interactive Planning. Specifically, this capstone describes how the scholars analyzed the systemic environment of the International House of Philadelphia through eleven activities in order to address its challenges and synthesize a compelling argument for organizational change.

Comments

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Advisor: John Pourdehnad

IMPLEMENTATION OF INTERACTIVE PLANNING

by

Pericles Stavros Giannaris

Submitted to the Program of Organizational Dynamics
in the Graduate Division of the School of Arts and Sciences
in Partial Fulfillment of the Requirements for the Degree of
Master of Science in Organizational Dynamics at the
University of Pennsylvania

Philadelphia, Pennsylvania

2011

IMPLEMENTATION OF INTERCTIVE PLANNING

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ABSTRACT

This capstone describes how Interactive Planning, a methodology of Systems Thinking, was implemented to address complex organizational problems. The paper focuses on how a group of scholars from the graduate program of Organizational Dynamics in the School of Arts and Sciences at the University of Pennsylvania addressed the systemic problems of the International House of Philadelphia through the process of Situational Analysis, an activity of Idealization, which is part of Interactive Planning. Specifically, this capstone describes how the scholars analyzed the systemic environment of the International House of Philadelphia through eleven activities in order to address its challenges and synthesize a compelling argument for organizational change.

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CHAPTER 1

INTRODUCTION

Background in Systems Thinking

For as long as I can remember, I have always functioned in a manner that can be described as diagnostic. In elementary school I would first identify critical aspects of my assignments. Next, I would dismantle those critical aspects into smaller components so that I could understand their significances. And then finally, after gaining some insight, I would complete my assignments—compartmentally. The same diagnostic qualities existed in my adult and professional life. Reflecting on my childhood and adult experiences revealed that the more analytical I became, regarding a single subject, the more knowledgeable I became about that subject. Mastering the aspect of work I was tasked with also meant that I was unable to connect the component that I had mastered to its larger system. At work I would enter into silos, frequently distancing myself from other organizational projects, staff departments, and events, as a result of focusing on a specific issue. As a graduate student, the same diagnostic propensities extended into my studies. An over-emphasis on one course or exercise, for example, would consume time and energy at the expense of other school obligations.

Analysis has endowed me with the capacity to reach deep into a particular area of focus while my ability to synthesize remained dormant. However, in the spring of 2010, I was introduced to the concepts, values, and methodologies of synthetic thinking, which regards social systems as integrated wholes. Ackoff

(2003) writes that synthetic thinking is an approach to know and understand a system. It approaches systems through a three steps process: (1) identify the larger system that contains smaller systems, (2) explain the behavior of the containing system, and (3) deconstruct the containing system into the capacities/responsibilities of the system to be explained. Jackson (2003) writes that according to Kant, synthetic thinking has concepts that justify the kind of knowledge humans have of the totality of the world. Consequently, synthetic thinking is the foundation of Systems Thinking: a holistic view of systemic environments.

Purpose of Capstone

The purpose of this capstone is to describe how Systems Thinking has helped an organization to prevail over its inactivity and address its systemic challenges. The paper follows the proceedings of the Organizational Dynamics project-based course: DYNM 645 Applications of Systems Thinking and Design Methodologies. The project course was part of a contracted educational partnership between the graduate program of Organizational Dynamics in the School of Arts and Sciences at the University of Pennsylvania and the International House of Philadelphia. It was a laboratory that helped the students directly learn about Systems Thinking and organizational consulting. Through the course the participants engaged in social organizational system diagnosis, planning, designing and implementation

(www.organizationaldynamics.upenn.edu/dynm64504611a). Faculty and students collaborated with the International House of Philadelphia to address its

complex organizational problems and design its ideal organizational future. The participants in the course addressed the organization's issues through the phases: Systems Analysis, Obstruction Analysis, Reference Projection, and Reference Scenario of the process of Situational Analysis part of Idealization of the Interactive Planning methodology. The scholars researched how events in the organization's environment obviated its development and the paper describes how the scholars succeeded in addressing International House of Philadelphia challenges. Van de Ven and Huber (1990) eloquently define the value of studying how a process unfolds to reach a conclusion:

The "How" question is concerned with describing and explaining the temporal sequence of events that unfold as an organizational change occurs. Process studies are fundamental to gaining an appreciation of dynamic organizational life, and to developing and testing theories of organizational adaptation, change, innovation, and redesign. (p.213)

Systems Thinking Approach to Organizational Development

Systems Thinking is a cognitive pattern that combines synthesis and analysis to address problems of social systems holistically and increase the effectiveness of organizations. Ackoff (1981) argues that systemic thinking explains the behavior of the parts of a containing whole "in terms of its roles or functions within its containing whole" (p.16). Systems Thinking is a holistic process instead of reductionist and it encourages creativity among individuals who are willing to address and tackle organizational problems.

Scholars in social sciences have identified six types of systems: physical, biological, designed, abstract, social, and human activity. They studied them through reductionism, which focuses on understanding the parts of the system in order to understand the whole, and through holism (Jackson, 2003). Von

Bertalanffy (1968) wrote General System Theory, which studied several systems independently then shared how insights of each were allocated to others. He then introduced the concept of open systems that advocated that organisms, elements of systems, have to interact with their environment in order to be sustainable. In contrast, closed systems are organisms, parts of systems, which do not interface with their environment. Social Systems are open systems.

According to Jackson (2003), Systems Thinking is classified as hard and soft. Hard Systems Thinking tries to improve a doubtful and vexed situation by organizing and implementing numerous systems ideas and techniques. Hard systems thinkers address complex problems through continuous application of mathematical models. Soft Systems Thinking assumes that systemic problems require a holistic approach, and provide “recommendations for analysis and intervention on that basis” (p.22). Soft systems thinkers focus on systemic shifts in social systems.

Complexity, in social systems, is due to two reasons: the growing size of systems, and the increasing number of participants in these systems (Jackson, 2003). First, systems span continuously from relatively simple to extremely complex. The level of difficulty of systemic problems depends on system diversity, complexity, and change and it determines the complexity of simple or complex systems: simple systems have few subsystems “involved in highly structured interactions” (p.19). Extremely complex systems have a large number of subsystems that are involved in “loosely structured interactions [and] evolve over time as they are affected by their own purposeful parts” (p.19).

Second, the relationship among systems' participants is categorized into three types: unitary, pluralist, and coercive. The participants' unitary relationships share common purposes. In pluralist relationships the basic interests of the participants are well matched but "they do not share the same values and beliefs" (p.19). In coercive relationships the participants have few common interests and conflicting views and beliefs. The combination of the above systems and participants' dimensions produces six ideal types of problem context: simple-unitary, simple-pluralist, simple-coercive, complex-unitary, complex-pluralist, complex-coercive (Jackson, 2003).

The Key Concepts of Holism and Purpose in Systems Thinking

Holism and purpose are two key concepts that help scholars to understand the value of Systems Thinking. Holism concentrates on the relationship of the parts of the system that compose the whole and it does not break down organizations into parts in order to understand them and intervene in them. A holistic approach to organizational problems allows one to examine organizations, their parts, and their environments as systems, subsystems, and suprasystems (Jackson, 2003).

The concept of purpose is an invention of the human mind and is predicated on mental models or a worldview or *Weltanschauung* that interprets the world according to one's values and experiences. Individuals are the components of social systems. While in a systemic environment individuals display determination and decision-making behavior that translates to purposeful activities. Social systems, as aggregates of individuals, have purpose of their

own. One's worldviews are subject to change when shifts occur in the environment of social systems.

Systems Thinking Categories

Jackson (2003) presents Systems Thinking in four types. Type A is defined as improving goal seeking and viability. It is a broad category that refers to the Systems Language, Applied Systems Thinking, and Creativity and Systems. Type B explores and clarifies the purposes and objectives of stakeholders of organizations. It contains the following methodologies: System Dynamic: The Fifth Discipline, Organizational Cybernetics, Complexity Theory, Strategic Assumption Surfacing and Testing, Interactive Planning, and Soft Systems Methodology. Type C focuses on systems types that ensure fairness in systems design. This type explores the theories of Critical Systems Heuristics and Team Syntegrity. Lastly, type D of systems approaches seek to promote diversity in problem resolution. This type examines the Postmodern Systems Thinking, Total Systems Intervention, and Critical Systems Practice (Jackson, 2003).

The Methodology of Interactive Planning

Interactive Planning is a type B methodology of applied Systems Thinking. It supports the purposes and objectives of stakeholders for organizational redesign. The methodology was established by Ackoff (see Jackson, 2003) and seeks to "win stakeholder approval for and commitment to an idealized design for the system they are involved with" (p.26). Its basic concept is that the future depends on the actions and the events that take place in an organization at

present until the ideal future (Ackoff, 2001). The methodology devises a dream organizational future based on the assumption that an organization “was destroyed last night”

Interactive Planning has two parts: idealization and realization. These two parts consist of six phases. Two of the six phases, Formulating the Mess and Ends Planning, are elements of idealization. The remaining four, Means Planning, Resource Planning, Design of Implementation, and Design of Controls, are features of realization (Ackoff, 2001).

The Process of Formulating the Mess

Formulating the Mess or Situational Analysis diagnoses how a social system will collapse if it fails to recognize and adapt to organizational changes and diversity. Mess Formulation analyzes and synthesizes the current reality of a social system in four strands: System Analysis, Obstruction Analysis, Reference Projection, and Reference Scenario. System Analysis presents the current operation of a system; Obstruction Analysis identifies characteristics that inhibit the development of a system; Reference Projection protrudes aspects of the organization in the future based on assumptions; Reference Scenario synthesizes the information-collected from the above steps and explains why and how a system would destroy itself if the assumptions would be realized (Ackoff, 2001).

Intervention Methodology

This capstone is a descriptive case study because it explains the participants' work in the project-based course in order to build their skills in

Situational Analysis, diagnose organizational problems, and help the International House of Philadelphia confront its complexities.

Definition of Case Study

According to Orum, Feagin and Sjoberg (1991), a case study is an in-depth, multifaceted investigation, using qualitative research methods, of a single social phenomenon. The study is conducted in great detail and often relies on the use of several data sources (p.2).

It is a social science research tool that examines happenings in social systems in every day life. Case studies are clinical approaches to subjects in question. Inevitably, a case study exposes the dynamics that develop daily events in a social ambiance. Arguably, it is an inquiry of truth. In commenting on the rationale of a case study Isaak and Michael (1981) argue: “[it studies] intensively the background, current status, and environmental interactions of a given social unit: an individual, group, or community” (p.68). A case study aims at bringing to the fore the circumstances that create a reality. From that point, a case study is also a laboratory that collects data from daily events and transposes it into information. A researcher experiments with the information, extracts knowledge out of it and provides it to a community of scholars and stakeholders.

Strength and Weaknesses of Case Studies

Isaac and Michael (1981) underscore that a case study has the characteristic of an “in-depth investigation of a social unit” (p.68). Moreover, it can refer to an entire lifecycle or segments of it while it can concentrate on specific factors or on the totality of events. The strength of a case study is that it digs intensively into the social phenomena that it follows and sheds light to their

activities and interactions. A case study often breaks ground into one of the social sciences elements triggering further studies in the same or similar fields.

Nevertheless, a case study is vulnerable to its narrow focus and its subjective biases. First, a case study by limiting its scope fails a broad representation of the field it is involved in. It does not deliver critical generalizations of the elements it uses. Second, a case study is susceptible to the constraints of researchers who can affect it by ruling certain data in or out, assigning high or low value to their significance, and even influence the outcome of the study.

Case Studies and Real-Life Situations

Hammond (2002) stresses the point that a case study is a method that calls for “discussion of *real-life* situations” (p. 1) while it is a practical way to learn managerial skills. A case study identifies a central problem, analyzes it, and proposes solutions to it. It signifies learning through experiments. Members of organizations who conduct or explore case studies learn to ask the right questions in determining what could be the real organizational problems. But, a case study does not provide an answer. It rather promotes a discussion between participants and researchers to develop several answers to case questions. However, a case study creates knowledge by analyzing real situations.

Five Steps for Building a Case Study

Isaac and Michael structure a case study upon five steps. At the outset, the objective of a case study defines the focal point of the study and how the inquiry is processed. In due course, the case study describes what sources of

data are available for examination and the methodology it uses for compiling that data. On the third step, a researcher collects the data. On the fourth step, the data is organized in order to provide an integrated whole. On the final step, the study illustrates the significance of its findings. (Isaac & Michael, 1981)

Description of the Case Study Process for this Capstone

The paper describes how the participants realized: interviews, surveys, group meetings, class sessions, observations, and reading material in order to collect information on the organizational system of International House of Philadelphia, a residential community. The paper does so by providing an integrative view of the participants' work.

The descriptive research methodology "involves the collection of data in order to test hypothesis or answer questions concerning the current status of the subject in the study" (Gay, 1996, p. 11). During the Situational Analysis the participants conducted interviews with members of the organization; they surveyed using a web-based questionnaire sent to the residents; and they studied the organization's systemic environment.

The students in the course facilitated the mess team for the project. Representatives of the International House of Philadelphia aided them in their tasks and their course instructor guided them through the process. The mess team met twice a week working on the project. It also held five iterations with the International House of Philadelphia representatives. The meetings were the vehicles for organizing the project data, processing it, and presenting it to class and in Mess Formulation iterations. During class sessions the faculty coordinator

lectured on Interactive Planning and assessed the progress of the project and engaged all students in class discussions. The reading materials were concomitant with the International House of Philadelphia and the scope of the mess team. These included: budget reports, organizational charts, annual status reports, strategic plan, organizational charts, and arts and cultures pamphlets.

The upcoming chapters explore the Body of Knowledge that unfolds the literature on Systems Thinking, systems theories and methodologies, and Interactive Planning; the Intervention Methodology that presents the paper's inquisitive methodology and defines the process of writing a case study; the Description Process for Reaching the Reference Scenario that recounts the sequence of events for creating a Reference Scenario; and the Conclusion that encapsulate the process of Situational Analysis.

CHAPTER 2

THE BODY OF KNOWLEDGE

This chapter reviews Systems Thinking terms, concepts, approaches, methodologies, and systemic environments. It explores the methodology of Interactive Planning and describes its four phases of Situational Analysis. Moreover, this chapter describes how individuals either alone or collectively use certain cognitive practices, Formulating the Mess, to address systemic problems and support organizational restructuring.

Definition of a System

Meadows (2008) defines a system as:

An interconnected set of elements that is coherently organized in a way that achieves something [. . .] a system must consist of three kinds of things: elements, interconnections, and function or purpose (p.11).

Chiefly, a system is more than the sum of its parts. It displays behavior that is goal-seeking, adaptive, dynamic, self-preserving, and often evolutionary (Meadows, 2008). The interconnections among the elements or parts of systems help the information flow. The information transmitted among the units of systems binds it together and determine its operations (Meadows, 2008).

Jackson (2003) illustrates that a system is “a complex whole the functions of which depends on its parts and the interactions of these parts” (p.3). He follows by identifying six types of systems: physical as in rivers, biological such as in organisms, designed like automobiles, social such as in families, and human activity that ensure the quality of products. The study of these systems takes place in two possible ways. Either through reductionism, which involves the study and understanding of the parts of a system or through holism, which seeks

to understand how the interconnectedness of the parts bolsters and preserves the whole.

On the nature of a system Ackoff (1981) postulates: “a system is a whole that cannot be divided into independent parts” (p.15). According to that definition, two critical properties of a system emerge. First, the parts of the system lose their properties when they are separated from the whole. Second, every system has properties that the parts do not have (Ackoff, 1981). An abridged statement of system properties would be: “when a system is disassembled, it loses its defining functions and so do its parts” (Ackoff, 1999, p.8). I use Ackoff’s definition of a system when I refer to systems in general or when I describe the International House of Philadelphia system in this capstone.

Description of Systems Thinking, Machine Age Thinking, Organismic World View and Social-Cultural View

Systems Thinking is a cognitive product of systems age, which is the era of challenges posed to every scientific field and method known to humans. The major dilemma in systems age puts into question the mechanistic or biological view of the world and their beliefs (Ackoff, 1981). The period before, during and after the Second World War impacted heavily on the mechanistic mindset. In addition, it lured scientists from multiple disciplines out of their laboratories and clinics and reassigned them to field studies in the real world. That change reconfigured the occupational ambiance of experts as a complex system of government, military, and corporate entities (Ackoff, 1981).

Machine age thinking, mechanistic epistemology, or the Newtonian worldview (King, 1993) is the conviction that the universe is a machine and “it was created by God to do His work” (Ackoff, 1981, p.6). Analytical thinking is the predominant mode of thinking in the machine age. Ackoff (1981) writes that the mechanistic mindset is identified by three attributes:

decomposition of that which is to be explained, explanation of the [. . .] properties of the parts taken separately, and aggregating these explanations into an explanation of the whole” (p.16).

In this regard, Ackoff (1981) illuminates the analytical competency of the Newtonian epistemology. He stresses that analytical thinking focuses on structure. It reveals how things work. Therefore analysis yields knowledge. He also underscores that analysis looks into things and is concerned with “the functional interaction of the parts of a system” (p17). Morgan (2006) claims that the machine thinking has been prevalent due to extensive use of machine metaphors. He reasons:

That the organization is a machine [is a popular idea]. The metaphor might create valuable insights about how an organization is structured to achieve predetermined results. But the metaphor is incomplete. For example, it ignores the human aspects (p.5).

Nonetheless, machines affect human existence. Machines have impacted humans’ imagination and cognitive patterns because they have superseded the labor output and productivity of both individuals and organizations (Morgan, 2006). The influence of the mechanistic thought is visible today in the majority of bureaucratic organizations. Max Weber observed that the organizations’ administrative procedures have become a routine and akin to repetitive machine operations (Morgan, 2006). Interestingly, the machine view dominates the

management theories. As Jackson (2003) underlines “it represents organizations as rational instruments designed to achieve the purpose of their owners or controllers” (p.34)

Systems Thinking offers an alternative to the mechanistic mindset. Three links deliver the concept of Systems Thinking according to Ackoff (1981). First, it “identifies a containing whole of which the thing to be explained is part” (p.16). Second, it explains the “properties of the containing whole” (p.16). Lastly, it enlightens the properties of the parts in terms of their roles or functions within the containing whole. Ackoff (1981) further notes that in Systems Thinking synthesis precedes analysis. The discipline focuses on the function of systems and manifests why systems behave or operate the way they do. Importantly, the synthesis that surfaces through Systems Thinking yields understanding of systems and their units.

Systems Thinking also overhauls the biological thinking that views systems as organisms. This type of thinking thinks of social systems and their parts as organisms that exist in an environment similar to the environment human and other living species live in on Earth. The organismic view of social systems identifies different types of organizational systems as species and its vocabulary relates to biology’s terminology and concepts. Morgan (2006) writes that as scholars of organizations “look around the organizational world [they] begin to see that it is possible to identify different species of organizations in different kinds of environments” (p.33). Scholars of the organismic view argue that certain organizations function well under certain organizational, economic

and bureaucratic conditions in a specific time and organizational environment. The fact that organizations thrive or wither in a specific ambiance proves that “certain species of organizations are better ‘adapted’ to specific environmental conditions than others” (p.33). Morgan adds that organizations, especially the bureaucratic ones, operate efficiently in stable and protected environments and that different species of organizations are found “in more competitive and turbulent regions, such as the environments of high-tech firms in the aerospace and microelectronics industries” (p.33).

In addition, Morgan (2006) presents the relation between the terms “molecules, cells, complex organisms, species, and ecology [and] individuals, groups, organizations, populations (species) of organizations, and their social ecology” (p.34). The above terms create metaphors in organizational literature that help members of organizations and organization scholars and theorists identify and study the needs of organizations. According to Morgan (2006) the organismic view of organizations approaches organizations in the following ways:

1. Organizations as “open systems”
2. The process of adapting organizations to environments
3. Organizational life cycles
4. Factors influencing organizational health and development
5. Different species of organizations
6. The relations between species and their ecology (p.34).

Viewing organizations and social systems as organisms has impacted heavily on peoples’ perception of organizations and their functions. Morgan (2006) also comments that the organismic view of systems was influenced from the machine thinking “locked into a form of engineering preoccupied with relations between goals, structures, and efficiency” (p.34)

Nevertheless, in addition to the Mechanistic and Biological view of the world there is also the Social-Cultural notion. It is a perception of the world founded upon the interaction and interchange of individuals' cognitive and communication functions. The Socio-Cultural lens views human development holistically. It considers individual or organizational evolution as sustainable social participation in a temporal continuum. Starr (2006) writes that the Socio-Cultural view considers organizations as associations of purposeful entities. He explains that this is a modern approach that considers organizations as purposeful bodies that are structured by purposeful elements. Often, the purposes of the organization and those of its parts are conflicting. Starr (2006) emphasizes:

Only by aligning the interests of the purposeful parts between each other, each level, and that of the whole can the system function optimally. Also essential to this modern socio-cultural metaphor is that attention must be given to personality differences, personal, political and social needs, the meaning of organization change to participants, and other components of human nature, growth, or change. (p.6)

This capstone details the work of a group of scholars and describes the systemic challenges of a not-for-profit organization under the Socio-Cultural view as Starr has defined it.

Systems Thinking takes a holistic approach to address complexity in social systemic organizations. Morgan (2006) propounds that Systems Thinking challenges organizational realities. It goads organizational members to think in different mental models. Systems Thinking creates "new capacities through which organizations can extend their ability to create the future" (p.90). System thinkers, according to Meadows (2008), see the world as conglomerates of

stocks, which are the memory of changing flows and actions in a system. She concludes that systems thinkers perceive the world as “a collection of feedback processes” (p.25). Atwater, Kannan, and Stephens (2008) formulated a Systems Thinking definition by synthesizing the concepts of analytical thinking, synthetic thinking, and holism:

From a pedagogical perspective, systemic thinking should be defined using the following elements: Synthetic Thinking: Studying the role and purpose of a system and its parts to understand why they behave as they do. Dynamic Thinking: Examining how the system and its parts behave over time. Closed-loop Thinking: Investigating how the parts of a system react and interact to each other and external factors (p.13)

In addition, Atwater, Kannan, and Stephens (2008) invented four reasoning tools to help individuals and organizations think systemically: policy deployment, which is a tool of strategic management; causal loop diagram that illustrates the feedback structures in a system; system archetypes, which represent specific combinations of feedback loops; and a stock and flow map for understanding dynamic system behavior (Atwater, Kannan & Stephens, 2008). Gabor (2010) states that in the era of globalization Systems Thinking is not a privilege for senior organizational executives. It is a cognitive prerogative to every organization and their members who endeavor to understand complexity in a highly interdependent and interactive world. In the era of globalization, according to Gabor (2010), global communications and business transactions have generated organizational complexity that stipulates:

appreciation of systems-focused view of the world, one that recognizes the interrelationships of people, processes, and decisions-and designs organizational actions accordingly (p.102).

Anderson argues that individuals and organizations that concentrate on analysis are like the “proverbial blind men touching different parts of the elephant” (Pourdehnad & Robinson, 2001, p.30). Analysis describes different aspects and levels of the reality of social systemic organizations. However, Pourdehnad and Robinson (2001) note:

At some point in time a grand synthesis [of the analytical positions] will be achieved [and social systems will be] subsumed under some overarching framework [. . .] this is systems approach to knowledge construction (p. 30).

Systems Thinking Categories

Jackson (2003) categorizes systems approaches in four types. He defines Type A as improving goal seeking and viability and is predicated on four systems approaches. The first of the Type A approaches is Hard Systems Thinking a scientific method that address organizational problems through operational research. Its goal is to apply scientific methods to complex organizational problems arising from the interaction of humans, machines, materials and money in every industry conceived by humans. Moreover, Checkland (1981) explains:

Hard systems thinking is an approach to real-world problems in which an objective or end-to-be achieved can be taken as a given. Then to meet or achieve the objective, a system is engineered. The distinguishing characteristic of all hard systems thinking is that all real-world problems can be formulated in the following way: there is a desired state, S1, and a present state, S0, and there are alternative ways of getting from S0 to S1. Problem solving according to this view consists of defining S1 and S0 and selecting the best means or ways of reducing the difference between them (pp.138-139, 146).

The second approach is Systems Dynamics a process established by Forrester and his team of scholars at MIT. Forrester (1994) argues that System

Dynamics theory epitomizes the real-world by accepting “the complexity, non-linearity, and feedback loop structures that are inherent in social and physical systems” (p.3). He illustrates the System Dynamic process in six steps:

1. Step one: Describe the system
2. Step two: Convert description to level and rate equations
3. Step three: Simulate the model
4. Step four: Design alternative policies and structures
5. Step five: Educate and debate
6. Step six: Implement Changes in policies and structure (p.4).

The third of the approaches is the theory of Organizational Cybernetics developed by Beers. According to Schwaninger (2006), Beers created a new perspective in management and organizations and he laid the foundations of managerial cybernetics in organizations. Espejo and Gill (1997) note that Beers contribution to cybernetics was the creation of the Viable System Model a “conceptual tool for understanding organizations, redesigning them (where appropriate) and supporting the management of change” (p.1.). They also illustrate Beer’s five essential functions of the Viable System Model: Implementation, coordination, control, intelligence, policy (p.4-6).

The fourth approach is the study of chaos in the context of Complexity Theory popularized by Gleick. Dooley, Johnson, and Bush (1995) comment on the chaos and Complexity Theory:

Chaos Theory has developed along two dimensions. Experimentalists (as popularized in Gleick, 1987) found ways (primarily grounded in topology) to discover deep and complex patterns in seemingly random or “chaotic” systems. Prigogine and Stengers (1984), among others, use chaos to describe how order can arise from complexity through the process of self-organization. Here is a summary of the main points from chaos theory: Seemingly random behavior maybe the result of simple non linear systems [. . .]; Nonlinear systems can be subject to sensitive dependence to initial conditions--the butterfly effect [. . .]; Systems that are pushed far-

from-equilibrium (at the edge of chaos) can self-organize into new structures [. . .]; Changes in the essential nature of a system take place when a control parameter passes a critical threshold--a bifurcation (p.8, 9).

Type B categorizes the systems theories that emphasize on “improving goal seeking and viability, exploring purposes, ensuring fairness, or promoting diversity” (Jackson, 2003, p.275). Compartmentalization of systems theories groups them by their mission and the managerial models they support (Jackson, 2003). Type B theories such as Strategic Assumption Surfacing and Testing, Interactive Planning, and Soft Systems Methodology, address the stakeholders’ operational role in the organizations they belong to (Jackson, 2003). Chiefly, the three methodologies construct soft systems thinking that enhances organizational learning. The learning process is a combination of values, beliefs, education, and visions of members of an organization. Additionally, organizational learning propels structural changes that make organizations agile (Jackson, 2003).

Strategic Assumption Surfacing and Testing is a methodology developed by Mason and Mitroff to address ill-structured problems of particular interest to the top hierarchy of organizations. Huff (1982) on her review of the Strategic Assumption Surfacing and Testing methodology asserts that the methodology is of interest to consultants, planners, and those who teach strategic decision-making. She also adds that Strategic Assumption Surfacing and Testing has two sets of decision support activities. The first one “analyzes alternative strategies by asking small groups from an organization to identify the assumptions upon which their preferred strategy depends” (p.79). The second method:

requires that a plan for organizational action is opposed by a single counterplan. Those who argue on each side must respond to the same set of data, and an independent group of observers is asked to rate the plausibility of the claims made (p.79).

Mason and Mitroff (1981) in support of the Strategic Assumption Surfacing and Testing methodology argue:

For every policy decision there are at least two alternative choices that can be made. There is an argument for and against each alternative. It is by weighing the pros and cons of each argument that an informed decision can be reached. In policy making these processes of dialectics and argumentation are inescapable (p.15).

Ackoff's Interactive Planning is detailed later in the chapter in a separate section.

Checkland founded Soft Systems Methodology the second of the three methodologies that compose Type B systems. Von Bulow (1989) defines Soft Systems Thinking as a methodology that ameliorates areas of social concern by activating in the people who participate in situations of social concern life long learning cycle. Checkland (1993) argues that Soft Systems Methodology:

is of practical use in real-world problems' [. . .], reviews the context provided by the systems movement, introduces the case for action research as the research method, describes [. . .] projects in detail, refers to [. . .] others, and describes the emerging methodology. It finishes with the very important argument that any methodology which will be used by human beings cannot, as methodology, be *proved* to be useful. (p.A12).

Molineux and Haslett (2003) claim that the methodology extends Systems Thinking from hard systems thinking to human activities systems or soft systems. They also argue "the purpose of Soft Systems Thinking in extending systems thinking to incorporate human activity systems has helped to broaden its influence in organizational decision making" (p.5). Furthermore, Checkland stresses that the methodology is based on four activities:

First, finding out about a problem situation [. . .]; Second, formulating some relevant purposeful activity models [. . .]; Third, debating the situation [. . .]; Fourth, taking action in the situation to bring about improvement [. . .] (p. A22).

Two factors measure the success of each of the three components of soft systems theories. The first factor is effectiveness. It underscores the capacity of organizations to achieve their objectives. The second factor is elegance referring to the stakeholders' taste on organizational operations (Jackson, 2003). Ackoff (1981) relates elegance to aesthetics. He explains that lack of aesthetics translates into a decreasing quality of life. Further, he approaches aesthetics from philosophical and psychological perspectives and argues that the corporate world has an idea what science, economics, and morals mean; however, its members lack the essence of beauty in relation to aesthetics of management.

Type B theories attribute to social sciences is the control of “disagreements and conflicts that occur between stakeholders because of the different values, beliefs, and philosophies they hold” (Jackson, 2003, p. 26). Subsequently, Interactive Planning carves “stakeholders approval for, and commitment to, an Idealized Design for the organizational system they are involved with” (p.26). The methodology enables organizations to use creative methods to dissolve their current messes and attain a coveted future.

Type C of Systems Thinking embraces Critical Systems Heuristics and Team Syntegrity. Jackson (2003) argues that type C was developed because of failure of functionalist and interpretive systems approaches. Ulrich universalized Critical Systems Heuristics and he declared with Reynolds (2010) that the above

systems approach is a framework for reflective professional practice defined by boundary critique. Ulrich and Reynolds (2010) state:

Critical systems heuristics (CSH) as developed by one of the authors (Ulrich 1983) is a philosophical framework to support reflective practice. In its most simple formulation, CSH uses a set of 12 questions to make explicit the everyday judgments on which we rely (consciously or not) to understand situations and to design systems for improving them. The precise nature and use of these so-called *boundary questions* [. . .] [are categorized by sources of motivation, sources of control, sources of knowledge, and sources of legitimacy and they are based on beneficiary, purpose, measure of improvement, decision maker, resources, decision environment, expert, expertise, guarantor, witness, emancipation, worldview] (pp. 243-244).

Interestingly, Jackson (2003) in his analysis on the term Critical Systems Heuristics explains that *Critical* is a reflection to presuppositions that enter into the pursuit of rational action, *Systems* refers to the totality of elements, and *Heuristics* implies a continuous action for surfacing presuppositions.

According to Jackson (2003) Team Syntegrity is a democratic decision making approach honed by the father of Organizational Cybernetics Beers.

Cullen and Leonard (2000) express Team Syntegrity as a group methodology that deals with complex organizational problems. They also note that Team

Syntegrity was developed while Beers was working on Organizational Cybernetics and as he

applied principles of managerial cybernetics to work out how to achieve high levels of 'syzygy' (cooperation and commitment) in groups that are large enough to satisfy issues of requisite variety, and small enough to accomplish something. The result is Syntegration®" (p.1).

In addition, Leonard (1999) writes that Team Syntegrity allows groups to collaborate in a democratic non-hierarchical fashion in order to produce creative ideas.

Type D of systems is about improving organizational operations by promoting diversity within. Postmodern Systems Thinking is the principal approach to diversity in organizations. Jackson (2003) in his critique on Postmodern Systems Thinking claims that in postmodern times new organization forms come to existence. In postmodern times individuals have a variety of choices available to them in a various organizational matters, there is diversity of stakeholders involved in the decision-making process of organizations and the unstable environment of organizations calls for their collaboration. Post Modern Systems Thinking is part of postmodern systems methodologies, which involves Critical Systems Practice its methodology Total Systems and Critical Systems Thinking.

Systems Thinking Key Concepts

Certain terms are vital to explain and understand Systems Thinking and its methodologies and theories.

System

Systems Thinking embraces Meadow's (2008), Ackoff's (1981) and Jackson's (2003) definition of a system and integrates it with other definitions and terms in systemic thinking.

Holism

One of the first systemic notions is holism. It is a belief that considers systems to be "more than the sum of their parts" (Jackson, 2003, p.4). Holism discusses the parts of systems in their networking relationships (Jackson, 2003). Systems Thinking views organizational complexity, change, and diversity through

holism (Jackson, 2003). Jackson ranks holism and holistic approaches to social systems into four groups: improving goal seeking and viability, exploring purposes, ensuring fairness, and promoting diversity (Jackson, 2003).

Historically, Plato explored the concept of holism with regard to the art of steersmanship or cybernetics. Aristotle studied the parts of the human body that support the entire organism. Kant championed the idea that it would be beneficial for humans to think in terms of wholes and Hegel reasoned that understanding of the whole, or the truth, happens through the development of thesis, antithesis, and synthesis (pp. 4-5). Similarly, Ackoff (1981) observes that one can appreciate an organizational system as a whole and not in fragments. Holism appeared in modern organization and management theories through systems engineering and biological analogies. Ackoff's and Jackson's concept of holism define the holistic approach to the International House of Philadelphia in this study.

Purpose

The concept of purpose is key for understanding social systems and Systems Thinking. The idea of holism alone is not enough for comprehending social systemic organizations. Purpose completes the perception of social systemic organizations. Jackson asserts that human- social systems are purposive. They have multiple purposes that are generated from inside the system. Often, the purpose of one unit of a system is not aligned or related to that of third parties (Jackson, 2003). Therefore, it is evident that "systems can be nested within systems. Therefore, there can be purposes within purposes"

(Meadows, 2008, p. 15). Notably, the function or purpose of a system is not always obvious despite the fact that it is of utmost importance for systems behavior.

Ackoff underscores that the concept of purpose is a classification tool. It categorizes systems among those that have choices of means and ends for achieving their desired outcomes (Ackoff, 1999). Ackoff states that: “an organization is a purposeful system that is part of one or more purposeful systems, and parts of which, people, have purposes of their own” (p.7). Jackson adds that the purpose of social systems derives from the human mind based on the individuals’ mental models. These mental models are also known as *Weltanschauung* or worldview. *Weltanschauung* is a collection of individuals’ experiences, values, and education for interpreting the world (Jackson, 2003). It is interesting that *Weltanschauung* provides boundaries to a system. The boundaries of social systems are subjective because they depend on the values and ethics of individuals (Jackson, 2003). This capstone examines the International House of Philadelphia organizational purpose according to Ackoff’s and Meadow’s definition of purpose.

Mindset

The concept of mindset is critical in Systems Thinking. It is a concept that plays an important role in understanding the value of social systems. Mindset is set of assumptions, methods, or notations established by individuals or groups of people that create powerful incentives based on former patterns and lifestyles (Pourdehnad, 2010). With regard to organizations, Michael, Story, and Thomas

(2002) identify two types of mindsets: entrepreneurial and managerial. The first one refers to cognitive abilities: that utilize heuristics to impact meaning to an ambiguous and fragmented situation. The second frame of mindset is:

more systemic decision making where management uses accountability and compensation schemes, the structural coordination of business activities across various units [. . .] (Michael, Story, & Thomas, p.91. See Hitt, Ireland, Camp & Sexton, 2002).

King (1993) writes that changing the mindset of an individual or a group is very difficult because it is rooted deeply into peoples' behaviors and actions. In particular, "a strategic shift requires a mindset change of almost heroic proportions" (p.5) in order for social systems to achieve progress and development.

Mindsets are related to mental models. Kirk, Cannon, and Burk (1997) write on that relation: "mental models include the images, assumptions, and stories that everyone carries around in his/her mind-personal mindset of what an individual considers to be reality" (abstract). Gabor (2010) draws her characterization of mental models from Senge, which are one of his five disciplines of ongoing learning of social systems. Senge cites: "mental models are the prevailing attitudes, beliefs, and cognitive habits held within a group that shape its perceptions of the world and how it takes action" (See Gabor, 2010, p.104, 2010). A shift in the mental model removes the manacles of the mind and provides solutions that were not considered before in organizational dilemmas (Magidson. See Belliveau, Griffin & Somermeyer, 2002). Interestingly enough, Meadows (2008) likens the mindset to paradigms. She indicates that mindsets are paradigms "the shared idea in the minds of society, the great big unstated

assumptions [the] deepest set of beliefs about how the world works” (pp.162-163). Additionally, she underlines: “paradigms are the sources of systems” (p.163). Clearly, the concept of mindset plays a pivotal role in understanding how social systems function. I allude to Meadow’s and Magidson understanding of mental models-mindset when I explain the International House of Philadelphia organizational status.

The Network Organization

The network organization is a vital concept of Systems Thinking. It is widely used by business scholars, the business press, and management consultants. The network organization “evades organizational inertia” (Baker, 1992, p.398) and espouses Systems Thinking concepts of creativity and holism. Networks are intended to handle complex organizational environments that call for organizational adaptability and flexibility. Baker (1992) also declares that the interaction of organizational problems, peoples, and resources occur in networks. Importantly, a network organization is “characterized by integration across formal boundaries of multiple types of socially important relations” (p.399). Integration emphasizes the degree of coordination among members of organizations. Miles and Snow (1978) declare that network organizations are different from other organizational types. The principal reason that differentiates the networks from past organizational structures is the cooperation and mutual shareholding among various groups that have stakes in organizations (1992). Baker’s view on network organizations influences my account of the interactions in the International House of Philadelphia transactional and contextual environment.

Stakeholders

A definition of critical importance in Systems Thinking and Interactive Planning methodology is that of the stakeholder: a person with interests in the operations, status, and success of an organization. Stakeholders for Ackoff (1981) are individuals or organizations in or outside an organization who are affected from the operations of that organization. Ackoff (1981) also incorporates the concept of stakeholders in his quest on systems analysis when he asks:

Who are the corporation's stakeholders? How many of each type are there? How dependent on the corporation are they? How dependent is the corporation on them? With respect to consumers or customers, how do they use the corporation's output and for what purpose? What is the distribution of economic, demographic, and personality characteristics among them? (p.83).

Also, Ackoff (1999) ponders that organizations should structure their mission statements in a form that are appealing and relevant to all of their stakeholders. He also underlines that in later years boards of organizations have invited greater numbers and varieties of stakeholders in their proceedings. This activity by the boards has contributed to "the humanization and environmentalization of [organizations], as well as to increasing the effectiveness with which they can pursue their own objectives and ideals" (p.181). Ackoff's explanation of the role of stakeholders in organizations defines also the role of stakeholders in this paper.

Description of Problems and Messes

Systems Thinking dissolves systemic problems. Combinations of political, cultural, financial, social and technological quandaries plague organizations. These problems cannot be solved with the conventional organizational wisdom.

They need innovative and creative thinking. Systems Thinking helps organizations design solutions to their problems that are not ephemeral but can be repeated in different ways.

Systems Thinking defines organizational problems as messes. Ackoff (1981) defines a mess, as “a set of two or more interdependent problems constitutes a [. . .]. The French call such a system *problematique*; for lack of a corresponding word in English, I call it a mess” (p.52) or concisely: “a system of interacting deficiencies, that is, a mess” (p.14). Further, Ackoff (1981) records that individuals and organizations should perceive a mess holistically because it is a system of interactive problems and opportunities. Jackson (2003) defines a mess as “an ill-structured problem situations made up of highly interdependent problems” (p.137).

King (1993) categorizes organizational problems as tame problems, messes and wicked problems according to their complexity, level of difficulty, and solutions. Tame problems, King writes, are of relative organized simplicity. These types of problems can be solved through analytical methods. Nevertheless, increased organizational complexity creates interrelated problems or messes. Organizations and individuals cannot solve messes in isolation. Messes require commitment to understanding how the parts of a system interact through methods, processes, and interdisciplinary approaches (1993). Wicked problems are difficult to locate due to individuals or organizations inability to sort out complexity and uncertainty (1993). Wicked problems do not have solutions. King adds that a wicked problem is a divergent problem and has become more

common in our times (1993). Rittel and Webber (1973) add that wicked problems correspond to “malignant, [. . .], vicious, [. . .], tricky, or aggressive” (p.160) situations.

In addition, Ulrich (2007) discusses systemic problems, as a gap in the system of an organization. According to Ulrich, the systemic problems have the following categories: taxonomy problems, design problems, selection problems, system improvement problems, tuning problems, crises, and wicked problems. Classification will help them identify their issues and address them correctly. As Ackoff (1993) propounds:

successful problem solving requires finding the right solution to the right problem. We fail more often because we solve the wrong problem than because we get the wrong solutions to the right problem (p. 1).

Ackoff's definition of mess and Ulrich's meaning of systemic problems interpret this capstone's reference to messes and systemic or organizational problems with regard to the International House of Philadelphia.

Dissolution

Organizational systemic problems are interactive and necessitate research, design, and action. King (1993) argues that systemic organizational problems require organizations and individuals to “examine patterns of interaction among parts” (p.4). In addition, he continues by adding that in systems of problems organizations look for vicious and virtuous circles, self-fulfilling and self-defeating prophecies, and deviation-amplifying feedback loops. These messes are then sort out through cross-functional groups and learning organizations (King, 1993). Ackoff (1981) pens that in order for an organization

to deal with its set of interrelated problems it has to understand that a problem satisfies three conditions: first, the individual or social system must have capacity for alternative course of action; second, the choice made should have an effect; and third, the decision making individual or organization should have doubts as to what course of action to select. Once the definition of what is a problem has been accepted, organizations can proceed with dissolving the problem.

The concept behind dissolving a problem is that it changes “the nature, and/or the environment, of the entity in which it is imbedded so as to remove the problem” (Ackoff, 1981, p.21). Organizations tend to idealize a problem when they dissolve it. They do not employ an optimal solution. Idealization forces organizations, plagued by a mess, to change (Ackoff, 1981). Idealization is premised upon a design approach to systemic problems. Ackoff (1981)

highlights:

the design approach is used by the minority of managers and management scientists whose principal organizational objective is development rather than growth or and who know the difference (p.172).

Ulrich (2007) posits that during the design process an agent observes a gap in a system, defines a problem, induces alternative solutions, opts for an approach and finally takes action. Ackoff (1999) declares that dissolution aims at redesigning the future of an organizational entity. Moreover, dissolution “focuses equally on the generality and uniqueness of a problem or a mess, and it employs whatever techniques, tools, and methods- clinical-or-scientific- that can assist in the design process” (p.14). Interestingly, dissolution prevents a problem from reemerging by redesigning the deficient system (Ackoff, 2006). Dissolution is the preferred tool of treating a mess; the other three are absolution,

resolution, and solution (Ackoff, 1999). Dissolving a problem is a systemic approach to address a problem. Analysis engages in answering problem questions by absolving, resolving and solving them. According to Ackoff (1999) to absolve a problem means to ignore a problem or a mess; to resolve an issue is taking action that produces a good enough outcome; and to solve a problem is to reach an optimal answer. Ackoff termed dissolution in a style that illustrates the work done by the mess team and its facilitator in order to address the organizational challenges of the International House of Philadelphia and idealized its future.

Interactive Planning Methodology

Interactive Planning is a Social Systems Thinking methodology. It is a cognitive process that plans the future of social systemic organizations.

According to Ackoff (2001):

Interactive planning is based on the belief that an organization's future depends at least as much on what it does between now and then, as on what it is done to it. Therefore, this type of planning consists of the design of a desirable present and a selection or invention of ways of approximating it as closely as possible. It creates its future [. . .] (p.3).

Interactivism

As has already been discussed Interactive Planning is a soft systems thinkers methodology and it has a dual focus. Initially, the goal of Interactive Planning is to bring consensus or accommodation between the different value propositions of organizational stakeholders (Jackson, 2003). It requires stakeholders commitment to implement changes and improvement in organizations (2003). Interactive Planning "was specifically designed to cope with the 'messes' that arise from the increased complexity, change, and diversity

that managers have to confront in the modern era” (Jackson, p.158, 2003).

Ackoff formulated Interactive Planning to assist organizations to cope with rapid changes, interdependence, and purposeful actions (Jackson, 2003). Moreover, in the systems age, Ackoff argues, that social systemic organizations must serve three purposes: their own, that of their parts, and the wider systems (Jackson, 2003). Interactivist's are the aficionados who serve these purposes. Ackoff (1981) explains:

Interactivists [. . .] are not willing to return to a previous state, to settle for things as they are, or to accept the future that appears to confront them [. . .] interactivists deny any an assumption that the future is largely out of our control [. . .] interactivists believe that the future depends at least as much on what we and the others like us do between now and then as it does on what has happened until now. Therefore, they maintain, the future is largely subject to creation (pp.61-62).

In addition, interactivists do not recognize technological advancements as a curse or a boon. Instead, they consider science as a search for similarities between differences. With regard to systemic problems they suggest a dual approach by first by determining how a problematic situation relates to a similar one that has occurred in the past, and how the current issue is unique and requires knowledge that is not available. Interactivists value the abilities of organizations to learn and adapt, and to develop in order to follow social changes in their environment.

For individuals and organizations who are ideal-seeking entities, Interactive Planning should involve three types of ends: goals-objectives-ideals, in its discipline. Therefore, interactivists, engage in normative planning. This is an indefinitely extended planning method that deals with all the internal and

external problems of social systemic organizations. Ideals are of utmost significance in normative planning.

Pourdehnad and Hebb (2002) argue that Interactive Planning addresses issues systemically. It considers every interaction that happens within a system and its environment and designs a holistic treatment for organizational problems. They also explicate, in five points Ackoff's belief that humans desire and design ideal-seeking systems. Pourdehnad and Hebb note: first, the methodology, facilitates the involvement of stakeholders in the design of a system; second, Interactive Planning focuses on ends not means; third, the process obliges the stakeholders to formulate clearly their proposal for organizational objectives; fourth, the ideal-seeking process asks for creativity, and fifth, it values collective action for making feasible the design of an ideal-seeking system (2002).

Idealized Design brings closer organizations to an ideal-seeking system.

Idealized Design is the capability of a social system to imagine what is the ideal solution to its problems. It works backward to where it is today in order to get the best outcome (Ackoff, Magidson & Addison, 2006). In addition, Idealized Design is an experimental way of designing an organization's future system (Gabor, 2010)

Interactive Planning Principles

Interactive Planning operates on three principles: participative principle, continuity principle, and holistic principle. The first principle engages the members of an organization in the development procedures of a system. It also helps them understand the organizational system in question and serve it

effectively. The principle of continuity is founded upon the notion that since organizational events are not prognosticated, advanced planning cannot solve future messes. Hence, organizations need a self-renewed plan that continuously monitors, evaluates, and modifies the organizational status. The final principle is a combination of coordination and integration. Ackoff (1981) explains:

“coordination has to do with the interactions between different units at same level; integration concerns interactions between units at different levels” (p.74).

Idealization and Realization

Interactive Planning encompasses the systemic processes of idealization and realization. Idealization is structured upon the phases of formulating the mess and ends planning while realization focuses on means planning, resource planning, design of implementation, and design of controls. In this capstone, emphasis is on Formulating the Mess. It is a phase that warns organizations how their systems can collapse if they do not adapt to changes that happen in their environment. It calls social systems’ attention to their “Achilles’ heel-the seeds of [their] self-destruction” (Ackoff, 2001, p. 5). Usually, organizations take action against their destruction when they realize that they are in a state of crisis. Often, social systems realize that they are falling apart when it is too late to react and the consequences are disastrous. On this account, the process of Formulating the Mess helps organizations realize that are currently in a state of crisis (Echavarria. See Jimenez, 2006).

Formulating the Mess

The Situational Analysis diagnoses messes in organizations and argues organizational change in four steps: systems analysis, obstruction analysis, reference projection, and reference scenario. The systems analysis describes how a social system currently operates. It focuses on the impact an organization makes to its environment and the influences the environment has on the organization (Ackoff, 1981). A series of ten questions help organizational stakeholders proceed with the system analysis:

1. How is the system for which plan is to be done to be defined?
2. What business or business is the [organization] in?
3. How is the [organization] organized?
4. How does the [organization] actually operate?
5. What policies, practices, strategies, and tactics are currently in force?
6. What are the principal stylistic preferences of management?
7. How has the [organization] performed in the past and how is it performing now?
8. Who are the [organizations'] stakeholders?
9. Who are the [organizations'] competitors?
10. What laws and governmental regulations affect the [organization] and how? (pp.80-84).

The phase of obstruction analysis emphasizes the properties of the organization that impede its development (Ackoff, 1981). Typically, constraints that can be found in the environment of a social system restrain its development and growth. These are internal discrepancies and conflicts. Accordingly, the discrepancies can be identified as organizational ends, organizational means, organizational resources, organizational structure and management, and the organization's stakeholders and environment (Ackoff, 1981). A typology of conflicts contains the following:

1. [Conflicts] within individuals who are part of the [organization]
2. [Conflicts] between such individuals
3. [Conflicts] between individual and the [organization] or parts of it

4. [Conflicts] between units at the same level of the [organization]
5. [Conflicts] between units at different levels or between units and the [organization]
6. [Conflicts] within the [organization] as a whole
7. [Conflicts] between the [organization] and external groups [. . .]
(pp.94-95).

Reference projection is a process that extrapolates current organizational data and performance characteristics into the future. At this stage, the organizational stakeholders assume that no changes occur in the present operations and in the expected environment. Ackoff (1981) argues that there are no mechanical ways in conducting reference projections but two guiding principles:

First, [. . .] corporate expectations of the future [. . .] can be fruitfully explored with reference projections. [Second, a] fruitful way of looking for projections involves using the supply and consumption of critical resources (pp.100-101).

The reference scenario is a synthesis of the above steps of the Situational Analysis, as he indicates:

The reference scenario, if well done, will make it apparent that the current mess is at least as much a consequence of what the corporation has done and is doing as of what had been done and is being done to it. It should also reveal what changes can be made to evade the mess. (p.101).

Importantly, a reference scenario should be impactful since it would ultimately reveal a desirable future. The reference scenario is a purposive document addressed to organizational stakeholders and it exposes an organization's current behavior. Its intention is to zero in the right organizational problems that plague an organization and not to predict the future.

All things considered, in Mess Formulation an organization begins to redesign its future in an iterative and cumulative manner with the facilitation of a

mess team that performs six activities: detects, focuses, searches, represents, diagnoses and presents the complex problems of an organization (Van de Ven & Huber, 1990). The descriptive process for reaching a compelling argument to provoke organizational changes, in this capstone, in the International House of Philadelphia followed the methodology of Interactive Planning as it was presented above.

Commentary on Interactive Planning

Jackson in his commentary on Interactive Planning points out that the theory studies and researches social systems that are purposive entities that contain other purposive units etc. In essence, Interactive Planning “seeks to galvanize stakeholders, upholding various purposes, in pursuit of a vision of what their organizations might be like” (Jackson, 2003, p. 175). He also cites the advantages that Interactive Planning offers to social systemic organizations: it facilitates stakeholders participation in the planning process; the stakeholders become dominant in the planning process; Interactive Planning frees suppressed creativity; it expands stakeholders conception of what is possible; and its participative principle generates commitment and consensus among stakeholders for an organization’s idealized future (Jackson, 2003).

Evaluation/ Implementation of Interactive Planning Methodology

Eriksson (2007) makes an evaluation of the empirical usefulness of interactive Planning by implementing Interactive Planning during the development of a medical department at a pharmaceutical company. At the same time he devises fifteen steps “in terms of [. . .] Postulates of Interactive

Planning, [which] were used as a guide for the actual use of [Interactive Planning] [. . .] and also [served] as criteria for its evaluation” (p.4) Eriksson’s

(2007) postulates are the following:

- IP-Postulate 1: Organizational Self-Development [. . .]
- IP-Postulate 2: Ideal-Seeking Procedure [. . .]
- IP-Postulate 3: Learn & Adapt [. . .]
- IP-Postulate 4: Participation [. . .]
- IP-Postulate 5: Continuity [. . .]
- IP-Postulate 6: Holism [. . .]
- IP-Postulate 7: Current & Uninterrupted Future [. . .]
- IP-Postulate 8: Ideal Organization [. . .]
- IP-Postulate 9: Management System [. . .]
- IP-Postulate 10: Organizational Structure [. . .]
- IP-Postulate 11: Activity Plan [. . .]
- IP-Postulate 12: Resource Plan [. . .]
- IP-Postulate 13: Controlled Implementation [. . .]
- IP Postulate 14: IP cannot resolve power structures [. . .]
- IP Postulate 15: IP cannot include all stakeholders [. . .] (p.5-6)

This sequence of fifteen steps is a tool in the hands of facilitators for convincing organizations to pursuit institutional changes.

CHAPTER 3

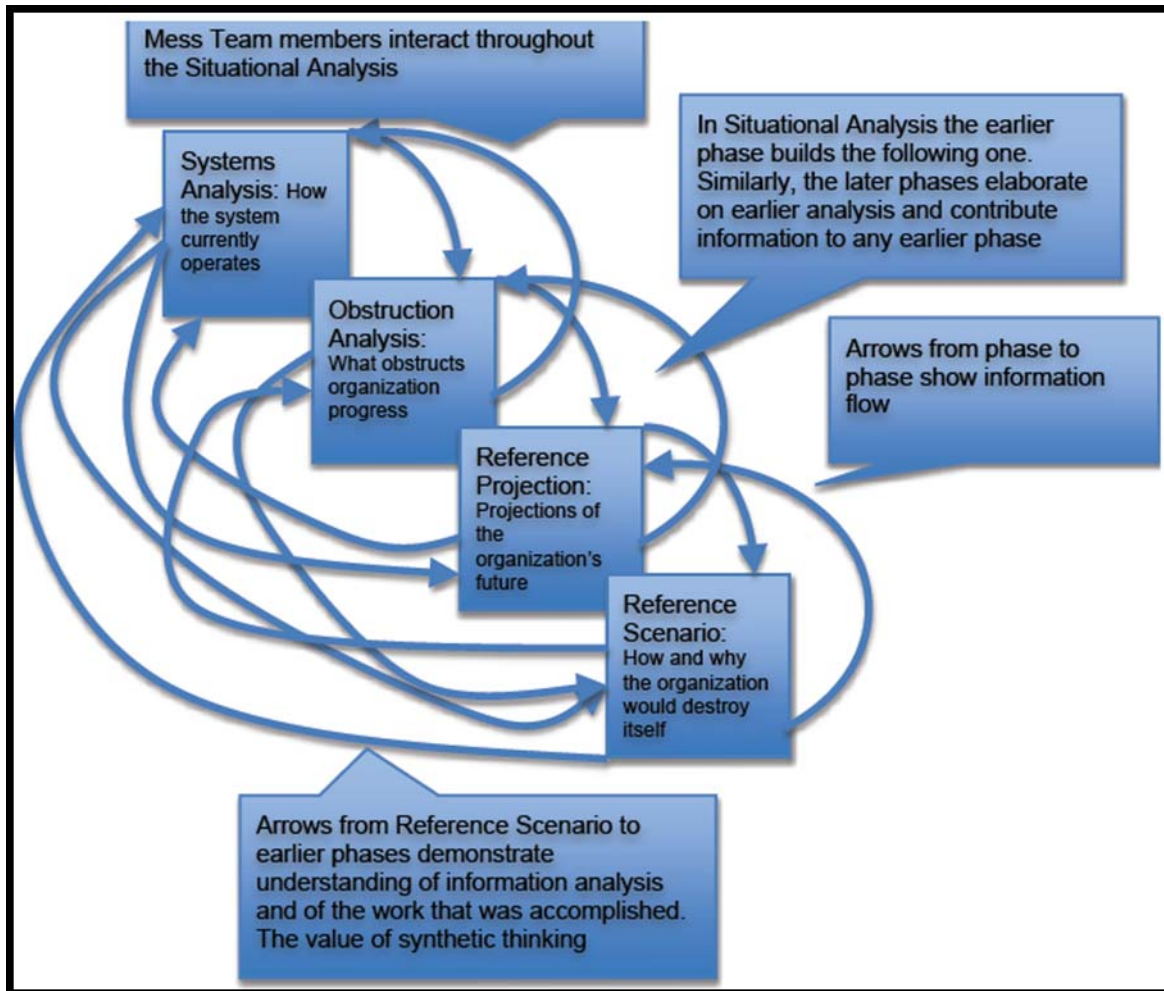
THE PROCESS FOR REACHING A REFERENCE SCENARIO

The Process of Formulating the Mess

An ideal state of affairs is neither imaginary nor utopian. It exists in the human mind and belongs to the future. Regrettably, an ideal state remains often unattainable for individuals and organizations. On the one hand, individuals are sedative or unmotivated to pursue it. On the other hand, complicated bureaucracies and inertia mire organizations. Worst, social systems, either individuals or organizations, are comfortable with the status quo and they refuse to accept organizational changes that promise progress. However, the theory of Interactive Planning leads organizations closer to their perfect state.

Mess Formulation helps organizations evade mediocrity and disaster with a plan of four phases. It begins with systems analysis, followed by obstruction analysis, then by reference projection, and ends with the reference scenario (Ackoff, 1981). Despite the fact that a Situational Analysis has four successive steps it is not a linear activity. Mess formulation is a multiple feedback-loop communication tool. Each phase collects and organizes information that supplements the other steps. In the end, information, activities, experience and knowledge converge on the reference scenario: the alarm clock of organizations. Figure 1 presents the communication process of Formulating the Mess.

Figure 1. Influence Diagram of Feedback Loops in the Situational Analysis



This chapter details the efforts by the mess team to implement the Formulating process in order to redesign the International House of Philadelphia business model. These efforts for organizational restructuring were a sequence of eleven activities modeled after Eriksson's (2007) evaluation and implementation method of Interactive Planning.

Formulating the Mess- Activity 1: Mess Team Formation- Kinship:

In the process of Situational Analysis the most important constituent is the mess team, which is formed by two groups. The first group is members or

consultants who introduce Interactive Planning to the organization in question. This group's critical task is to facilitate the transition of Situational Analysis from one phase to the next. The representatives or clients of the organization that seeks to redesign its system assemble the other group. The fact that two social systems merge to dissolve the organizational mess of a larger system makes the process of Formulating the Mess rich in interpersonal relations. For that reason effective communication is compulsory during Situational Analysis. For instance, at the commencement of the educational partnership between members of Organizational Dynamics and the International House of Philadelphia established a good rapport based on trust and mutual respect.

Formulating the Mess- Activity 2: Development of Trust- Common language

Candor allowed the members of the International House of Philadelphia to share with the scholars from Organizational Dynamics confidential information pertaining to their organization. That information was critical to the scholars involved in the partnership in order to understand the business model, mission, and culture of the International House of Philadelphia. At the same time, students and faculty became comfortable working for an organization open to innovative procedures for organizational reframing. Importantly, the two groups of the mess team had to speak the same language for optimal cooperation. Therefore, at the level of bonding, the scholars lectured their counterparts on Interactive Planning and on the jargon of their methodology. Once the mess team acquired a common language, the Mess Formulation became an uninterrupted process.

Formulating the Mess- Activity 3: Design of the Process of Situational Analysis and its Objectives- Organizational Learning- Use of Soft Information Technology Consulting Tools

However, a significant detail has to exist to bring the four phases to fruition. The individuals who crew a mess team ought to dedicate themselves in the process of Interactive Planning and seek to replenish the methodology with up-to-date consulting tools such as mind-maps and the use of cloud information technology and social media; the collection of organizational data through continuous research and observation; and the creation of rich pictures that depict the entire environment an organization operates. Situational Analysis is a learning process, a professional development, and a social activity. Therefore, a Situational Analysis is a purposeful campaign that has multiple objectives. It dissolves organizational mess, it reframes organizations, it institutes social bonds, and it explores the current technology. Above all, it is a methodology that teaches organizations how to iterate the four phases themselves and be sustainable. Consequently, the mess team ought to be inclined to study organizational cultures, to be unbiased during organizational design, and to be curious for the result of the process. Skeptics avoid the multifaceted organizational nature of the methodology. The process of Mess Formulation requires team enthusiasts who interact with their environment in order to create the ideal future for organizations. The Situational Analysis recruits committed individuals to organizational design.

Formulating the Mess- Activity 4: Consultant- Client Collaboration in Action

Once the two groups of the mess team are energized, they collaborate to fulfill their objectives. In the case of the educational partnership, the scholars'

objective was to help the client realize that the organization was facing an aggregate of challenges. The client's objectives were to identify the traces of their organizational character that can reinforce stagnation. Then the client knowledgeable about organizational constraints designs its ideal organization. The identical objectives between consultants and clients underscore the egalitarian attribute of the Situational Analysis. While Formulating the Mess, the members of the mess team cannot have ulterior motives. The open process of the methodology exposes and isolates any element that inhibits the Mess Formulation or threatens to derail it. Team members who disagree with the proceedings are encouraged to voice their opinion. They can also persuade their peers for their views. But, if a member is constantly a minority voice he or she is obliged to abide by the will of the majority or plainly observe the process.

Formulating the Mess- Activity 5: Description of the Organization's Transactional and Contextual Environment- The Role of Facilitator

A Systems Thinking mindset is crucial for all the members of a mess team. The group of scholars assisted the group from the International House of Philadelphia to think holistically of their organizational environment. At the initial steps of Formulating the Mess, social systems should understand the value of a holistic approach to organizational issues. Therefore, facilitators promote the concepts of transactional and contextual environments. A facilitator is “[a person that] helps a group to elaborate the initial models into a system dynamics model that reflects a shared social reality and consensus around the nature of the problem” (Jackson, 2003, p. 74). Ackoff (1981) argues that the transactional environment consists of “individuals, organizations, and institutions with which

the [organization] interacts directly” (p.90) and the contextual environment “consists of everything other than the transactional environment that effects or is affected by the corporation and over which it has no control and [. . .] little influence”(p. 90). Once an organization is cognizant of its ambience it can reorient its organizational objectives and strategies. Well-defined boundaries of an organizational environment delineate fertile ground for organizational evolution.

Formulating the Mess- Activity 6: Systems Analysis- Organizational Research and Case Study- Organization Identification

Once the individuals have the above prerequisites the mess team is fully functional and moves forward to the phase of systems analysis. The mess team operates using available information in order to configure a social organizational system. The mess team led the system analysis on the International House of Philadelphia through the study of documents, research, dialogue, and business model analysis. The management of the International House of Philadelphia supplied the mess team with evidence internal to the organization such as financial data, hierarchical structure, and the organizational strategic plan. The scholars had also accessed information available to the public such as brochures on the art and culture programs of the organization, its housing facilities, and its website.

On research, the scholarly group utilized the Internet, and conducted interviews and surveys. Initially, the scholars researched the profile of the organization on the Internet. The mess team had to find out the organization’s profile on the World-Wide-Web and how many similar organizations offer

comparable experiences. In addition, the student members of the mess team reviewed the web sites of fifteen other International Houses in the United States and overseas. Their goal was to examine the services offered by the sister organizations. Moreover, they observed similar organizations that offer housing or arts and culture programs in the area around the International House of Philadelphia.

The International House of Philadelphia is a not-for-profit organization located in the city of Philadelphia, in the State of Pennsylvania in the U.S.A. It provides student housing, language classes, and arts and culture programs to its residents, scholars, and the general public. In addition, it offers commercial spaces for rent to vendors and other institutions. The organization was founded in 1911 in Philadelphia and it was the first organization of its kind worldwide. Today, a web of fifteen international houses is spread around the world.

The operational structure of the International House of Philadelphia is based upon the office of the Executive Director, the Business Office, the Housing and Resident Services, the office of Institutional Development, the Building Services and Operations, and the Office of Programs. Its organizational structure is comprised of Officers, of a Board of Trustees, of Emeriti, Honorary and International Trustees, a Center Board, and an International House Board of Delegates. The International House of Philadelphia has a top-down linear organizational hierarchy. At the top of the organization sit the Board of Trustees, the Center Board, and the Board of Delegates. Next in hierarchy rests the Executive Director aided by the Vice President of Institutional Advancement and

the Director of Building Operations. Below the above-mentioned offices lie a number of directors, mid-level managers and staff.

An enterprise view of the International House of Philadelphia organizational environment could be a set of concentric circles. At the center of the circles is the organization itself, encircled by the University City, belonging to West Philadelphia and surrounded by the city of Philadelphia. Similarly, the International House of Philadelphia stakeholders could be defined in three concentric circles. In the middle is the organization of focus. Next circle is the International House of Philadelphia transactional environment, and the third and larger circle would be its contextual environment. Figure 2 and 3 present the International House of Philadelphia organizational environment:

Figure 2. Enterprise View of the International House of Philadelphia Organizational Environment (Source: DYNAM 645 notes)

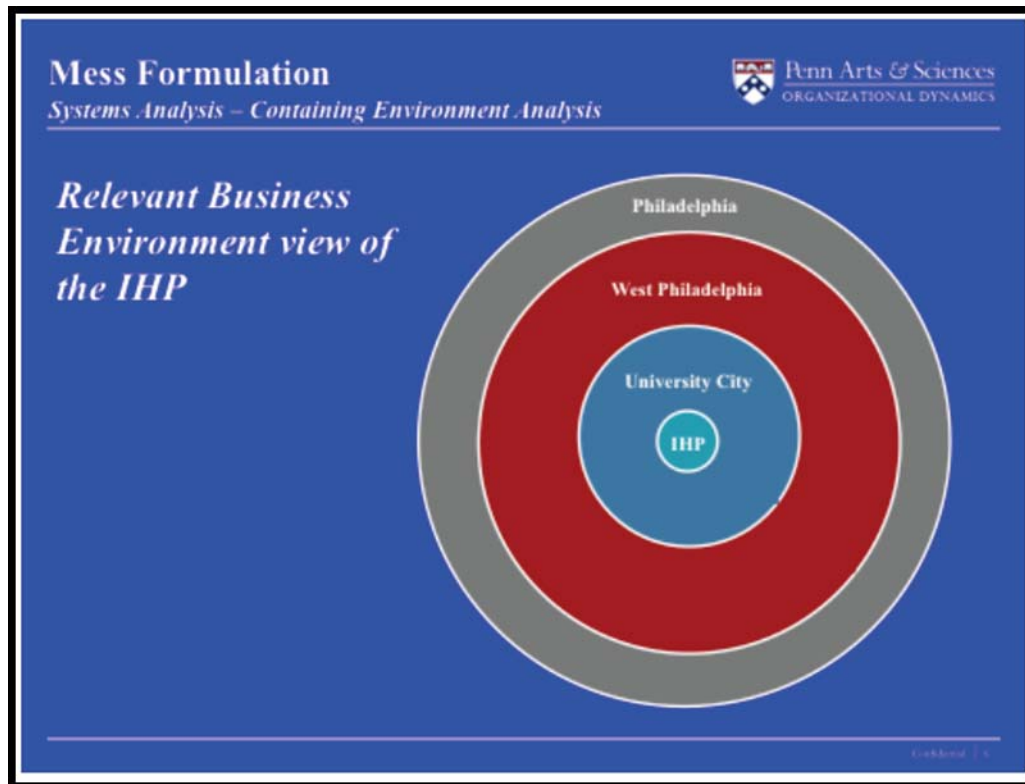
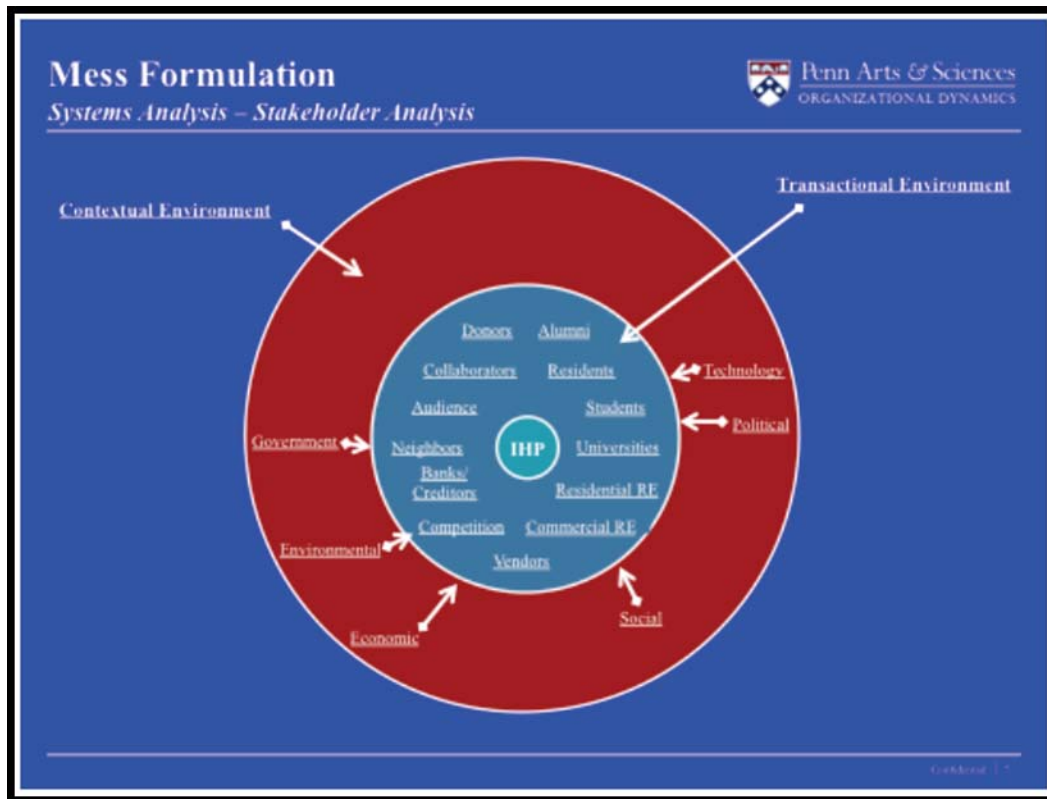


Figure 3. Enterprise View of the International House of Philadelphia Contextual and Transactional Environment. (Source: DYNAM 645 notes)



In the summer of 2011, the International House of Philadelphia celebrates its centennial millstone and it is at organizational crossroads. After hundred years of service to the global community the organization seeks to modernize its organizational model and to update its infrastructure.

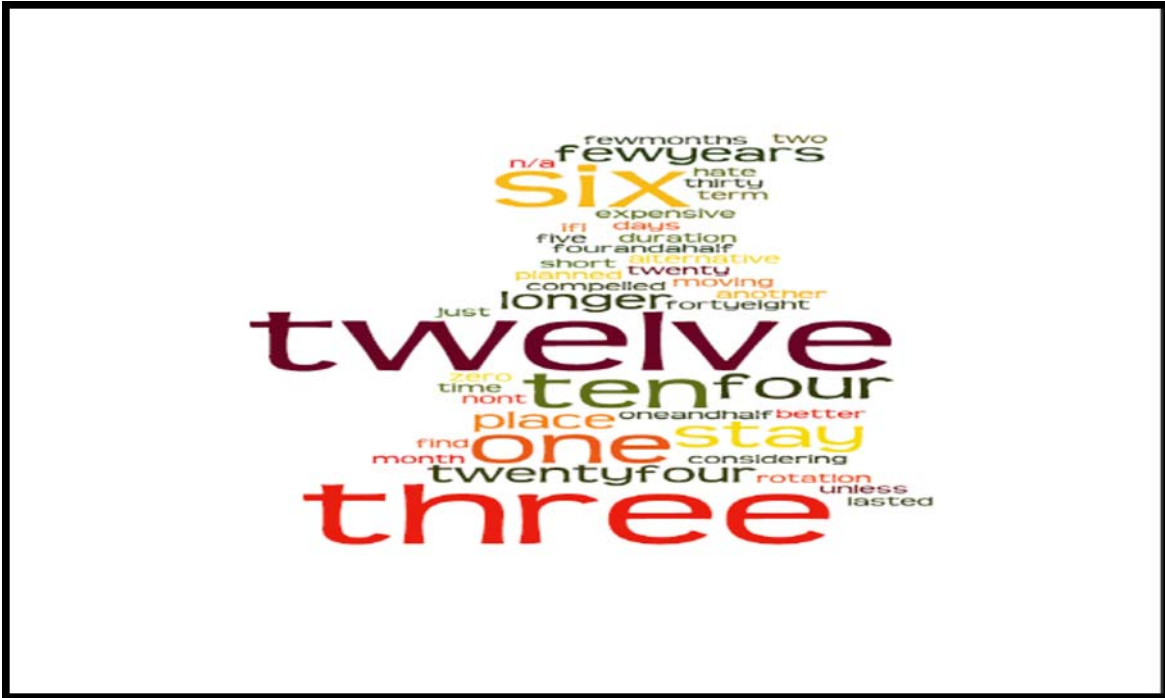
The consultants yearning for deeper understanding on the operations of their client surveyed the residents and interviewed the major stakeholders of the organization. Both of the above activities were developed in parallel. The survey was ten questions investigating the residents of the International House of Philadelphia on the overall services of the organization. During the survey the

respondents had the liberty to write a limited word text and grade the importance of the services of the organization on a scale of one to ten. Online software provided the survey. The survey preserved the responders anonymity and the answers were kept for the client's internal use. The scholars analyzed the written responses based on the rate certain words occurred or repeated and utilized spreadsheets to develop statistical diagrams on responses that scaled the services of the International House of Philadelphia. The survey questions were the following:

1. How did you found out about the International House of Philadelphia?
2. Why did you choose to stay at the International House of Philadelphia?
3. Where were your alternative places to stay?
4. When you were considering possible place to stay, how long did you plan to stay?
5. Now that you are at the International House of Philadelphia, how long have you stayed?
6. Now that you are at the International House of Philadelphia, how much longer do you plan to stay?
7. On a scale of 1 to 10, 10 being very important, how important were the International House of Philadelphia's cultural programs in your decision to stay?
8. On a scale of 1 to 10, 10 being very important, how important were the International House of Philadelphia's art programs in your decision to stay?
9. Have you participated in International House of Philadelphia's arts programs? If so, how many?
10. Have you participated in International House of Philadelphia's culture programs? If so, how many? (Sample of survey questions, Spring Semester 2011. Source: DYNM 645)

Figures 4, 5 and 6 are a sample of the residents' answers to the survey questions (all material is from DYNM 645 notes).

Figure 6. Sample Answer to the Fifth Survey Question (Source: Dynamics 645 notes)



The consultants also conducted seven interviews with members of the International House of Philadelphia. The members of the organization that participated in the interviews were four heads of departments, two members of the Board of Directors, and the Executive Director. Two interviewers asked their interviewees the same seven questions:

1. Can you tell me a story about one of the most personally satisfying experiences you have had here at IHP?
2. Why did you choose to work for a nonprofit educational and cultural organization? What did you want to offer? What did you want to achieve? Have your goals remained the same?
3. (Read the mission statement) . . . Does that mission statement still holds true today or has it subtly changed?
4. What is the one thing you would like to change, with regard to IHP and University City stakeholders that you think prevents IHP from achieving its goals?

5. How does your department help IHP accomplish its mission? How does your department help the other departments achieve their goals? Are you constrained by the work of other departments?
6. How does IHP decide what cultural and arts programs will be offered to the public?
7. How are new ideas brought before the executive committee? What is the process of the executive committee for reviewing these ideas? (Sample of interview questions, Spring Semester 2011. Source: DYNM 645)

The interviews were recorded on audio recorder and notes were kept on paper. Access to the content of the interviews had solely the students and they used it for the purposes of system and obstruction analyses. The students analyzed the interviews during study groups and class sessions. Importantly, that analysis outlined how each of the interviewees identified, understood and envisioned his or her organization.

Formulating the Mess- Activity 7: Sustainable Organizational Learning and System Analysis- Iterations.

The dialogue was in the form of in depth discussions. It took place during the iterations for the Situational Analysis between both groups of the mess team. Its target was to make clear that the participants comprehended the system of the organization, its business model, and the larger system. The ethnographer summarized the iterations and kept written and audio records. In addition, the scholars gave presentations to their clients that provided insights to participants on the organization's status. The presentations enriched the discussions during the iterations. One student had assumed responsibility for presenting the group's findings in the iterations under the guidance of the faculty coordinator and facilitator. The visual aid of the presentations was on a slide deck. The following figures: seven, eight, and nine are samples of the presentation that was delivered on a slide deck during the iterations of the Situational Analysis of the

International House of Philadelphia (see figures 7, 8 and 9 all material is from Dynamics 645 notes).

Figure 7. Sample of the Presentation (Source: Dynamics 645 notes)

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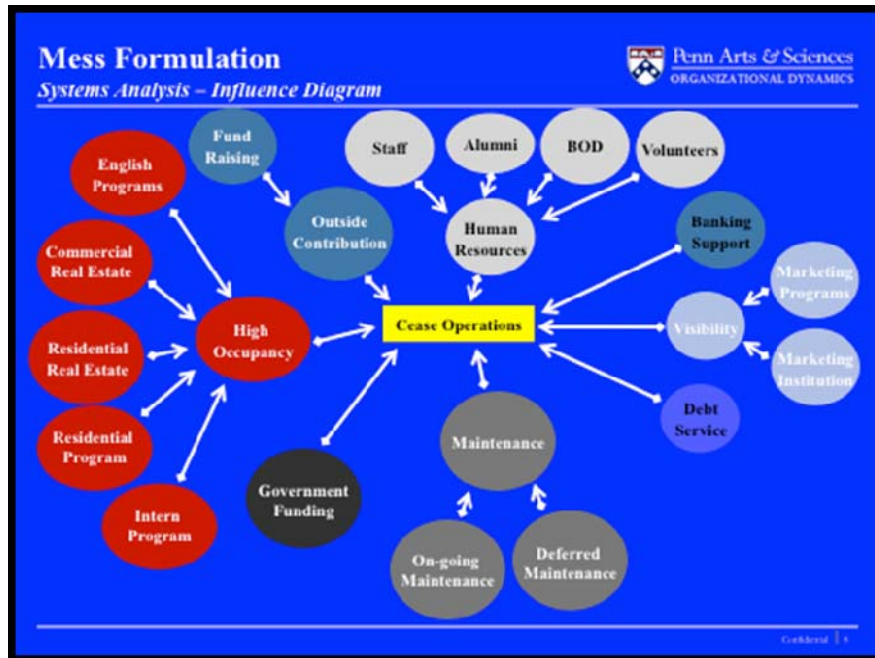
Figure 8. Sample of the Presentation (Source: Dynamics 645 notes)

Mess Formulation
Hypothesis Development

What will happen to IHP if it were going to continue to do what it's doing now regardless of what happens and the environment will change only in ways that organization predicts?

Continued | 2

Figure 9. Sample of the Presentation (Source: Dynamics 645 notes)



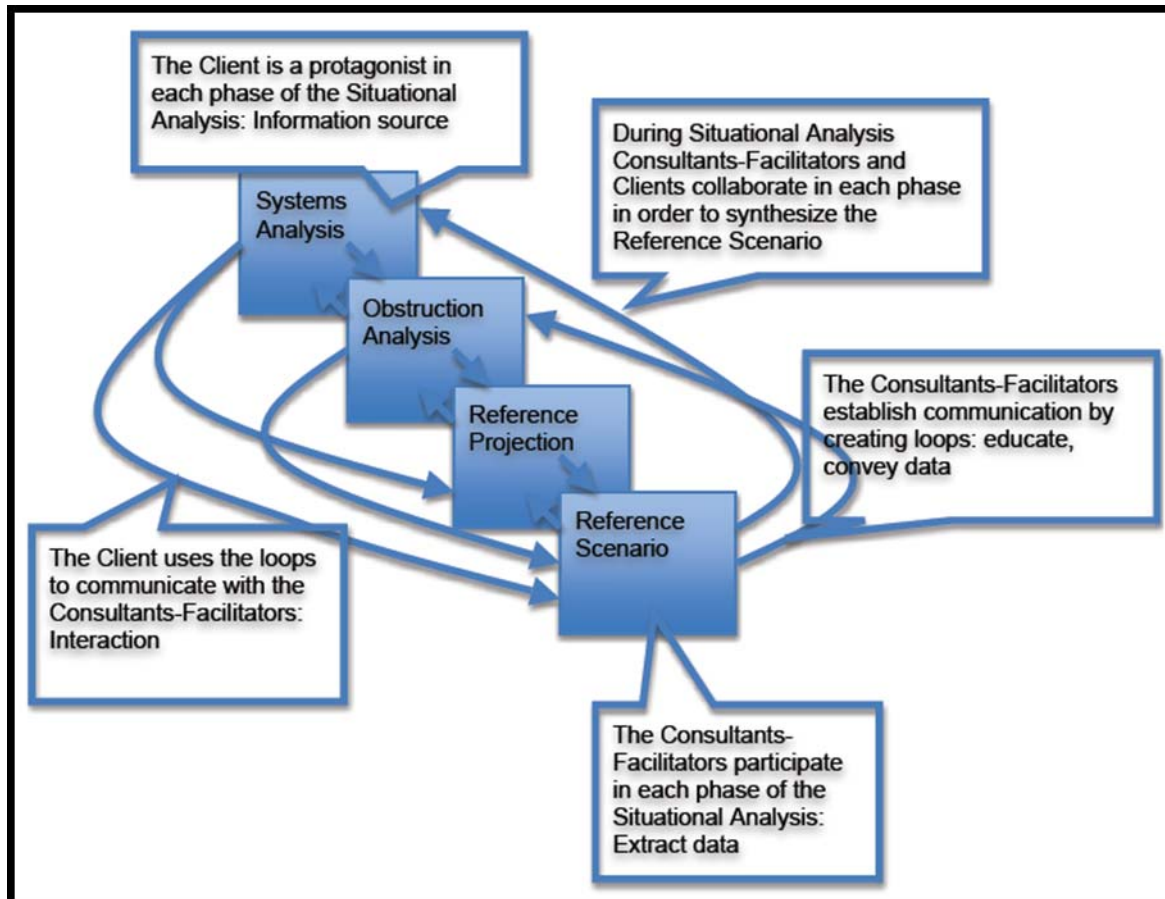
Additionally, the scholars broke down the International House of Philadelphia business model in order to complete the phase of system analysis. The business model analysis was a four steps process: containing environment analysis, programs and services analysis, business model analysis, and stakeholder analysis. International House of Philadelphia internal documents and its website, the scholar's research, the mess team discussions, and literature in organizational design were the students' tools to perform the business model analysis. The official documents of the International House of Philadelphia offered insights to existing management trends in the organization and to synergies among its departments. The consultants depicted the business model analysis of the organization with the following models: an influential diagram on system analysis, concentric circles environment analysis diagram, basic Venn relationship programs and services diagram, an independent cycles programs

and services diagram, and a detailed business process analysis. The graduate program of Organizational Dynamics and the faculty coordinator of the project based course suggested textbooks in Interactive Planning and organizational management to the students and provided to them articles on organizational change, strategies, and design. The suggested textbooks were the following: Ackoff's *Creating the Corporate Future*, *Recreating the Corporation*, Ackoff's Gharadjedaghi's, and Finnel's *A Guide to Controlling your Corporation's Future*, and *Redesigning Society*, and Jackson's *Systems Thinking, Creative Holism for Managers*. The recommended articles were Hammond's: *Learning by the Case Method*, Ackoff's *A Brief Guide to Interactive Planning and Idealized Design*, Jack Griffin's *Ouster: Lessons from a Failed 'Change Agent'*, Pourdehnad's and Robinson's *Systems Approach to Knowledge Development for Creating New Products and Services*, Edmondson's *Strategies for Learning from Failure*, Brown's *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*, Nussbaum's *Design Thinking is a Failed Experiment, so What's Next?*, Ackoff Center Blogs: *A Conversation Between Russell Ackoff and Edward Demings*, Baldoni's *What Teaching Taught me About Management*, Abelson's *A Legendary Think Tank Shows its Age* , and the Charlie Rose *Brain Series Episode Twelve: Creative Brain*. Notes distributed were Pourdehnad's *Formulating the 'Mess' What's Going on Around Here?* and *Using Interactive Planning to Create the Future Now*.

Formulating the Mess- Activity 8: Sustainable Organizational Interaction and Communication

At the first step of mess formulation both groups of a mess team facilitate the process. In the educational partnership the scholars facilitated the mess formulation with their knowledge on the methodologies of Interactive Planning and the passage from one phase of the Situational Analysis to the next. Subsequently, the client shared information on the organization, adapted a flexible time schedule to participate in iterations with the scholars and encouraged the interviews and surveys. That both scholars and client assumed the role of facilitator in formulating the mess proves that both groups were one team working in tandem. In addition, this explains the feedback loop and the organizational learning during Mess Formulation. The consultants steer the client through the four phases. Then, the client reciprocates with a similar culture: access to information and sharing of thoughts and vision. Also, the dialogue revealed that silos do not separate the two groups of the mess team. There is not “them and us” in the process of formulating the mess. Synergy between the members of a mess team is the key to a successful Situational Analysis. The dialogue reappears through out the remaining phases. Figure 10 illustrates consultant-client teamwork:

Figure 10. Influence Diagram Illustrating the Synergy between Consultants and Clients



Formulating the Mess- Activity 9: Obstruction Analysis

At the level of Obstruction Analysis, a mess team identifies the routines of the organization that blocks its development. In the example of the International House of Philadelphia the students from the Organizational Dynamics and their counterparts addressed the issues that could distract the organization from attempting to modernize its operations. At this point, it is important to note that the scholars bore a larger amount of work because they were outside the organization looking in. Therefore, they could describe what elements obstruct the organization's progress with out any bias. The scholars' means to perform

the obstruction analysis were the literature on Interactive Planning, the results on the analysis of the interviews, the findings from the web survey, and the conclusions the consultants draw from the business model analysis. Readings in Interactive Planning, specifically, in obstruction analysis educated the students on discrepancies and conflicts that trouble organizations. The pieces were Ackoff's book *Idealized Design* and the chapter on Formulating the Mess the section dedicated on Obstruction Analysis in Ackoff's *Creating the Corporate Future*. The above readings blended with study group analyses and class lectures helped the scholars to focus on key words and phrases of the client and to synthesize the obstructions. Comparison of the statements of each of the interviewees revealed their beliefs, visions, and understanding of their organization's status. The answers to the survey questions disclosed how the residents experienced their living in the International House of Philadelphia and the arts and culture services. The consultants analyzed the survey responses during their study groups and compared them to the interviews and the summaries of discussions. The students-consultants used a web-based software tool to analyze their web-based surveys that showed frequency of appearance of keywords of written answers and percentages of participation in the International House of Philadelphia events and culture programs on multiple-choice questions. They discussed the results of the surveys and they compared them with interview statements they had collected. That project helped the participants understand how the residents' and members of the International House of Philadelphia viewpoints converge or diverge on the operations and objectives of the

organization. In addition, the faculty coordinator with the insight of a student with a financial background analyzed the client's financial data over accounting. The business model analysis produced data that brought to light a good deal of information regarding the organization's financial and market status. These data exposed the consultants and the client to veiled traps malignant to the organization's development.

At the level of obstruction analysis the mess team reaches a maturity level attributed to the personal work of each of its members. Each participant in the project-based course was committed to a certain task. Each task analyzed and compared organizational aspects of the client based on the information collected from the previous step: interview statements, financial data, organogram, arts and culture programs, location of the organization, building condition, the International House of Philadelphia residents' demographics, and web surveys. Then in study-group sessions the students discussed their findings, synthesized them, and they compiled a single work that was shared with their instructor during class sessions. In class, the students and faculty elaborated on their evidence and they embellished it with the necessary language and concepts from Interactive Planning.

Notably, the work of the mess team had to be integrated and presented in a way that reflected Systems Thinking mindset. The work each member of the mess team had concluded and complemented the team effort had to be delivered as an integrated whole that could be always enhanced until the completion of the last step: the reference scenario. This is the reason the Mess Formulation is

characterized by iterations and the reason each step of the process borrows continuously traits from the other.

Formulating the Mess- Activity 10: Reference Projection- Assumptions

The mess team has to confirm its skills when progressing into the phase of reference projection. In Reference Projection details of an organization, particularly financial features are projected into the future. This is a delicate part of Situational Analysis because it utilizes the client's sensitive and confidential financial information. For the period of the educational partnership, the representatives of International House of Philadelphia provided its strategic plan and business facts to their counterparts from Organizational Dynamics. The students studied their client's financial statements. They analyzed them carefully, categorized them in terms of revenue, expenses, assets, and income, and they projected them into the future. The projection was predicated on the assumptions that the organization maintains its status of operations and expects no changes in its future environment (Ackoff, 1981).

The purpose of the reference projection is not to foretell the future and panic organizations or create animosity among its members. The reference projection is a sophisticated method that exposes pitfalls in the financial documents of an organization. It makes explicit that despite current bloated financial numbers and short-term profits a downward trend in income and revenue, and an inflated deficit would potentially haunt the organization. A reference projection advises members of organizations to forego their comfort zone and adapt to changes that would make their organization sustainable.

A mess team must not insult its client when it projects its financial behavior over time. The key player for an impactful reference projection is the consultant-facilitator. He or she must handle with professionalism the financial statements of the client with respect to its position in the market. Moreover, the calm attitude of the facilitator while delivering the reference projection is a catalyst for conveying the message of organizational change. The facilitator must also have sound financial knowledge and background in order to read an organization's financial trends and to convince the client for the honesty of the financial analysis.

It is worth noting also that in the project of International House of Philadelphia the reference projection was prepared in parallel with the system analysis and performed immediately after it. The reshuffling of the three first steps of Situational Analysis showed that their order is not imperative. Also, an early reference projection can help a mess team discover evidence-explaining obstructions to organizational evolution that otherwise it would be puzzling. A student with analytic business skills and a faculty coordinator, seasoned in reference projections, shouldered the responsibility of this phase and delivered bottom-line projections in the Mess Formulation meetings.

Formulating the Mess- Activity 11: Reference Scenario- Synthesis- Closing Argument

The reference scenario concludes the Situational Analysis and pronounces the way an organization would hurt itself if it failed to heed the warnings. At this last stage organizational knowledge, system and obstruction analysis, reference projection assumptions, and the toil of each member of the

mess team converge into one document. The members of the group of Organizational Dynamics were tasked with writing the reference scenario their equivalents from the International House of Philadelphia provided comments. Although one person took the lead in writing the first draft of the document, this development was a team effort. Specifically, the faculty coordinator tasked a student with taking the lead in writing the Reference Scenario. The student wrote the first draft of the Reference Scenario having as an initial source the slide deck that contained the analysis on the process of Formulating the Mess, the interview and survey answers and results, and the description of the client's organizational environment. The author enriched the document of the Reference Scenario with graphs and matrices derived from the mess team's work on the organization's financial information and survey responses, and with images of the organization. The objective of the student that composed the Reference Scenario was to create a document that would resemble a business journal article. The writing style and language used in the document were business oriented and dramatic in order to impact on the organization's top hierarchy attention and underline the urge for organizational change. The rest of the members of the mess team after they read the first draft they offered their insight on information that could be added. The scholars of the mess team convened in class and study groups and exchanged ideas on few items: writing style, financial and social systemic data, hypothetical story that coated the data, truthfulness of the message, all elements of the message the reference scenario attempted to convey. Moreover, the mess team consulted its faculty and it read samples of reference scenarios to

understand the spirit of such a document. The document was submitted to the client at the end of the process of formulating the mess that was equal to one academic semester.

Writing a reference scenario is a pluralistic and authentic activity. It is pluralistic because all the members of the mess team participate equally in its composition and they transcribe the best of their ideas. They also share drafts of the reference scenario with their client and ask for feedback. Subsequently, it is an incorruptible document because it relies on existing organizational data. The authors of the reference scenario do not attempt to intimidate their audience but to provoke its imagination for an organizational development that could be a reality. Thus, the reference scenario is not a hoax.

Furthermore, the reference scenario uses, as it has been stated, organizational data collected and analyzed during its preceding phases embellished with a hypothetical narrative. That enables the mess team to plainly warn an organization on its potential demise by calling a spade a spade. Principally, a reference scenario investigates threats that would harm the organization and seeks opportunities that can impel an organization to change. In this respect, the reference scenario reflects the beliefs, visions, and innovative spirit of the mess team in authoring a compelling story. In addition, the reference scenario after it is completed remains unpublished and it is at the discretion of the client to make it known and to whom. Above all the reference scenario is a closing argument to a case with social ramifications.

CHAPTER 4

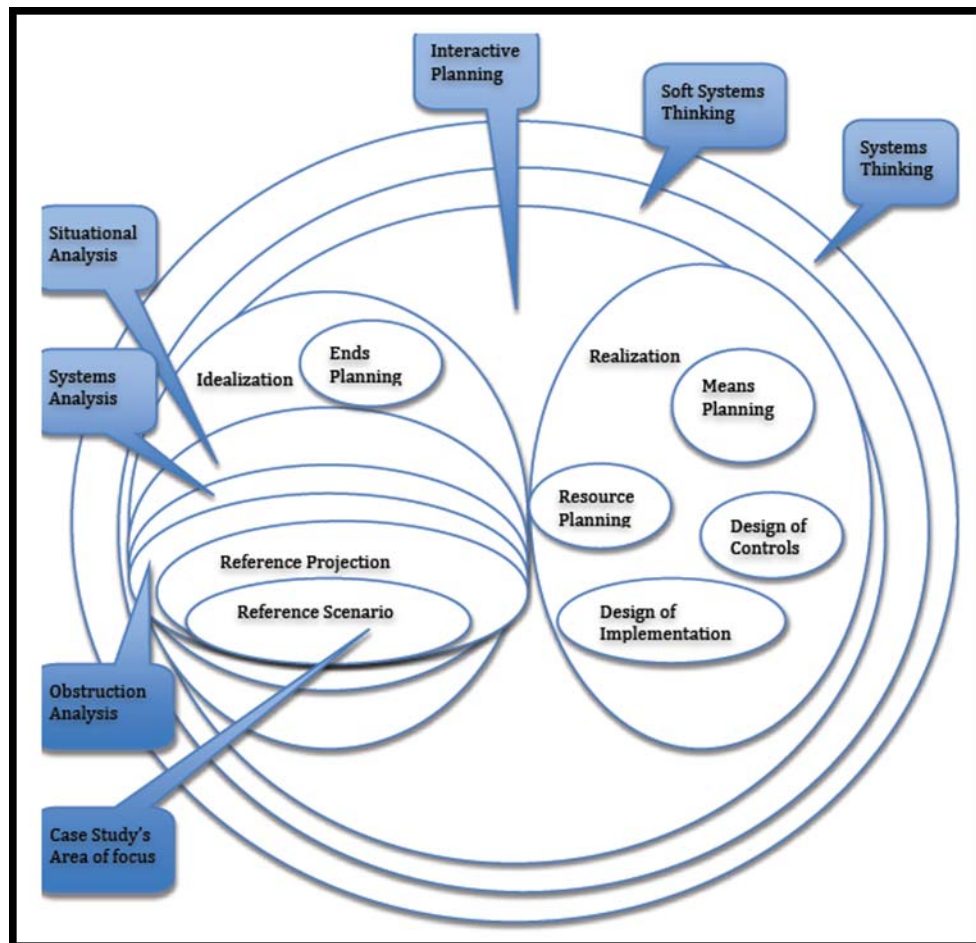
CONCLUSION

Interactive Planning as a Learning Process

Members of organizations cannot pinpoint the right problems that obstruct organizations from reaching their full potential if they maintain an exhausted mechanistic mindset. The Newtonian thinking ossifies organizations' intellectual and financial capital. As a result, organizations fall victims of their poor market and community services and stall indefinitely. Therefore, it is vital for social systems to take action and confront organizational hardships and adapt to changes in their systemic environment.

In this respect, this capstone concentrated on how a team of Organizational Dynamics scholars followed the process, methods and systematic organizational developments of Situational Analysis. It described the mess team's purpose for changing a parochial social model and dissolving the International House of Philadelphia systemic problems. Formulating the Mess for the International House of Philadelphia became a learning, social, and management process that demanded holistic thinkers. The participants became systemic thinkers through lectures on organizational environments, studies on organizations' literature, and collaboration. They also learned how to emancipate the International House of Philadelphia social system from an idled mindset. Figure 11 shows the steps of the Interactive Planning methodology and its containing systemic environment source: Dynamics 645 notes. Furthermore, it points out the area in which the mess team worked:

Figure 11. Systemic Environment of the Interactive Planning Methodology
(Source: Dynamics 645 notes)



The Principle of Interactivism

In Interactive Planning idealization, realization and Idealized Design could coexist. The Situational Analysis paints the whole picture of an organization and addresses systemic challenges while the design process of an ideal social system develops. Ackoff, Magidson, and Addison, (2006) describe the stages of idealization and realization as interactive processes that coproduce Idealized Design. In particular, they state in the description of Interactive Planning that the processes of idealization and realization are the fundamental points for a successful Idealized Design and that it can occur without any of the other stages

being realized. Situational Analysis' unique attribute is that it invites organization stakeholders to participate in the process.

During the Situational Analysis for the International House of Philadelphia participation and interaction were the two key concepts that raise the value of Interactive Planning and make Situational Analysis attractive. The substance of participation is extolled by Ackoff, Finnel, and Gharajedaghi (1984) who write:

The most important [. . .] benefit of planning is not derived from use of its product, a plan, but from engaging in its production. In interactive planning, process is the important product. By engaging in the process its participants come to understand their organization and its environment, and how their behavior can improve performance of the whole, not just the part of it (p.7).

The Value of Time in Interactive Planning

Time is an important component of Situational Analysis. Ackoff, Finnel, and Gharajedaghi (1984) discuss interaction in its relation to time and particularly the future. In Interactive Planning, the significance of interaction is based on the quality of one's character to connect with his or her environment and plan a future. Anew, Ackoff, Finnel, and Gharajedaghi (1984) note that interaction is "a type of planning [that] consists of the design of a desirable future and the selection of intervention of ways of bringing it about as closely as possible" (p.5).

During the Situational Analysis for the International House of Philadelphia, time was determined by iterations. These refer to the number of meetings that the mess team needed to drive home the point of organizational restructuring. A mess team does not institute a standard number of iterations. However, during the International House of Philadelphia partnership the iterations had to be sufficient for the mess team to exploit all organizational data and keep its task

interesting. As a general observation, time refreshes at the end of the last iteration, the client-organization learns the process of Formulating the Mess, and it can repeat it any time it deems it necessary.

Iterations are also a time constraint of Situational Analysis. A limited number of iterations suggest rigorous implementation of Situational Analysis. Therefore, the mess team has to manage creatively its precious time. Missteps or lack of concentration during implementation expend mess team's time. Time mismanagement results in rushed analysis and synthesis of organizational data or suspension of the process. Consequently, the facilitator and his or her mess team produce a derisory sum of work with serious repercussions for the entire process. The number of iterations the mess team conducted for dissolving the International House of Philadelphia systemic problems was five. These gave the chance to the student participants to articulate their argument for organizational change, engage in discussion with the representatives of the client on their approach to organizational messes, and collaborate on dissolving the International House of Philadelphia issues.

Ackoff (1999) argues that the three traditional forms of management originate from an organization's attitude toward time. He defines time as an obliging variable that has three categories: the past, the present, and the future. He also links the attitude towards time to an organization's determination towards change. Significantly, Ackoff (1999) explicates the importance of time in designing the future during Interactive Planning:

[. . .] the objective of management and planning should be to create as much of the future as is possible. This is the objective of a new type of

management, the interactive [. . .]. [. . .] it does not think of good and bad as functions of time and it does not think of what time does to us as good or bad, but of what we do to time as good or bad (p.55).

The inextricable relationship of individuals, organizations, and time bonds the members of a mess team, the stakeholders, and the members of organizations and lifts stumbling blocks to complete the process of Formulating the Mess.

Situational Analysis provides to its participants the organizational time and space to demonstrate their professionalism and unleash their creativity. It liberates individuals' resourcefulness and their organizational capacity for innovation. These two qualities are indispensable to a facilitator help his or her creative mind to form pathways to organizational change. Also, according to Ackoff (1981) the process of Formulating the Mess orients its participants towards specific methodology outputs under certain criteria.

The Paradox of Interactive Planning

Wilson (2011) underlines an Interactive Planning oxymoron. Although Formulating the Mess is a process of holistic thinking that conceives organizations as integrated and purposeful systems, one understands only through its analysis. He notes:

As a methodology based on the principles of Systems Thinking, it is indeed ironic that the best way of describing its basic characteristics it is through a description of its major parts. Notwithstanding this irony, Dr Ackoff's powerful methodology can be best understood by studying the following basic components: Mess Formulation, Idealized Design, Means Planning, Resource Planning and finally Implementation and Control (p.1).

Nevertheless, the fact that a facilitator and a mess team have to break down the process of Situational Analysis does not contradict the holistic

approach to organizations. At the contrary, it is through analysis that the Mess Formulation achieves its objective to dissolve complex organizational problems.

Interestingly, the mess team for the International House of Philadelphia educational partnership engaged in a linear and non-linear activity while Formulating the Mess. In theory, the mess team followed Ackoff's four subsequent phases of Situational Analysis and analyzed the organizational data it collected along the process. At the same time, the scholars approached systemically the International House of Philadelphia Situational Analysis. While they analyzed the organizational environment of the client they observed, analyzed, and studied activities in the Obstruction or Reference Projection phases. The scholars-consultants did not view each phase as a silo of providing information but as a conduit to the Reference Scenario. Therefore, each phase funneled information following the later steps of Formulating the Mess provided to clues to earlier activities.

The Tasks of the Mess Team

The Organizational Dynamics scholars and their counterparts from the International House of Philadelphia carried out the process of Situational Analysis. The students and the organization's staff and board members were from various scientific disciplines. Each one of them contributed his or her educational and professional experiences to the process. Especially, the participants from the Organizational Dynamics divided the different tasks of the process among each other. One student with a strong background in finance worked on the reference projection. Another student with good communication

and synthetic skills took the lead in writing the reference scenario. A different student with good information technology skills organized the interview sessions and posted surveys and group findings on a discrete location on the World-Wide-Web, and the author assumed the responsibilities of an ethnographer. Two members of the International House of Philadelphia board of trustees, the executive officer of the organization, and heads of departments composed the organization's mess team. They added their insights and valuable knowledge on the International House of Philadelphia to each phase of the Situational Analysis and they facilitated the interviews and surveys in the process. Eventually, all collaborated to formulate an inspiring conviction for organizational change.

The Reference Scenario as a Closing Argument

In conclusion, the process of Situational Analysis is a synthesis of knowledge acquired from each of the phases. Its purpose is to deliver a compelling closing argument for organizational change and sustainability. In law, an attorney tries to establish a strong link between the facts of a case and the law (ISBA Center for Law and Civic Education, 2010). Similarly, a mess team collects evidence during the analysis of an organization and links it to its objective: persuade the client to organizational changes. As the mess team collects its facts it needs to systematize them in the phase of the reference scenario. The strength of a closing argument depends on its "organized, well reasoned presentation that emphasizes the strengths of the client's case and addresses the flaws of the opponent's case" (ISBA Center for Law and Civic Education, 2010). Therefore, a reference scenario articulates the need for

organizational change through a dynamic narrative. An impactful narrative depends on the mess team's ability to organize its findings, and integrate them with comprehensive and convincing language.

In the International House of Philadelphia case the scholars synthesized the information they gathered from organizational documents, interviews, surveys and discussions and produced a written Reference Scenario. The information analysis by the consultants evidenced the document and incited organizational change. The Reference Scenario was effective because it made clear to the members of the organization that organizational change was inescapable if they wanted to avoid organizational demise. Moreover, what strengthened the arguments in that document was the well preparation of the mess team before each time they met with representatives of the International House of Philadelphia, the impactful presentations during iterations, and the scholars' ability to view holistically the organization's environment.

Collateral Veins: Situational Analysis and Knowledge

The process of Situational Analysis that was implemented in the International House of Philadelphia was a journey that showcased how organizational redesigning develops. It departed from a specific point: the organization's structural challenges due to an outdated business model, and it had a well-defined final destination: the International House of Philadelphia enhanced services to international students and scholars through organizational reframing. In between, the four phases of Situational Analysis with ongoing

research, data analysis, synthesis of information and communication created knowledge of institutional structures and organizational dynamics.

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