# UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

#### MOSAIC METAPHOR OF ORGANIZATIONS

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# MOSAIC METAPHOR OF ORGANIZATIONS

# A DISSERTATION APPROVED FOR THE GRADUATE COLLEGE

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#### Dedication

I dedicate this dissertation firstly, to the concept of tolerance for others; secondly, to my family and friends; thirdly, to the dissertation chair and committee; fourthly, to all the amazing individuals involved in Advanced Programs; and finally, to the very competent university personnel that bring it all together and make it all happen.

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"It must be considered that there is nothing more difficult to carry out, nor more
doubtful of success, nor more dangerous to handle, than to initiate a new order of
things."
Niccolo Machiavelli, The Prince

"Midway between the unintelligible and the commonplace, it is metaphor which most

produces knowledge."

### TABLE OF CONTENTS

PART ONE:	INTRODUCTION	
Chapter One:	Overview of Dissertation	1
Chapter Two:	Statement of Problem	2
Chapter Three:	Organization of Dissertation	4
Chapter Four:	Statement of Concepts and Definitions	6
PART TWO:	METAPHORS OF ORGANIZATIONS	
Chapter One:	Metaphors	15
Chapter Two:	Taxonomy of Metaphors	17
PART THREE:	SOCIETAL MODEL of MOSAIC METAPHOR	
Chapter One:	Societies as Models	26
Chapter Two:	Organizations as a Microcosm of Society	36
PART FOUR:	ANALYSIS of THREE ORGANIZATIONAL META	<u>APHORS</u>
Chapter One:	Environment and Diversity	41
Chapter Two:	Organizational Structure	64
Chapter Three:	Management Theory	77
Chapter Four:	Leadership Theory	93
Chapter Five:	Emotion, Motivation, Power, and Relationships	121

PART FIVE:	CONCLUSIONS		
	Summary and Scholarly Contributions	140	
PART SIX:	<u>REFERENCES</u>	146	

# LIST OF TABLES

Table 1:	Environment and Diversity	50
Table 2:	Organizational Structure	69
Table 3:	Management Theory	87
Table 4:	Leadership Theory	112
Table 5:	Emotion, Motivation, Power, and Relationships	131

# LIST OF FIGURES

Figure 1:	Machine Metaphor of Organizations	11
Figure 2:	Organism Metaphor of Organizations	12
Figure 3:	Mosaic Metaphor of Organizations	13

#### Abstract

Organizations, and their leaders, face many threats and opportunities in their environments at any given point in time as they attempt to survive and thrive. In the 21<sup>st</sup> Century, one of the most significant threats and opportunity is for organizations to adapt externally and integrate internally in relation to changing demographics.

This dissertation describes and explores how metaphors, in general, can aid organizational leaders and members grasp the complexity of this change. The metaphor, *mosaic*, is introduced and suggested at the organizational level based on its use at the societal level in Canada. Additionally, Canada's national metaphor, the cultural mosaic is contrasted to the U.S.' national metaphor, the melting pot.

This dissertation describes, explores, and analyzes the machine, organism, and mosaic metaphors of organizations in relation to the environment and diversity, organizational structure, management theory, leadership theory, and finally, emotion, motivation, power, and relationships. Each metaphor provides a unique perspective.

Organizations have evolved from traditional hierarchies to less traditional matrices, and to boundaryless, flat organizations, as appropriate. Organizations have also shifted from transactional leadership represented by the machine metaphor towards more participative leadership represented by the organism metaphor, and even to leaderless, shared, and transformational leadership represented by the mosaic metaphor.

There is no one best organizational structure, management theory, or leadership theory or style but organizations do need to be responsive to their environment.

However, leader behavior consistent with neocharismatic leadership paradigm, which the mosaic metaphor represents, might be universally accepted and preferred.

#### PART ONE: INTRODUCTION

#### Overview of Dissertation

The goal of this dissertation is to introduce the mosaic metaphor at the organizational level. The mosaic metaphor can aid and guide organization leaders and members to address changing environments, including changing demographics. The mosaic metaphor will be compared and contrasted to the machine and organism metaphors in relation to organizational structure, management and leadership theory, and related organizational issues such as emotion, motivation, and relationships.

Metaphors, such as the organization as a machine, an organism and a mosaic, can help orient an organization to better meet the threats and opportunities presented by the environment at any given point in time. The machine metaphor is suited to stable environments as it is somewhat rigid and unresponsive. The organism metaphor is suited to changing environments and is more responsive. The mosaic metaphor is suited to turbulent environments involving a great deal of change and complexity, as it is potentially the most responsive metaphor.

The machine metaphor invokes the efficiency of machines that operate without complaint, decisions, dissent, and emotion. Machines do not require motivation nor participate in personal and professional relationships. The organism metaphor invokes the complexity of living organisms that are born, grow, decline, and die. Organisms adapt to their environments in order to survive. The mosaic metaphor invokes diverse individuals or departments working together to mutually create an organization.

Organizational metaphors can support organizational structure and type. The machine metaphor works well in mechanistic organizations with an emphasis on

manufacturing operations. The organism metaphor works well in organic organizations with an emphasis on service. The mosaic metaphor works well in boundaryless or virtual organizations with global, high technology operations.

Organizational metaphors can support different management and leadership theories. The machine metaphor supports traditional management theory such as bureaucracy, scientific management, and transactional leadership. The organism metaphor supports behavior and contingency theory such as management grid theory, which specifies flexible leadership styles. The mosaic metaphor supports systems thinking and transformational leadership theory.

Organizational metaphors highlight different orientations to emotion, motivation, power, and relationships. The machine metaphor is thought to be devoid of emotion, and limited to extrinsic motivation, power differentials, and hierarchical relationships. The organism metaphor involves increasing awareness of emotion and the complexity of motivation, power and relationships. The mosaic metaphor places emotion, complex motivation, power sensitivity, and relationships at the forefront.

Organizational metaphors are not however restricted by and to environment, organizational structure or type, or management and leadership theory. Their value is in the unique perspective they provide which is determined on a case by case basis.

#### Statement of Problem

Environments are ever changing and evolving, as well as interconnecting.

Interactions between and within populations and their organizations have accelerated with ease of communication, technology, and travel. Interactions transcend geographic

space and time boundaries, presenting challenges for organizations. Organizations may operate globally where in the past they operated more locally (Alland, 1980; Brown, 2009; Brown, 2011; Friedman, 2006; Geothals, Sorenson & Burns, 2004, pp. 154, 577).

Organizational structures are also changing and evolving. Traditional organizations tend to be hierarchical with leadership concentrated at the top. Organic organizations can be less hierarchical with leadership dispersed in project matrix organization. Boundaryless or virtual organizations tend to be flat with dispersed leadership and cross functional teams operating globally (Hellriegel & Slocum, 1992; Natemeyer & McMahon, 2001; Northouse, 2004).

Management theories are changing and evolving too. Traditional management theories are primarily concerned with efficient production and profit for key stakeholders through bureaucratic principles. Later management theories became more concerned with people and understanding motivation. Organizational leaders and organizations must now find a balance between concerns for production and for people. Furthermore, management theory can be distinguished from leadership theory (Burns, 1978; Natemeyer & McMahon, 2001; Northhouse, 2004; Yukl, 2006).

Leadership theories too are changing and evolving. Early leadership theories focused on traits of primarily male leaders in the search for universal leadership qualities. Subsequent leadership theories considered leadership and the situation or a combination thereof. Later leadership theories focused on the leader trait of charisma. There was a general progression from transactional to transformational leadership styles (Burns, 1978; Natemeyer & McMahon, 2001; Northhouse, 2004; Yukl, 2006).

Additionally, individuals and organizations are not necessarily as rational as suggested by traditional management and leadership theories. Alternative conceptions of leadership, and the importance of creativity and emotion, have been gaining in focus. Transformational leadership reflects these trends in society and organizations and the mosaic metaphor supports transformational leadership (Burns, 1978; Fletcher, 2001; Goleman, Boyatzis & McKee, 2002).

A perceived gap in the literature has to do with the increased diversity in society and organizations resulting from the confluence of changes and challenges in the environment. Individuals and leaders come together in organizations from all different abilities, ages, backgrounds, genders, orientations, and races. Greater diversity internally and externally presents challenges of internal integration and external adaptation (Harvey & Allard, 2005; Natemeyer & McMahon, 2001; Thomas, 2005).

A related gap in the literature has to do with organizational metaphors. The machine metaphor was extremely relevant and useful during the Industrial Revolution. Many organizations realized huge increases in profit and productivity. However, there was parallel pressure on both human and natural resources. The organism metaphor fills the gap left by the machine metaphor beautifully but leaves wanting a more narrow focus on increasing diversity of human resources which the mosaic metaphor fills.

#### Organization of Dissertation

The dissertation consists of six main parts: introduction, metaphors of organizations, societal model of mosaic metaphor, analysis of three organizational metaphors, conclusions, and references.

This introduction part forms the foundation for this theoretical exploration of metaphors and how they are useful to organizational leaders and members. It consists of four chapters: overview of the dissertation, statement of the problem, organization of the dissertation, and statement of the concepts and definitions. Three figures are presented as visual representations of organizations in relation to the three metaphors: machine, organism, and mosaic.

The second part is a literature review of metaphors and consists of two chapters: metaphors and taxonomy of metaphors. Metaphors provide fresh insights into familiar concepts, act as a bridge between known and unknown concepts, and otherwise aid in grasping unfamiliar concepts by linking them with familiar concepts. Metaphors operate at a superficial, deep, and meta level, providing insights into organizations.

The third part offers a model of the mosaic metaphor at a societal level and consists of two chapters: societies as models, and organizations as a microcosm of society. The mosaic metaphor has been used to describe a modern, multicultural and vibrant country: Canada. The so-called Canadian Cultural Mosaic serves as a model at the societal level for the mosaic metaphor at the organizational level.

The fourth part is the analysis of the three metaphors and consists of five chapters. The first chapter explores the environment including diversity, and the second chapter discusses organizational structure. The third and fourth chapters present management and leadership theory respectively. The fifth chapter is emotion, motivation, power, and relationships.

The fifth part of the dissertation is the conclusions and consists of summary and scholarly contributions. It is concluded that there is no one best organizational

structure or type, no one best management and leadership style, and no one best metaphor for organizations. Rather organizational structure, management and leadership, and organizational metaphor should be compatible and fit with the environment and should be determined on a case by case basis.

The dissertation is intended to provide alternative perspectives of organizations and organizational leadership through the analysis of different metaphors.

#### Statement of Concepts and Definitions

#### **Metaphors**

Metaphors, in general, associate one concept with another in order to provide insights and a fresh way of looking at concepts. The acceptance, effectiveness and usefulness of metaphors depend on the current concepts and norms of behavior in society. An example might be "the man is a lion." This implies the man has the qualities of a lion that might be aggressive, dangerous, fast, ferocious and strong.

A different example might be "the woman is a lion." Given the stereotypical image of a woman that persists in many societies, this metaphor elicits very different images, reactions and responses. To imply that a woman is aggressive, dangerous, fast, ferocious and strong may seem to go "against the grain" and violate norms of society. It might not produce the positive evocations that is does when used to describe a man.

Although helpful at generating new images of a man or woman, metaphors can also have the unwanted effect of creating distortions and "constructive falsehoods." In this example, the metaphor may serve to reinforce the stereotypes of men being

ferocious and women being tame. Metaphors are a two-edged sword as far as providing mental frameworks and thus used with this caution in mind (Morgan, 1943).

The use of metaphor does, more often than not, accomplish the goal of viewing common understandings in a new way. The point is not whether we agree or disagree, but the fact that familiar concepts and entities are seen from a new angle and perhaps new comparisons, norms, relationships and values evolve as a result.

Changes in norms, as well as unfamiliar behaviors and concepts, can be captured by the appropriate metaphor. The role of women for example has changed enough in many developed countries to warrant the use of the metaphor, cougar. The metaphor cougar is used to describe some of the newly acceptable and evident social behaviors for women. A cougar is not afraid to initiate social contact with younger men.

Metaphors are powerful and useful bridges particularly during times of upheaval. Metaphors operate by linking known concepts with new concepts and images (Marshak, 1993). They are "basic to the intellectual processes humans use to determine truth, facts, and meaning" (Ott, 1989, p. 29, citing Nietzsche, 1968).

The thoughtful application of metaphorical analysis can be effective to deal with complex and often irrational and paradoxical nature of organizational life. According to Cleary & Packard, 1992, p. 3), "metaphorical thinking is common in organizations and represents a fruitful and untapped area for increasing organizational effectiveness".

#### Metaphors of Organizations

Morgan (1943) in his classic publication *Images of Organizations* identifies various organizational metaphors. The metaphors range from organizations as

machines, organisms, brains, cultures and political systems, to psychic prisons and instruments of domination for individuals. Although all of these metaphors contribute unique insights, this analysis focuses on the machine and organism metaphors.

Machine is defined as "a person or organization that resembles a machine." The definition goes on to state "as in being methodical, tireless, or unemotional" (Merriam-Webster, 1997, p. 697). The machine metaphor of organizations supports efficient and methodical use of resources to ensure maximum production and profit for key stakeholders.

The machine metaphor represents organizations which are hierarchical and mechanistic. Leaders tend to be autocratic with communication and decisions flowing down in one direction. Employees are regarded as cogs in the machine without emotions and motivated by economic incentives or transactional exchanges (Hellriegel & Slocum, 1992; Morgan, 1943; Natemeyer & McMahon, 2001).

Organism has been defined as "a living being" and as "a complex structure of interdependent and subordinate elements . . ." Merriam-Webster, 1997, p. 819). The organism metaphor of organizations supports response to the environment and concern for the well-being of natural and human resources.

The organism metaphor represents organic organizations with matrix structures and cross functional teams. Leaders tend to be democratic including employees in decision making and participative power and profit sharing. Employees are assumed to have complex motivations (Hellriegel & Slocum, 1992; Morgan, 1943; Natemeyer & McMahon, 2001).

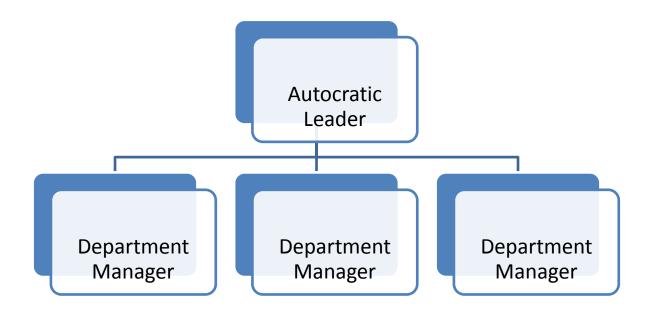
What about the mosaic metaphor? What comes to mind when you hear the word mosaic? Perhaps you imagine a colorful picture or pattern or puzzle of various hues, sizes, and textures. What about the boundaries of the pieces? Do they appear to be clearly defined or overlapping? Are they changing or static? As with many concepts, differing ideas abound and are limited only by our imaginations.

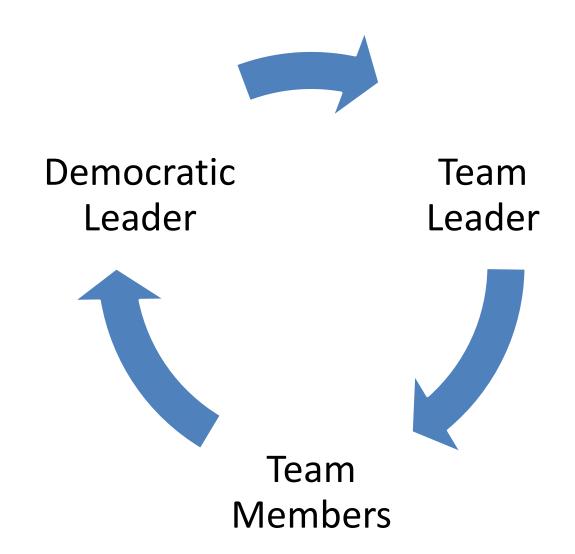
Mosaic is defined in Merriam-Webster's Collegiate Dictionary (1997, p. 758) as both an adjective and noun in which pictures or patterns are produced by joining together small pieces of stone, glass, etc. of differing colors. If we substitute organizations or societies for "pictures or patterns" in the definition, and substitute individuals of differing abilities, backgrounds, genders, generations, races, religions and sexual orientations for "pieces of stone, glass, etc. of differing colors" we would have the most useful definition for our purposes here.

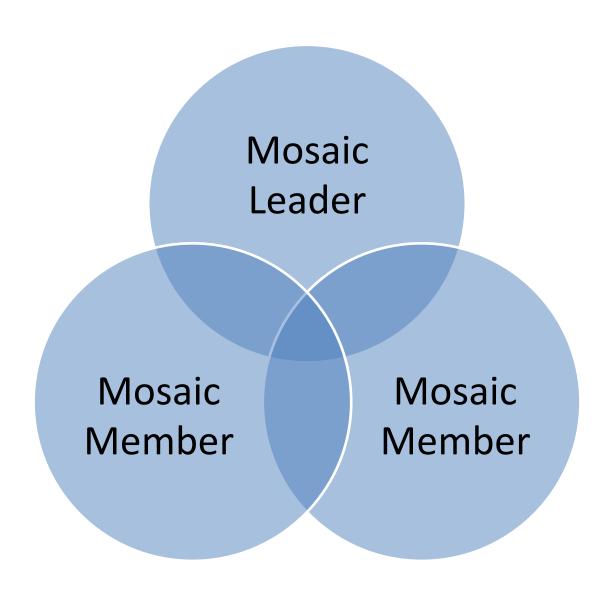
The revised definition would read, "Mosaic organizations or societies are produced by joining together individuals of differing abilities, backgrounds, genders, generations, races, religions and sexual orientations." It is further defined figuratively as diversified. Whichever way mosaic is defined or imagined, it is a complex, integrative concept worthy of further analysis.

The mosaic metaphor is presented here as a mechanism to accommodate diverse individuals in organizations and societies and to encourage diverse leadership. The mosaic metaphor is an abstract representation meant to show how individuals or functional departments can be both differentiated and unified simultaneously and symbolically. It has immediate emotional and visual appeal and impact.

The outcome of the dissertation then is to show how the application of organizational metaphors can benefit and guide organizational leaders and members by providing alternative perspectives. Graphic representations of the machine, organism, and mosaic metaphors of organizations are presented following.







The following part reviews the literature of metaphors before proceeding to the societal model and analysis of three metaphors of organizations, and to the conclusion of the dissertation.

#### PART TWO: METAPHORS of ORGANIZATIONS

#### Metaphors

#### Introduction

Theoretical literature related to the use of metaphors of organizations will be examined in this part to provide adequate breadth and depth for the ensuing analysis of the three metaphors at the organizational level. The part will include a definition, taxonomy of different levels of metaphors, and conclusion.

#### Definition

Metaphors provide guidance, meaning and purpose as well as provide a unifying framework for organizations. Metaphors are figures of speech associating one concept with another in order to provide insights and a fresh way of looking at concepts particularly in terms of similarities. This relates to the etymological sense of metaphor as a bridge. Metaphors can function as essential bridges between multiple levels of affect and cognition (Gozzi, 1999).

Metaphor comes from the Greek roots "meta" which means above, among, and beyond. It also means change, transformation, and substitution. Metaphor also comes from the Greek root "pherein" which means bearing or carrying (Merriam-Webster, 1997). There is a need for new organizational paradigms of this nature (Lincoln, Quinn, Mohrman & Lawler as cited in Gozzi, 1999).

The meaning of metaphor has expanded in scope to describe any analogy or similarity. Actions, ideas and objects can also be construed as metaphors. Metaphor forms the root of other words of interest here such as metalinguistic and metamorphosis

(Merriam-Webster, 1997). Metamorphosis of individuals and organizations in terms of ethical development and growth is the intended goal of transformational leadership theories for example (Burns, 1978).

According to Aristotle's (as cited in Gozzi, 1999) ancient definition in *The Rhetoric and the Poetics of Aristotle*, a metaphor is "transference", naming one thing in terms of another. Aristotle also recognized the creative power of metaphor which when applied in new situations expands the reach of language and thought (Langer as cited in Gozzi, 1999, p. 1):

"... we all naturally find it agreeable to get hold of new ideas easily: words express ideas, and therefore those words are the most agreeable that enable us to get hold of new ideas. Now strange words simply puzzle us; ordinary words convey only what we know already; it is from metaphor that we can best get hold of something fresh" (Aristotle, 1954 ed., 1410, Ch. 20 as cited in Gozzi, 1999).

Lakoff and Johnson (as cited in Gozzi, 1999) define metaphor as "mapping".

They suggest metaphors map features from a source domain onto a target domain.

Lakoff and Johnson also use the term "systematicity" to express the idea that metaphors are coherent and systematic, meaning that metaphors can map entire structures of relations from one domain to another.

Gozzi's (1999, p. 2) working definition echoes this property of systematicity: "A metaphor asserts a structural similarity between two domains normally thought of as separate". Gozzi further asserts the implications of structure are a major source of metaphor to generate creative thought into unknown domains.

Turner and Fauconnier's (as cited in Gozzi, 1999) "conceptual blending" definition adds to the conceptual processes at work identified by Lakoff and Johnson (as

cited in Gozzi, 1999). They suggest two or more domains may be blended into a separate conceptual space that has emergent structure of its own. They give the example of cyberspace that blends the notion of computer networks with physical space producing something that has new properties of its own.

Pondy (as cited in Cleary & Packard, 1992) suggested metaphors offer a valuable paradox in that they can simultaneously facilitate change and reinforce traditional values. According to Donnellon, Gray, and Bougon (as cited in Cleary & Packard, 1992) metaphors enhance "equifinal meaning" in which people make different interpretations of reality but draw similar behavioral implications.

Gozzi (1999) concedes that most theories of metaphor acknowledge it works on more than just one level of language and thought. He proposes taxonomy of deep, surface and meta-metaphor defined and described in the following paragraphs. It is asserted the machine, organism, and mosaic metaphors are deep metaphors as well as metaphors.

#### Taxonomy of Metaphors

#### Introduction

Several levels of metaphors have been identified: deep, surface, and meta metaphors. Deep metaphors provide structure and reveal underlying values of society and organizations. Surface metaphors are explicitly stated comparisons and imply the use of analogy. Meta metaphors highlight the creative and generative nature of language and metaphors (Gozzi, 1999).

#### Deep Metaphors

Deep metaphor has been found at work and use in art, intellectual disciplines, political speeches and policies, as well as in news stories. When these intellectual disciplines, speeches, policies and news stories are analyzed, much can be discovered about the underlying assumptions and values which otherwise may not be explicit (Gozzi, 1999).

Deep metaphors are sometimes called models, which has not been without much discussion in the literature. Deep metaphors share the same property as models by providing structure though metaphors are usually ideas or words while models are visual representations of relation according to Black(as cited in Gozzi, 1999).

Exposing deep metaphor allows for alternative deep metaphors, critique, and other suggestions (Gozzi, 1999). Stelzner (as cited in Gozzi, 1999) for example, discovered many mechanical metaphors in speech communication theories of the 19<sup>th</sup> century before a shift to biological metaphors in the 20<sup>th</sup> century.

Schon (as cited in Gozzi, 1999) in yet another example examined the discourse of city planners and social policy makers finding that urban housing was often described as blight. Blight defined the situation as a problem requiring the solution of urban renewal involving the complete destruction and redesign.

Other metaphors emerged describing the slum as a natural community which led to notions of supporting the communities where they were. Clearly these were two distinct views of the same situation demanding two equally distinct solutions. Schon (as cited in Gozzi, 1999) thought when the underlying metaphors of a field shift, the language and thought have many new paths to follow.

Importantly, several thinkers have noted technologies have formed many deep metaphors influencing society. Bolter (as cited in Gozzi, 1999) calls these "defining technologies." Other thinkers such as Mumford (as cited in Gozzi, 1999) have determined how communication technologies can be internalized and structure the conceptualizing of many other processes of discourse and thought.

Mumford (as cited in Gozzi, 1999) discusses the clock in early industrial culture of Europe, and Edge (as cited in Gozzi, 1999) finds the steam engine in the thought of 19<sup>th</sup> Century thinkers like Freud and Marx with their concerns for psychological pressure and release. Bolter (as cited in Gozzi, 1999) sees the computer as today's defining technology.

The machine is the deep metaphor of objectivist culture in general and in science. Turbayne (as cited in Gozzi, 1999) found the underlying metaphor of the universe as machine in influential early scientific thinkers like Descartes and Newton. A whole scaffolding of scientific truth has been erected upon the machine metaphor highlighting the dangers involved in grasping one metaphor too tightly as the only acceptable way to do science.

Turbayne (as cited in Gozzi, 1999) claims many scientists have thus become "victims" or "prisoners" of the mechanistic metaphor. The victim of metaphor accepts only one way of assembling the "facts" confusing the special view of the world with the actual world. Turbayne shows the arbitrariness and limitations of the deep metaphor machine by considering the deep metaphor nature.

Turbayne (as cited in Gozzi, 1999) claims using the deep metaphor nature would lead to an entirely different though no less valid conceptualization of the world and

practice of science. Mitroff (as cited in Cleary & Packard, 1992) suggested "the world as a garden" as a global metaphor to deal with the complexity and interconnectedness of modern life.

Edge (as cited in Gozzi, 1999) too has found mechanical metaphor as the basis of much thinking about society and fears the authoritarian implications for social control. He reasons, if society is a machine, then trained engineers run it, not leaving this to the fickle whim of electorates. Edge suggests the alternative deep metaphor of society as a work of art, could lead to a more creative and participatory set of assumptions.

Mosaic is a deep metaphor that immediately reminds us of the multiplicity of views and presents a challenge to any one way of assembling the facts in a special view. Promoting the inclusion of diverse individuals and their differing world views prevents becoming victims or prisoners of metaphors as put forth by Turbayne (as cited in Gozzi, 1999).

The mosaic metaphor also fits with Edge's (as cited in Gozzi, 1999) suggestion of viewing society as a work of art moving away from the authoritarian and objectivist tendencies of the machine metaphor towards a more creative and participatory set of assumptions.

#### Surface Metaphors

Surface metaphors are explicitly stated in discourse. Surface metaphors imply some analogy or structural similarity between two domains of reference. They may be connected to other surface metaphors indicating a deep metaphor. Noth held that deep

metaphors are based on relations between one surface metaphor and other surface metaphors (Noth as cited in Gozzi, 1999).

Surface metaphors used to be the theoretical focus coming from within the objectivist view of the world. From this perspective, the importance of metaphor is downplayed. To Noth (as cited in Gozzi, 1999, p. 129) metaphor seemed to be a matter of replacing words in substitution theory or suggesting analogies in comparison theory.

Metaphor from the objectivist perspective was a mistake since the job of language is to refer to the outside world as accurately as possible. According to objectivism, proper language is literal and those figures of speech not conforming to this view are called tropes or turnings since they turn away from the proper referential function of language according to Noth (as cited in Gozzi, 1999).

Further, literal language means written and therefore fixed or permanent. The objectivist view of deep metaphor rested solely in print or writing prescribing qualities of written and printed language for all proper language. Lakoff (as cited in Gozzi, 1999) points out that literal language itself is a metaphor.

In contrast, oral language is changing and fluid. Ong (as cited in Gozzi, 1999) discusses the differences between sound based oral language and silent, permanent and written language. Electronic media of modern times is moving the culture away from print and writing and diffusing the literal-figurative dichotomy.

#### Meta and Other Level Metaphors

Meta level is yet another level of metaphor according to Gozzi (1999). This level focuses on its creative aspects and its ability to expand linguistic and cognitive

maps reflecting the meaning of meta which is above or beyond. Sometimes expanding linguistic and cognitive maps is accomplished by linking specific phenomena with larger "archetypal" concepts.

Osborn (as cited in Gozzi, 1999) points out the use of the archetypal metaphors of light and darkness functioning to increase motivational power of appeals. The function of metaphor as creative power was most fully explored by Martin Foss (1949) in *Symbol and Metaphor*. Basically, Foss classifies symbols and metaphors along a spectrum from "symbol" which codifies language and "metaphor" which allows for language expansion and fluidity.

The discussion in the book, rooted in the ancient Greeks, is more detailed and subtle. Foss (1949) focuses on existence as a process but this process is never fully describable by fixed "symbols". Fixed symbols arbitrarily chop up the fluid process and substitute static parts which are treated as wholes but are always contingent and incomplete.

Foss (1949) contends the processes of existence are best captured by language. He considers metaphor as process -- process of expanding concepts and language. The metaphorical process is thus messy and unpredictable, not at all appealing to those who want the false security and regularities of symbolic reductions. Foss anticipates many of the findings of Lakoff and Johnson (as cited in Gozzi, 1999) and grounds them in a philosophical base.

. . . it is not so much in the single word, but in the process of speech itself, stretching over and beyond single words, in which the metaphorical move toward extension of knowledge is to be found. Only in the process of speech can the metaphorical task be fully achieved, that is, to oppose the tendency of the word toward smooth and expedient

fixation in familiar fences, and to draw it into the disturbing current of a problematic drive . . . (Foss, 1949, p. 59).

In blasting symbols and shattering their customary meaning the dynamic process of the searching, striving, penetrating mind takes the lead. . . . It is what Aristotle (as cited in Gozzi, 1999, pp. 59 – 60) aims at when he calls the metaphor energy.

Metaphors are symbolic language however and according to Jung (as cited in Cleary & Packard, 1992) symbols transcend cultures and images link humankind across thousands of years.

Daft (as cited in Cleary & Packard, 1992) used symbol to encompass "information carrying devices" such as metaphors, myths, and stories as well as organizational charts and receipts. The latter organizational charts and receipts are more instrumental and rational in nature in content whereas the former metaphors, myths, and stories have more emotional and expressive content.

Pondy (as cited in Cleary & Packard, 1992) concurred by contrasting the "objective reality" of empirical events and objects with the "symbolic reality" of metaphors. The objective reality of empirical events and objects has received the lion's share of attention.

Marshak (1993) reinforces the idea that metaphors serve as the essential bridge between literal and symbolic, between cognition and affect, and between the conscious and the unconscious. Further, Marshak contends that metaphors are the medium for presenting ideas, insights, and intuitions not always available to analytic discourse and reasoning.

Mosaic metaphor has the potential to operate as a meta metaphor serving as a bridge between its literal meaning as an artistic collection of diverse pieces to its abstract symbolic meaning of a creative group of diverse individuals and/or functional departments of an organization.

#### Conclusion

Metaphors are figures of speech relating one concept with another to provide fresh insights. Metaphors can provide guidance, meaning and purpose as well as act as a unifying framework for leaders and members of organizations. Metaphors can act as bridges transferring meaning from familiar concepts to new concepts.

Deep, surface, and meta levels of metaphors have been identified in the literature. Deep metaphors reveal underlying values. Many deep metaphors invoke the prevailing technology. Surface metaphors are usually explicitly stated analogies or comparisons. Meta metaphors suggest the fluid nature of language and metaphors.

The machine is the deep metaphor of objectivist thought. The clock and steam engine have been identified as defining technologies of the 19<sup>th</sup> century while computer technology has been identified as the defining technology of the 20<sup>th</sup> century.

Alternative deep metaphors have been proposed such garden and piece of art.

Surface metaphors were the focus of objectivist culture. Focus on surface metaphor downplayed the influence and importance of metaphor by regarding metaphors as a mistake distracting from the literal world and from the written word. Electronic technologies are blurring the lines between written and spoken language.

Meta metaphors highlight the creative and fluid nature of metaphor in contrast to the static nature of symbols. The mosaic metaphor has been identified as having qualities of a deep metaphor as well as qualities of a meta metaphor. As a deep metaphor, the mosaic metaphor suggests a unifying structure and underlying values of inclusion and participation. As a meta metaphor, the mosaic metaphor acts as a bridge and mechanism for expanding thought.

The next part presents a model of a society using the mosaic metaphor: Canada.

The part will include literature of salient points of the society as compared and contrasted to a society using the melting pot metaphor: the United States of America.

PART THREE: SOCIETAL MODEL of MOSAIC METAPHOR

Societies as Models

Introduction

Literature of the mosaic metaphor at the societal level will be examined in this part. Specifically, the so-called Canadian cultural mosaic will be reviewed as evidence and as a model of the mosaic metaphor at work in an industrialized country. Literature to do with the national cultures, national metaphors, founding nations and general societal indicators such as the economy, education, government policy, the military, and the populations will be included.

Experiencing the mosaic metaphor at the societal level and witnessing its guiding, motivating, uplifting, and unifying effect first hand, served as the incentive for this dissertation. Since the mosaic metaphor is providing such powerful guidance at a societal level in Canada it stands to reason the mosaic metaphor can be just as effective at the organizational level.

In this part, Canada and the United States (U.S.) will be compared in terms of two national metaphors: cultural mosaic and melting pot, respectively. Canadian society will be compared to American society in terms of the national metaphors, historical and current culture and events, and economic, educational and social development.

No conclusions are made concerning the direction and extent of the influence process of the mosaic metaphor on society. The intent is to suggest a real-world application of the mosaic metaphor in contrast to the melting pot metaphor of society. By highlighting the advantages and nuances of adaptation and integration experienced

26

in the Canadian society, the potential for applying the mosaic metaphor, by analogy, to organizations is revealed.

#### National Cultures

National cultures profoundly influence the attitudes, beliefs, and values of individuals and organizations. National culture influences the expectations for behavior, including leader behavior, perceptions of problems, solutions, and situations. National cultures also influence many of the underlying assumptions and much of the focus of academic research.

National culture has been defined as the shared characteristics such as customs, history, language, religion, and values that distinguish members of one group of people from another. Values are basic beliefs that are important and stable or time. A value system is multiple beliefs that are compatible and supportive of each other (Hellriegel & Slocum, 1992; Robbins, 2005).

Hofstede (as cited in Hellriegel & Slocum, 1992) has demonstrated the divergence of national cultures in at least four different areas: power distance, uncertainty avoidance, individualism, and masculinity. Four countries were ranked on these dimensions: Canada, France, Mexico, and the U.S. (Robbins, 2005).

Power distance, according to Hofstede (as cited in Hellriegel & Slocum, 1992) is the degree to which a society tolerates unequal influence and power. France and Mexico are examples of high power distance countries. Hofstede states uncertainty avoidance is the degree to which ambiguity, indefiniteness, and riskiness are avoided. Canada and the U.S. are examples of low uncertainty avoidance (Robbins, 2005).

Hofstede (as cited in Hellriegel & Slocum, 1992) finds individualism is the degree to which citizens are expected to take care of themselves, with the opposite being collectivism. Collectivism is the degree to which the group focus is on common loyalty and welfare. Canada and the U.S. rank very high on individualism.

Masculinity is the degree to which assertiveness and acquisition of money is valued. The opposite of masculinity is considered to be femininity, which values nurturing and other orientations. Canada and the U.S. surely rank lower today due to social pressure. Mexico still remains high on this dimension according to Hofstede (as cited in Hellriegel & Slocum, 1992).

Canada and the U.S. seem quite similar in relation to Hofstede's (as cited in Hellriegel & Slocum, 1992) dimension. Canada is a country of immigrants like the U.S., but there are critical differences of culture and society. One of the differences is the metaphors commonly used to characterize the two countries: cultural mosaic and melting pot respectively. The two national metaphors are compared and contrasted in the following paragraphs.

### Cultural Mosaic versus Melting Pot

The Canadian cultural mosaic describes the particular mix of a multitude of cultures, languages and people coexisting within an official government edict promoting multiculturalism, peace and tolerance. Canada is arguably one of the most diverse nations on earth and exceptional in its promotion of the peaceful coexistence of diverse cultures (Gibbon, 1938; Gillmor & Turgeon, 2000; Sauvé & Sauvé, 1997; Secretary of State of Canada, 1997; Wikipedia, 2009).

The melting pot metaphor suggests assimilation of immigrants and minorities into the American way of life. It was assumed different people would want to assimilate. The melting pot metaphor implies the dominant culture is superior to minority cultures and languages. There are historical and lingering racial resentments and tensions (Robbins, 2005).

Evidence for this difference between Canada and the U.S. exists in many areas including citizenship. In Canada, dual citizenship is relatively common. It is possible to have two passports for example. Dual citizenship is not encouraged in the U.S. although it is possible to maintain it and two passports. Canadian citizens are encouraged to maintain ties to their country of origin or ethnic background as indicated in the following quote by Queen Elizabeth of England.

"Canada asks no citizens to deny their forebears, to forsake their inheritance — only that each should accept and value the cultural freedom of others as he enjoys his own. It is a gentle invitation, this call to citizenship and I urge those who have accepted the invitation to participate fully in the building of the Canadian society and to demonstrate the real meaning of brotherhood of arms" speaks Queen Elizabeth II (as cited in Secretary of State of Canada, 1997).

There has always been continuous movement of population and trade between Canada and the U.S. Exchange, trade and travel continue to this day along the world's longest undefended border between the two neighboring countries. Additionally, it was an American writer, Victoria Hayward, who first coined the term, mosaic, to describe Canada's cultural landscape (Gibbon, 1938).

# Founding Nations of Canada

A classic book about the culture of Canada and its people is *The Canadian Mosaic* by John Murray Gibbon (1938). Gibbon (1938) provides various details of the origin, culture, and initial settling of many of Canada's first waves of immigrants and their enduring contributions and legacy. The two dominant founding nations in Canada were the British and the French, who both encountered indigenous, native populations.

Porter (1965) gives a different view of the immigrant groups and their relative influence and status in a subsequent treatise entitled *Vertical Mosaic*. *The Vertical Mosaic* (Porter, 1965) shows how one of the two founding populations, the British, dominates economically and politically with their members holding by far the majority of the elite positions in society.

The other founding population, the French, does not do as well as the British economically and politically. The many other minority populations do even poorer yet (Porter, 1965). In terms of a nation coming to terms with its two dominant populations and diverse immigrant population however, Canada's policy of multiculturalism, peace, and tolerance succeeds (Secretary of State of Canada, 1997).

There are two official languages in Canada: French and English. This has many repercussions for Canada's national culture, education, employment and society. All official documents, signs, and symbols are required to be represented in the two official languages. The population is encouraged to learn and use both languages and bilingual fluency is a requirement of government service (Sauvé & Sauvé, 1997).

The founding nations, their languages, and multiculturalism in Canada definitely add a distinct flair to life and a certain "je ne sais quoi". This is not to say however, that

there have not been tensions between the English and the French. It was continuing waves of new immigrants that helped resolve the tensions by breaking a political gridlock between the two founding nations (Gibbon, 1938; Porter, 1965).

In Canada, as in the U.S., the indigenous peoples were originally marginalized. Indigenous populations such as the Inuit of arctic Canada, the Métis, and various Indian tribes were decimated after initial European contact. Children were removed from their families and placed in residential schools where they were punished for speaking their native languages. Many other practices of indigenous culture were discouraged. Survivors were relocated and encouraged to assimilate (Gillmor & Turgeon, 2000).

Recently, efforts are being made to address past injustices and more richly incorporate aboriginal native cultures. The North West Territory, a far northern territory in arctic Canada, was recently split and renamed Nunavut and North West Territory as ongoing reconciliation measures, for example. Native culture is included in national celebrations and events such as the recent Winter Olympics of 2010 held in Vancouver, British Columbia and the mountain resort of Whistler, British Columbia.

# Current Population

Canada continues to support the founding populations and the indigenous population while encouraging immigration. The number of visible minorities in Canada is growing with more than two hundred ethnic groups. New immigrants are also supported while they adjust and learn the official languages. Immigrant populations are encouraged to practice their ethnic customs and speak their native languages.

Canadian citizens are afforded the opportunity for a full expression of their beliefs and traditions (Sauvé & Sauvé, 1997).

Language is an important part of identity expression for many ethnic groups.

Anecdotally, a stroll down any urban street in Montreal, Toronto, or Vancouver will evidence multiple languages being spoken by individuals in equally diverse clothing.

East Indian Sikhs are even permitted to wear their traditional head wrap as part of the official Royal Canadian Mounted Police uniform – an iconic symbol of Canada.

Ottawa, the national capital and the large metropolitan cities of Montreal, Toronto, and Vancouver are noted for their ethnic neighborhoods. Distinct neighborhood streets are lined with a multitude of shops and eateries catering to particular tastes besides the British and French, such as Chinese, Korean, Eastern European or East Indian (Sauvé & Sauvé, 1997).

These ethnic neighborhoods are not just tolerated; they are celebrated, encouraged, promoted and supported. Many multicultural as well as alternative lifestyles festivals reflect this attitude and celebrate the many diverse communities.

Tolerance is lived, palpable, recognized, and visible. It is a point of pride for the nation (Sauvé & Sauvé, 1997).

Government Policies Promoting Multiculturalism, Peace, and Tolerance

Many other Canadian government policies stand in contrast to the U. S. Historically, Canada embraced its British heritage and engaged very differently in the Revolutionary War (Elections Canada, 1986). Canada became a British colony and

followed British traditions. Canada is still part of the British Commonwealth of countries with Queen Elizabeth II recognized as sovereign.

The Queen of England still maintains representation in Canada in the institution of the Governor General's office. The Queen's portrait is still to be found in most elementary school classrooms and the royal family is followed closely. Canada's parliamentary system reflects its British heritage for example (Gillmor & Turgeon, 2000; Sauvé & Sauvé, 1997; Secretary of State of Canada, 1997).

There are many other reminders of our historical and current ties to Britain.

Victoria, British Columbia, maintains a distinctly British flavor with traditional tea salons serving scones and fish and chips in newspaper wrapping. The spelling of many words and vocabulary in this document would be different in Canada for example, also reflecting the British heritage.

Another historically divisive social issue in which Canada engaged differently or not at all was the issue that prompted the American Civil War. There wasn't slavery and all it entailed for the development and history of the U.S. Schools and other social institutions in Canada were likewise never openly segregated negating the need for protracted battles to fight for this basic equality.

In contrast to the U.S., Canada was a haven for escaped slaves, for example.

There wasn't the prolonged fighting over secession and the issue of slavery that tore the U.S. apart and resulted in a massive death toll. There wasn't the long and ongoing climb out of the resulting inequality of the races which comprised the most central issue of the Civil Rights Movement in the U.S.

Canada wasn't involved in the Vietnam War. Again, Canada was a haven for American draft dodgers demonstrating Canada's belief in individual rights and peaceful means. Many draft dodgers remain in Canada even though they have been granted immunity from prosecution if they return to the U.S. The Vietnam War ended up being quite divisive for the U.S.

Canada only rarely and as a matter of national defense, becomes involved in war. Canada is a strong supporter of its allies however and joins in defense as appropriate as evidenced during World War I, World War II, the Korean War, and more recently in support of efforts in Afghanistan, but notably not in Iraq (National Defence Headquarters, 2000).

Only a fraction of GDP is spent on defense compared to the U.S. leaving more money available to support other areas of society. The different spending priorities between Canada and the U.S. parallel the original orientation towards Britain. Canada embraced Britain, and the U.S. fought against British traditions. It seems the militaristic attitude still prevails in the U.S (National Defence Headquarters, 2000).

## Crime, Education, Economic and Social Development

Education in Canada is first rate and tends to be of the public variety. Teachers are paid more than in the U.S., perhaps reflecting a greater importance placed on public education and equality of all citizens. A recent poll ranked Canada second in science and fifth in math compared to the U.S. ranking twenty-first in science and twenty-fifth in math (OECD, 2010).

The economy of Canada is robust. The economy was originally based on agriculture, trading of furs, and other natural resource extraction and export. While there are large farms and industries, much remains of the family farm type of enterprise contributing to a diversified and resilient economic base.

There tends to be more valued added and technology development now. An example of one such technology company is Research in Motion, makers of the Blackberry, located in Waterloo, Ontario. Canada is also the biggest supplier of oil to the U.S., a fact little known to many. Much of the oil is supplied from the giant tar sands of northern Alberta (U.S. Energy Information Administration, 2011).

There is a robust middle class and less social stratification in Canada compared to the U.S. Some economists feel a strong middle class is of paramount importance for overall innovation (Kondassis, personal communication, 2007). There is no flight to the suburbs from the cities to escape crime, racial tensions or violence.

Hand guns are not legal in Canada and, not coincidentally, there is less crime and violence in Canada than in the U.S. It's interesting to note that with lower crime and violence there is little to no discussion of the need for a hand gun for home or personal protection rendering that whole argument moot.

Medical care also is of a very high quality, reasonable cost and universally available. Contrary to some questionable arguments about medical care in Canada, it is available to all and first rate in care and quality. In the matter of other controversial and important issues, Canada is openly accepting, peaceful and tolerant. Gay marriage is legal as is medical use of marijuana.

This is not to suggest that there is no crime or challenges, or that all is utopian. However, by all measures of modern societies, Canada comes out near the top according to the U.N. The quality of life is very high. It is speculated that some of the credit for Canada's enviable position and ranking in the world is due to a diversified population that is proactively respected by a government policy of multiculturalism and the national metaphor, the Canadian Mosaic.

# Organizations as a Microcosm of Society

#### Introduction

The word organization derives from the Greek word "organon", meaning instrument or tool. Some of the earliest organizations were armies, churches, empires and pyramids representing tools of heads of church and state. Organizations are a cultural phenomenon that varies according to a society's stage of development (Morgan, 1943).

To a certain extent we all live and work in offices and factories sharing the same industrial culture and basic expectations and skills. According to Presthus (as cited in Morgan, 1943) we are currently living in a society in the west of large organizations that influence most aspects of our lives.

Emile Durkheim (as cited in Morgan, 1943) showed how organizational societies are accompanied by a disintegration of traditional patterns of social order giving way to fragmented beliefs, ideals, and values. The division of labor creates a problem of integration or cultural management. Cross national difference in culture still forms the greater context however (Morgan, 1943).

There is a range of organizational structures and types. Organization structures range from hierarchical to flat. In general, organizational types range from mechanistic, to organic, and boundaryless or virtual, respectively. Each structure and type will be briefly introduced in the following chapter (Burns & Stalker, 1961).

Mechanistic, Organic, and Virtual Organizations

Mechanistic organizations are associated with standardization. Frederick the Great of Prussia between 1740 and 1786 introduced ranks and uniforms extending standardization and systematic training using army drills with the goal of shaping the army into standardized parts fearing officers. Frederick the Great composed his army of criminals and paupers transforming them into professional soldiers using principles of roman legions and the workings of automated toys (Hellriegel & Slocum, 1992; Morgan, 1943).

Thus while efficient, this level of standardization ignores the existence of organizations to achieve other ends such as development of employees, the greater good, and economic and social benefit for other stakeholders and society in general. The human and social limitations of mechanistic organizations can be illustrated by a story about Chuang-Tsu who was a 4<sup>th</sup> Century Chinese sage (as cited in Morgan, 1943).

Chuang-Tsu (as cited in Morgan, 1943) saw an old man digging an irrigation ditch north of the Han River and recommended other techniques for drawing water using a draw-well. The old man replied in anger that he who does his work like a

machine grows a heart like a machine and loses his simplicity and then becomes unsure of the striving of his soul that doesn't agree with the honest self.

Max Weber (as cited in Morgan, 1943) noted the parallels between mechanization of industry and bureaucratic forms of organization that routinized administration. Bureaucracies emphasized clarity, efficiency, precision, regularity, and reliability through the creation of a fixed division of tasks, detailed rules and regulations, and hierarchical supervision.

Weber (as cited in Morgan, 1943) is often associated with bureaucracy, but Weber's writings were actually skeptical and concerned with social consequences, fearing the erosion of the human spirit and capacity for spontaneous action and more democratic forms of organization. Alternatives to bureaucratic organizations emerged.

Researchers such as Frederick Herzberg (1967) and Douglas McGregor (1957) integrated the needs of individuals and the technical needs of the organization. They showed how bureaucratic structures, leadership styles, and work organization could create enriched, motivating jobs encouraging people to exercise creativity and self-control (Morgan, 1943).

Organizations with less bureaucratic structures, leadership styles, and work organization are called organic organizations. Organic organizations are associated with matrix structures and the needs of individuals within the context of the environment, life cycles and open systems. Other important concepts emanating from open systems theory are the related ideas of nested subsystems (Natemeyer & McMahon, 2001).

Yet other organizations with even less bureaucratic structures, leadership styles, and work organization are called boundaryless or virtual organizations. Boundaryless or virtual organizations are associated with flat structures, inclusive cultures, and open communication networks. Less rigid rules and regulations allow for more creativity and response to the environmental threats and opportunities.

## Challenges to Organizations and Societies

As we move from the present towards the future in the 21<sup>st</sup> century there are challenges for organizations in terms of increased competition and diversity, increased democratization, exploding growth of population, and globalization of enterprises all enabled by technological developments (Brown, 2009; Brown, 2011; Goethals, Sorenson & Burns, 2004, p. 154).

One of the biggest challenges facing organizations and societies is the effective use of human resources. The main focus therefore of this dissertation is to provide aid to organizational leaders and members as they attempt to reconcile any tensions emanating from the increasing diversity of humanity and organizations through organizational metaphors.

Existing and new metaphors need to guide organizational leaders and members. It's no longer adequate to assume different others wish to assimilate and adopt dominant values. Rather diverse individuals may wish to exploit their differences by contributing unique ideas and views to their organizations and societies.

The relative merit of the three metaphors discussed here will be analyzed in the following part. There may be times when one metaphor is preferable to another. Some

criteria to consider are the nature of the general and task environment and the extent of diversity present or desired. Ultimately, the choice of which metaphor an organization employs is to be decided on a case by case basis.

#### PART FOUR: ANALYSIS of THREE ORGANIZATIONAL METAPHORS

This part is the analysis of the machine, organism, and mosaic metaphors of organizations in relation to organizational theory. This part is divided into five chapters: Environment and Diversity, Organizational Structure, Management Theory, Leadership Theory, and Emotion, Motivation, Power and Relationships. Organizational communication, culture, and conflict would be other worthwhile areas of interest beyond the scope of this dissertation.

Each chapter will begin by reviewing the relevant literature. An analytical table follows before the chapter proceeds to the analysis of the metaphors in relation to the literature. Articulation of the gaps in the literature, and limitations or strengths and weakness of each metaphor over time are included. Finally, the major themes will be recapped in the chapter summary.

## **Environment and Diversity**

#### Introduction

Eras are characterized by different environments and organizations. The three eras being considered are the 18<sup>th</sup> and 19<sup>th</sup> Centuries, the 20<sup>th</sup> Century, and the 21<sup>st</sup> Century. Organizations adapt to the imperatives and major developments in the environments of their eras (Wikipedia, 2012).

The major development of the 18<sup>th</sup> and 19<sup>th</sup> Centuries was the Industrial Revolution which occurred in a relatively stable environment. The major development of the 20<sup>th</sup> Century was the human resource and environment paradigm characterized by

a complex, changing environment. The 21<sup>st</sup> Century is the global era characterized by the information revolution in a complex, turbulent environment (Wikipedia, 2012).

The Industrial Revolution era of the 18<sup>th</sup> and 19<sup>th</sup> Centuries was characterized by a relatively simple, stable environment. Many organizations incorporated machines and mechanized operations. Organizational productivity and profit for investors was paramount. Human and natural resources were assumed available for exploitation and unlimited (Brown, 2009; Brown, 2011; Goethals, Sorenson & Burns, 2004, p. 154).

The human resource and environment paradigm of the 20<sup>th</sup> Century was characterized by a more complex and changing environment. Many organizations attempted to achieve a balance; organizational efficiency and productivity was important but so too were the human and natural resources. Human and natural resources were viewed as more finite, limited, and shared (Brown, 2009; Brown, 2011; Goethals, Sorenson & Burns, 2004, p. 154).

The global, information era of the 21<sup>st</sup> Century is being characterized by turbulent environments. Changes include increased competition, changing demographics, greater diversity, and globalization. New communication and information processing technologies have enabled the rapid pace of change. There is also continued pressure on human and natural resources (Brown, 2009; Brown, 2011; Goethals, Sorenson & Burns, 2004, p. 154; World Watch Institute, 2010).

Different organizational metaphors tend to correspond to different eras and organizations. In general, the machine, organism, and mosaic metaphors correspond to the industrial era, the human resource era, and the global, information era respectively.

There is some overlap of the time frame presented here. The analysis is intended to be illustrative and not strictly delineated.

#### Environment

Organizations operate within a macro or general environment and a task environment. There are two main environment dimensions: simple-complex and stable-changing resulting in four basic types. The dimensions refer to whether factors in the environment are few and similar to each other (Duncan as cited in Hellriegel & Slocum, 1992, p. 84).

The general environment includes demographics, economic and political systems, and natural resources. The general environment also includes cultural factors such as beliefs, customs, language, religion, and value systems. Technology can be considered part of the general or task environment (Hellriegel & Slocum, 1992, p. 77).

Demographics are the characteristics of a group of people such as age, education, gender, race, religion, and status. Economic systems range from free market enterprise, to socialism and communism. Economic conditions can be depression, recession, or prosperity. Political systems range from democracy, to dictatorship and monarchy (Hellriegel & Slocum, 1992, p. 77).

Natural resources are the air, coal, oil, forests, soil, water, and others. Cultural factors vary by society and include customs, language, religions, and value systems. Cultural factors impinge on organizations and organizational members (Hellriegel & Slocum, 1992, p. 77).

The task environment includes customers, competitors, suppliers and substitute goods. The four basic types of task environments are simple/stable, simple/changing, complex/stable, and complex/changing or turbulent (Hellriegel & Slocum, 1992).

The Industrial Revolution, which occurred in England, Europe, the U.S. and Canada in the 18<sup>th</sup> and 19<sup>th</sup> centuries, represented a challenge to societies and organizations. The general and task environments shifted dramatically. Prior to the Industrial Revolution, various artisans, farmers and tradesmen had worked independently supporting the needs of their local villages.

Subsequently, there was a mass exodus from the countryside into the factories and ports of the cities. The factories manufactured bricks, chemicals, ceramics and textiles, and supplied coal. Coal was the main energy source at the time. The ports supported ship building and trade. There was a need for management of the labor in the factories and ports of the cities.

The capital investment of the city ventures was relatively high and demanded a return on investment for the primary stakeholders and owners. An economic and social divide between the capitalists and labor developed. Although industrialization raised the general standard of living for everyone, certain other less desirable developments gradually became clear.

In the 20<sup>th</sup> century the cities were noticeably more crowded, dirty, noisy and polluted. Working conditions in the factories and other places of work were often dangerous, dirty and harsh even for the many child laborers. Considerations of the greater and working environment became salient and heralded the shift towards the human resource and environmental movements of the 20<sup>th</sup> century.

The 21<sup>st</sup> century is being heralded with unprecedented challenges for societies and organizations. Challenges include but are not limited to environmental changes and pressures as well as rapidly increasing populations. The world population now stands at over 7 billion. Technological changes have enabled interactions between these populations as never before (Brown, 2009; Brown, 2011; Goethals, Sorenson & Burns, 2004, p. 154; World Watch Institute, 2010).

One of the most significant changes in the general environment of organizations is changing demographics and the increase in the diversity of populations. Managing changing demographics and diversity is an important challenge for organizations in the 21<sup>st</sup> Century in order to make the most of human resources and meet the challenges to organizations (Brown, 2009; Brown, 2011; Goethals, Sorenson & Burns, 2004, p. 154; Robbins, 2005; World Watch Institute, 2010).

# **Diversity**

Demographics and diversity are near synonymous terms referring to a heterogeneous group consisting of people who vary by age, gender, generation, race, religion, sexual preference, and national origin. Others think of diversity in terms of functional areas within organizations such as accounting or human resources, career levels such as entry or middle management, and work-related backgrounds such as education and experience according to Dass and Parker (as cited in Thomas, 2005).

Diversity is also associated with differences in dispositions and modal behavior patterns. This takes the form of differing assumptions, beliefs, identities, meanings, motives, social expectations, and values. Group norms emerge when there is

commonality and similarity between individuals sharing these dispositions (House & Aditya, 1997).

Diversity issues also change over time and by society. World War II was a major turning point because of the atrocities committed by the Nazis toward Jews and others who didn't fit their ideal human standard. Minorities were also employed in the armed forces of the U.S. in new roles, highlighting the prejudice prevalent in greater society. Women also worked in the factories and in other professions related to war service expanding their experience and horizons.

Post World War II, after experiencing new levels of equality, minorities and women were asked to return to their homes and the traditional way of doing things. The enhanced roles and work experienced by minorities and women lay at the root of the social revolution of the 1960s. Alternative ways of working together were challenging institutional thinking and the status quo.

Several underlying issues are at the heart of diversity discussions: competition, differences of culture and expectations, and privilege. Privilege has been defined as those attitudes, behaviors, and structures that provided one group (elite) with a real or perceived "unearned advantage" over another group (non-elite). Privilege perpetuates the generalization, myths, and stereotypes of either or both groups (Butler, personal communication, 2007).

Privilege is also an invisible source of conflict in organizations. It is more psychological in nature than the traditional conceptions of wealth and power (Thomas, 2005). Wildman and Davis (as cited in Thomas, 2005) state "The invisibility of

privilege strengthens the power it creates and maintains . . . and as a result privilege is allowed to perpetuate, regenerate, and re-create itself".

Other related concepts are prejudice, prejudgment, and stereotypes. Prejudice is an attitude, usually associated with negative feelings, that involves a prejudgment about members of a group. Stereotypes are formed by ascribing generalizations to people based on their group identities (Plous as cited in Harvey & Allard, 2005).

Different approaches have developed to address the issues of diversity. In general, there has been a movement from assimilation, to suppression, and towards pluralism. In the U.S., there have been three approaches towards pluralism. The three approaches are to address past injustices, valuing diversity, and linkage to strategic goals (Harvey & Allard, 2005).

The first approach to address past injustices is accomplished through affirmative action and Title VII legislation as well as desegregation in American schools. The second approach is to value diversity. Valuing diversity involves appreciating and learning about the attitudes, beliefs, and contributions of non elite groups (Harvey & Allard, 2005).

The third approach is to link strategic goals of the organization through changes in organizational culture. Anderson (as cited in House & Aditya, 1997) suggests organizations with a structure and culture that is adequately employee oriented and otherwise well coordinated and managed, may subdue any issues arising from diversity.

Cox (as cited in Thomas, 2005) has identified different stages of diversity development in organizations. Organizations were examined on seven cultural integration dimensions including acculturation, structural and informal integration,

cultural bias, organizational identification, and intergroup conflict. The three resulting models are monolithic, plural, and multicultural.

Monolithic organizations, according to Cox (as cited in Thomas, 2005) have the least amount of integration. Plural organizations have some heterogeneous membership yet remain skewed with conflict and a glass ceiling. Cox opines multicultural organizations meet all seven dimension of integration throughout.

Sue (1991) (as cited in Thomas, 2005) developed an acculturation model of multicultural development. The concern is for healthy organizations. There is recognition that organizations vary in the extent to which they are aware of and concerned with discrimination and social justice. The stages of development are determined to be monocultural, nondiscriminatory, and multicultural.

Monocultural organizations are ethnocentric and Eurocentric. The approach is assimilation. Nondiscriminatory organizations have some awareness of diversity issues but have difficulties translating this into practice and policies according to Sue (1991) (as cited in Thomas, 2005).

Multicultural organizations, according to Sue (1991) (as cited in Thomas, 2005) have a culture that consistently embraces and values diversity and sees it as a competitive edge. Multicultural organizations embrace equality while being responsive to diverse individuals. Diversity efforts must be consistent and pervasive to be effective.

Diversity has been defined as a heterogeneous group in relation to age, gender, generation, race, religion, sexual preference, and national origin. The specific changes

taking place in the workforce representation of most of these categories is detailed following.

In many industrialized nations, the workforce is aging. Older workers will increase from 13 percent to 20 percent of the workforce in the U.S., for example. Women now make up approximately half of the workforce in the U.S. In 1950, women comprised 29.6 percent of the workforce and by 1999 women comprised 46.6 percent of the workforce. Women are also a growing percentage in many other countries (Robbins, 2005).

Many employees are new immigrants in the U.S. and other developed countries. New immigrants often bring different assumptions, beliefs, and workplace norms. English is not the first language for many new workers. Furthermore, many employees live in their native countries such as China and India where many jobs have been outsourced (Robbins, 2005).

The percentage of ethnic and racial minorities also continues to increase in the U.S. From 2005 to projections for 2050 in workforce representation, blacks will increase from 11 percent to 14 percent. Hispanics are projected to increase from 11 percent to 24 percent, and Asians are projected to increase from 5 percent to 11 percent (Robbins, 2005).

Managing diversity well can increase creativity and innovation, and improve decision making. On the other hand, if not managed sensitively, there is a risk of difficult communication, interpersonal conflicts, and greater turnover. The implication for organizations is to shift from treating everyone the same to recognizing difference and responding appropriately (Robbins, 2005).

Table 1: Machine, Organism and Mosaic Metaphors

Environment and Diversity

	MACHINE	ORGANISM	MOSAIC
LITERATURE	18th to 19th	20 <sup>th</sup> Century	21 <sup>st</sup> Century
	Industrial Rev'n;	Human & Environ.;	Information Rev'n;
	Local	International	Global
	Simple/Stable	Complex/Changing	Turbulent
	Manufacturing	Mixed	Service
	Depletion	Resource Sensitivity	Sustainability
	Assimilation	Valuing Diversity	Strategic
	Monocultural/	Plural/ Non	Multicultural
	Monolithic	Discriminatory	Wattieditara
	Wononine	Discriminatory	
GAPS	Human and Natural	Relationships	Lack of Research
	Resources		
LIMITATIONS	Innovation; Rigid	Technical	Productivity

Analysis

Organizations experience many threats and opportunities and are otherwise constrained by their environments. In other words, environments have many repercussions for organizations. Metaphors can help make sense of changes in the environment and in the organization. The machine, organism, and mosaic metaphors can be seen to correspond to different environment eras (Hellriegel & Slocum, 1992).

The machine metaphor was appropriate and worked well in the 19<sup>th</sup> Century, in the midst of the Industrial Revolution. The general and task environments were quite simple and stable. The economic and political systems generally supported capital investors. There was an adequate market. Industry was rapidly becoming mechanized and was predominantly manufacturing (Hellriegel & Slocum, 1992; Robbins, 2005).

The machine metaphor originated during an era of awe and fascination with machines. Until the development of machines, things were accomplished, built and made by human hand and tools of the trade. Compared to the efficiencies of machines such as the spinning mule invented by Crompton for example, spinning by hand was inefficient, slow, and comparatively unproductive and unprofitable (Wikipedia, 2012).

There was a singular focus on the efficiencies achieved by machines along with the potential increase in profits for stakeholders. Even non-manufacturing jobs not particularly dependent on machines or machine processes began to take on the specialized and stream lined nature dictated by machines. Machines came to be highly respected and valued.

The machine metaphor works well to support manufacturing organizations that are heavy on mechanized operations. The machine metaphor invokes clocklike

precision, engines, engineers, cogs, and gears as well as breakdowns, maintenance, repairs and replacement of interchangeable parts. It is quite impersonal and technical, and focuses on the needs of the machines (Morgan, 1943).

The machine metaphor is less applicable in the area of human resources.

Human labor is not, in fact, "cogs in the machine" and is subject to breakdowns of a different sort and is not interchangeable. Rather, labor is living beings with emotional, motivational, and social needs quite different from the machines they build, maintain, and operate. Human labor was comparatively devalued as were the resources being consumed by the machines in production.

The machine metaphor does not work as well in the area of natural resources and the degradation of the environment experienced in the 20<sup>th</sup> and 21<sup>st</sup> centuries. The machine metaphor largely ignores the environment in favor of increased productivity. Natural resources are consumed without thought of exhaustion or pollution of habitat, air, land, and water.

In the 20<sup>th</sup> century, greater consideration of human and environmental resources was demanded by the general and task environment. Competition and international conflict characterized this era. Economic crises contributed to political expansionism leading to two world wars. Populations were engaged in struggles to meet basic needs and survive.

The organism metaphor of organizations representative of the 20<sup>th</sup> century, contrasts with the machine metaphor representative of the 18<sup>th</sup> and 19<sup>th</sup> centuries. The organism metaphor does not emphasize manufacturing production processes to the same

extent. There was a shift of organizational resources being diverted away from direct production toward human resources such as better working conditions.

Corporate practices that threatened the quality of the air, land and water were managed, legislated and monitored by environmental protection agencies. Likewise, working conditions were subject to legislation designed to protect the lives and livelihood of labor.

Organizations such as the Environmental Protection Agency (EPA) and the Occupational Safety and Health Agency (OSHA) in the U.S. were created to monitor safety and working conditions. Unions developed to further protect the rights of labor and counter the power and perceived potential for exploitation by owner capitalists.

The organism metaphor is appropriate and works well with an increase of the value of human life and natural resources. The organism metaphor focuses on the cycle of life, and the human and physical environment. The organism metaphor also focuses on the needs of the organization, its members and environmental relations.

Additionally, the organism metaphor incorporates the systems mentality of computers which caught on in the later decades of the 20<sup>th</sup> Century. The organism metaphor suggests organizations are best understood as sociotechnical systems.

Organizations are viewed as whole systems with interdependent and interconnecting parts.

The organism metaphor does not work as well to focus organizational resources on productivity. Additional costs may be incurred to protect human resources and preserve natural resources as well. The organism metaphor with its broad connotations may not adequately address developing challenges for organizations in the 21<sup>st</sup> century.

Organizations in the 21<sup>st</sup> century operate for the most part in complex, dynamic, interconnected general and task environments. Organizations must struggle to compete. The world economy experienced one of the biggest crises since the Great Depression. In the U.S. culturally and politically, there is practically no consensus on important issues. The natural environment is stressed with a high probability of global warming affecting every aspect of life including food and fuel supplies and weather.

In the 21<sup>st</sup> Century, the general and task environment are complex and changing. There has been a shift towards service industries. Not just service however, but rather very much individualized service. It is not just necessary to have a personal computer, laptop, or tablet for example, but the cover must be customized. Cells phones have personalized ring tones and other customized features.

The mosaic metaphor is presented to represent the global era of the 21<sup>st</sup> century. The mosaic metaphor works well to represent abstractly the greater diversity of the general and task environments: society, organizations, organizational members and functional departments. The mosaic metaphor with its pattern of interconnected pieces also works well to represent the diversity of customers, competitors, and suppliers in the task environment.

The mosaic metaphor emphasizes human adaptability, capabilities and creativity represented abstractly in a piece of art. The pieces of material comprising the mosaic represent individuals or different functional areas of organizations. The mosaic metaphor promotes the value that inclusion of diverse individuals should be foremost to the greatest extent possible given organizational constraints and imperatives.

The argument being made is acceptance, inclusion and recognition of diverse individuals allows them to contribute their unique talents and perspectives and produce their best. It is also suggested that encouraging the contributions of unique, whole individuals will enhance organizational effectiveness and survivability in competitive, global and turbulent operating environments.

Applying the Metaphors to an Environmental Example

The general environment of organizations includes natural resources. To illustrate the potential impact a metaphor could have on organizations, let's look at an example. The tuna fishing industry will serve our purposes. As of 2012, the tuna industry faces diminishing stocks of fish due to global overfishing.

An organization utilizing the machine metaphor might be interested in maximizing capacity of its resources. Its resources would include boats, labor, and equipment, as well as the tuna. The intent would be to catch and process as many tuna as possible. Efficient techniques such as long line and pursing would be used. However, these techniques have decimated the species drastically, are preventing species survivability, and harming other species.

An organization utilizing the organism or mosaic metaphor might recognize better the limitations of human and natural resources. Efforts could be made to encourage alternative fishing techniques such as jacking. Jacking targets the adults which ensures the sustainability of the tuna species and allows the young to grow. Additionally, other species such as dolphins and turtles are not slaughtered inadvertently.

Sensitivity to human and natural resources such as that encouraged by the organism and mosaic metaphors could show the way towards more ethical and sustainable operations. Other advantages would be encouraging more global cooperation, dialogue, and limits. However, not pursuing efficiency at all costs could be seen as controversial given the pervasiveness of that kind of thinking.

## **Diversity**

In relation to diversity issues the machine, organism, and mosaic metaphors represent different perspectives. In the 18<sup>th</sup> and 19<sup>th</sup> Centuries, different races and societies tended not to mix, except for limited trade as separate societies. There tended to be conflict and a rigid hierarchy of power and privilege of one race over another (Alland, 1980).

At the time of the Industrial Revolution in the 18<sup>th</sup> and 19<sup>th</sup> Century, European colonialism and imperialism was at its height. Europeans felt they were superior and set out to civilize other worlds and claim new territories. The theories used to justify the divisions were biological and cultural. Part of the feeling of superiority was based on technological developments (Alland, 1980).

The machine metaphor with its insistence on non emotive adherence to the impersonal demands of the machines aided assimilation and exploitation of colonies. The colonizers were mostly interested in furthering their interests in the most efficient means possible. Devaluing populations and resources enabled them to pursue their interests without conscious regard.

The machine metaphor works partly to dehumanize colonized populations. This may have aided in the exploitation of local populations in several ways: the efficiencies of machines, and disregard for human labor and suffering. Natural resources also were exploited. The beliefs, customs, lifestyles and values of the populations were disregarded opening the door for the imposition of the values of the colonizers.

Organizations reflected the same values. Outside of royalty, leaders were European males. The labor of other men, women, and children were exploited. Any diversity internal to organization was ignored and everyone was simply expected to accept and assimilate into the dominate culture. This was the status quo and it was not to be challenged.

Assimilation and the machine metaphor accomplished their purpose quite successfully for one portion of the population – the dominant and privileged group. The suppressed and oppressed minority populations were not as successful. There are still however merits to the machine metaphor in terms of maximizing efficient, nonemotive, streamlined processes.

These attitudes and behaviors persisted for centuries. In the 20<sup>th</sup> century, European notions of superiority may have ultimately collapsed with internal conflict between European nations. The Nazis took it to an extreme and on home turf. The resulting implosion really put into question the notion of race superiority and of inexhaustible resource exploitation.

This coincides with both the emergence of the organism metaphor and developments in relation to respect and valuing different others. There had to be a shift in thinking away from assuming one culture or race or way was superior to another

because there could be no winner. There had to be a shift towards humanizing different others and their values.

The organism metaphor with its emphasis on life cycles and the environment works well to support these values. This was the beginning of valuing the complexity and diversity of populations and resources discussed in more detail in the motivation chapter. There was a renewed interest in humans and their needs and motivations including the recognition again that there were different but equal populations.

The 20<sup>th</sup> century brought increasing concern in the general and task environments about the inequality between genders and races. The economic and political direction demanded attention to diversity issues. The diversity initiatives in the U.S. for example, reflected this concern with the attempts to redress historical injustice and bring awareness to the issues of prejudgment, prejudice, and stereotyping.

There were implications for organizations as they changed procedures and policies to better accommodate legal imperatives to include women and minorities.

Gradually, the benefits of including all members of society in organizations began to be realized. Organizations realized linking diversity initiatives with their strategic goals made sense and money.

The organism metaphor and the valuing of diversity were effective up to a point. There was backlash and resistance from the privileged group. There is the glass ceiling and still other barriers beyond which women and minorities couldn't seem to progress beyond. Respecting environmental resources was having some effect but still seemed ineffective.

In the meantime, populations grew and international competition and trade increased. There were more and more interactions between them raising issues of how best to value the diversity. There was also a growing awareness of rapid change and turbulence in the environment and a greater sense of limited resources.

In the 21<sup>st</sup> century, with the world population reaching seven billion and greater diversity dispersed throughout, the mosaic metaphor could help move organizations to the next level in terms of appreciating and exploiting difference. The approach to diversity is strategic. In so far as possible, different voices should be heard and respected and valued.

The shift to service industries may have placed a renewed interest in the human element as organizations struggled to meet the individualized needs of both human employees and customers. The mosaic metaphor is more appropriate in the age of increased change and diversity, competition, democratization, globalization, and internet technology.

The mosaic metaphor is presented as an alternative to the machine and organism metaphors of organizations when there is increased diversity, or the desire for increased diversity in the organization. The mosaic metaphor is also suggested when there is a global and turbulent operating environment which assumes greater diversity internally and externally. The mosaic metaphor acts as a bridge in light of actual and greater diversity of customers, competitors, and employees, government agencies and the broader general environment.

The power of metaphor in general is to encourage a reexamination of the familiar in a fresh way. The emphasis is on individual consideration and also case by

case application in organizations. Robbins (2005) states, "to maximize employee performance and satisfaction, individual difference. . . should be taken into account" (p. 227).

What are the gaps in the literature and limitations or strengths and weaknesses of the machine, organism and mosaic metaphors of organizations in relation to the environment and diversity?

# Gaps and Limitations

The machine metaphor doesn't include much consideration of human resources.

Or rather, resources from the machine metaphor perspective are considered to be part of machines and are to be treated as interchangeable parts. Issues such as human needs, motivation, and relationships are not part of the metaphor. Other issues such as communication and culture are ignored.

The machine metaphor also doesn't include consideration of natural resources and the environment. The only consideration is given to maximizing the capacity of the machines to produce the most products as quickly as possible. The metaphor doesn't encompass destruction or depletion of natural resources nor the harm done to the natural environment in the process.

The machine metaphor seems rigid and static in that it is self contained and not open to information from the general or task environment. The concept supports mechanized operations with insufficient regard to changes in demographics, the economy, political and social spheres. The machine metaphor doesn't allow organizations to respond to shifts in their operating environment very quickly.

In terms of changing demographics and diversity, the machine metaphor doesn't acknowledge individual differences. The machine metaphor seems to function by restricting consideration of difference and insisting on adherence to the predetermined processes. The machine metaphor may contribute to a sense of distance between leaders and labor. The machine metaphor can be alienating, non emotive, traditional, outdated, and static.

However, machines and manufacturing organizations are still very much part of the economies of developing and industrialized countries. The sophistication of machines has only increased however. In relation to the skilled workforce required of many computerized operations in the 21<sup>st</sup> Century, the machine metaphor seems somewhat lacking and outdated.

In contrast, the organism metaphor better reflects the concerns for human and natural resources overlooked by the machine metaphor. The organism metaphor reminds us of the biological, living element. The organism metaphor evokes cycles of life, and the dynamic quality of cycles. It remains open to the environment.

The organism metaphor also encompasses the concept of integrated systems. However, the concept is still quite technical. The organism metaphor also seems quite broad in concept, not particularly focused on any one, main issue. It seems to ignore the impact of leadership and intricacies of human relationships. Diversity is valued for example but the glass ceiling is still seemingly impenetrable and representative diversity is still not achieved.

The mosaic metaphor doesn't seem to encompass the more mechanical and technical aspects of organizations. It is focused more on human and natural resources,

and the relationships between and within them. The mosaic metaphor is also quite broadly focused in scope in relation to diversity and may have less relevance in homogeneous organizations.

Furthermore, the mosaic metaphor has not been used extensively in organizations. It's difficult to assess its effectiveness when confronted with environmental changes until it is used more extensively and over time. The lack of experience and research negatively limits any conclusions.

#### Conclusion

Different eras are characterized by significant events which characterize the environment. Organizations reflect different eras and are influenced by the opportunities and threats of the environment. Identified eras are the Industrial Revolution of the 18<sup>th</sup> and 19<sup>th</sup> centuries, the human resource era of the 20<sup>th</sup> century, and the global era of the 21<sup>st</sup> century.

General and task environments tend to be simple or complex, and stable, unstable, or turbulent. The general environment includes demographics, economic and political systems, and cultural systems. The task environment includes customers, competitors, suppliers and technology. Changes in the operating environments of organizations challenge organizations.

There were shifts in the general environments of organizations over time.

Demographics are changing with diversity increasing. The economy is shifting from manufacturing to service industries. There are different political and legal restrictions.

Natural resources are under pressure and cultural changes include increasing democratization and globalization

There were shifts in the task environment of organizations over time also. The task environment was simple and stable becoming complex and changing. Technology was becoming more of a driving and enabling force of the economy stimulating demand for new products and services. Creativity and innovation became concerns for organizations.

The three eras have been identified and analyzed in relation to the machine, organism, and mosaic metaphors. The machine metaphor corresponds with the Industrial Revolution era of the 18<sup>th</sup> and 19<sup>th</sup> centuries, while the organism metaphor corresponds with the human and natural resource era of the 20<sup>th</sup> century. The mosaic metaphor corresponds with the global era of the 21<sup>st</sup> century.

The machine metaphor works well to represent organizations with machine driven manufacturing operating in fairly stable and localized environments. However, the human element including leadership and vision, relationships, informal communication, and culture are largely ignored by the machine metaphor of organizations. There tends to be assimilation.

The organism metaphor works well to represent organizations in mixed industries in complex and changing, international environments. It gives greater attention to the human and natural resources. However, the organism metaphor is still somewhat technical with its emphasis on whole systems. The organism metaphor does not specifically focus on leadership and vision, communication, and culture – all uniquely human aspects of organizations.

The mosaic metaphor works well to represent organizations in service industries operating in turbulent, global environments. The mosaic metaphor better represents the increased change and diversity of organizational members and operating environments of the 21<sup>st</sup> century. In this respect, the mosaic metaphor fills some limitations left by the machine and organism metaphors.

Finally, there is no one best metaphor. Metaphors tend to better represent different eras and organizations. The metaphors highlight and support certain salient characteristics and features that have a tendency to change over time. Further analysis of the guidance provided by metaphors will be discussed in the following chapter on organizations.

## **Organizational Structure**

### Introduction

This chapter will review the literature of the structure of organizations in relation to the machine, organism, and mosaic metaphors of organizations. An analytical table is presented before the chapter proceeds to the analysis of the metaphors. Articulation of the gaps in the literature, and limitations or strengths and weakness of each metaphor over time are included. Finally, the major themes will be recapped in the chapter summary.

#### Structure

Every aspect of organizations is both created by and reflects the structure of the organizations. There are at least six important elements that make up an organization's structure or type. The six elements are job specialization, departmentalization,

centralization or decentralization, chain of command, span of control, and finally formalization (Robbins, 2005).

The first element of an organization's structure is job specialization which is the degree to which tasks are subdivided. Both economies and diseconomies result. Specialization increases organizational efficiency and productivity, but workers can become bored, fatigued, and stressed leading to absenteeism, poor quality, and high turnover (Robbins, 2005).

The second element of an organization's structure is departmentalization.

Departmentalization involves grouping similar specialized jobs together by function, product, geography, or customer. Examples of organizational departments are finance, marketing, research and development, sales and service, and operations. Again, both economies and diseconomies result (Robbins, 2005).

The third element of an organization's structure is the degree of centralization or decentralization. Centralization refers to the concentration of decision making authority which occurs when top managers make all the decisions with little to no input from lower level managers. There is a trend toward less centralization whereby lower level managers closest to the action and customer are empowered to make decisions (Robbins, 2005).

The fourth element of an organization's structure is chain of command. Chain of command involves authority and the unity of command principle. Authority refers to the right to give orders and the expectation that orders will be followed. Unity of command principle refers to the concepts of an unbroken line of authority (Robbins, 2005).

The fifth element of an organization's structure is span of control. Span of control is the number of subordinates a manager or leader can efficiently and effectively manage. Span of control determines the number of vertical layers in an organization and the number of managers required. The lower the span of control the more efficient the organization in terms of fewer vertical layers and lower costs (Robbins, 2005).

Span of control also concerns distance between organizational members and departments. Faulty social processing increases geometrically with increasing span of control or distance. Faulty social processing (FSP) is defined as actual processing of information being equal to potential processing minus FSP (Gabert, personal communication, 2006; Robbins, 2005).

Faulty social processing (FSP) can be considered high, medium, or low with high being less desirable. FSP is dependent on coordination, communication, and motivation. Coordinative links can be calculated as N (N-1)/2. The greater the organizational distance, the more faulty social processing, suggesting flatter organizations are more immediate and efficient (Gabert, personal communication, 2006; Robbins, 2005).

Finally, the sixth element of an organization's structure is formalization. Formalization is the degree to which jobs in an organization are standardized. Standardization exists when there are clearly defined job descriptions, rules and regulations, policies and procedures. There are economies and diseconomies in that standardization can act as leader substitutes but can restrict input and freedom of subordinates (Robbins, 2005).

Furthermore, organizational structure is thought to have three dimensions. Organizational structure has a horizontal, vertical, and spatial dimension. Horizontal differentiation is reflected in the departmentalization, or lack thereof. Vertical differentiation is reflected in the layers, or lack thereof. Spatial differentiation is reflected vertically or horizontally, and may be geographic, language, or size (Gabert, personal communication, 2006).

The six elements and three dimensions, when taken together, characterize the type of organization. Organizations range in type from mechanistic, organic, and boundaryless or virtual. Mechanistic organizations tend to be hierarchical. Organic organizations tend to have a matrix structure, and boundaryless or virtual organizations tend to be flat (Natemeyer & McMahon, 2001; Robbins, 2005).

Mechanistic organizational structures are characterized by a high degree of horizontal, vertical, and spatial differentiation. They tend to have a high degree of job specialization, departmentalization, and centralization. There is chain of command with authority at the top, and unity of command. Span of control tends to be high along with a high degree of FSP. There is also a high degree of standardization (Hellriegel & Slocum, 1992; Robbins, 2005).

Organic organizational structures are characterized by a medium degree of horizontal, vertical, and spatial differentiation. Organic organizations tend to have job expansion and specialization, departmentalization and project organization, and tend to be less centralized with dual command chains. Organic organizations are characterized by medium span of control, teams and cross functional teams (Natemeyer & McMahon, 2001; Robbins, 2005).

Tom Burns and G. Stalker (1961) further crystallized the distinction between mechanistic and organic approaches to management and organization in their comparative studies of man-made fibers, electronics, and engineering firms. Their approach is now popularized in matrix or project forms of organizing.

Boundaryless or virtual organizational structures are characterized by a low degree of horizontal and vertical differentiation, but a high degree of spatial differentiation. Boundaryless or virtual organizations tend to have job expansion, low departmentalization with high project organization, and are less centralized -- even flat. There can be multiple chains of command, quite low span of control, and cross functional and cross hierarchical teams (Natemeyer & McMahon, 2001; Robbins, 2005).

Organizational structures have been changing in response to increased competition and turbulent environments. Many organizations have been downsized, right sized, and reengineered due to increased competition. All of these pressures and more require getting the most out of people and production (Natemeyer & McMahon, 2001; Robbins, 2005).

The three levels of the organization being considered in the dissertation are organizational leaders, managers, and members. The application of the three metaphors has the potential to impact organizational levels differently. The following table summarizes characteristics of organizational structure on the six elements relative to the machine, organisms, and mosaic metaphors.

Table 2: Machine, Organism and Mosaic Metaphor
Organizational Structure

	MACHINE	ORGANISM	MOSAIC
STRUCTURE	Mechanistic	Organic	Boundaryless; Virtual
ELEMENTS	Job Specialization; Departmentalization; Centralized; Unity of Command; High FSP Standardization	Job Expansion; Dept. and Project; Mixed Authority; Dual Command; Medium FSP X-Functional Teams	Job Expansion; Project; Decentralized; Multi. Command; Low FSP X-Hierarchic Teams
	Hierarchical	Matrix	Flat
GAPS	Barriers;	Command Clarity	Ambiguity
	Contributions		
LIMITATIONS	Satisfaction; Turnover; Rigid; Unresponsive	Loss of Efficiency and/or Productivity	Loss of Efficiency; Resistance

Analysis

Organizational metaphors can help leaders assess the appropriateness of the structure of their organization. The metaphor should fit and guide the structure of the organization. It could be that no metaphor is needed or a different metaphor is more appropriate. Alternative metaphors could be tried out to look for the fresh insights the different metaphors provide.

The machine, organism, and mosaic metaphors represent different organizational types. The machine metaphor of organizations represents mechanistic organizations, the organism metaphor represents organic organizations, and the mosaic metaphor represents boundaryless or virtual organizations.

The machine metaphor works well in mechanistic organizations with a high degree of horizontal, vertical, and spatial differentiation. In other words, the machine metaphor works well in organizations that have a high degree of job specialization, are highly departmentalized by function, and centralized with unity of command. It also supports standardization.

The machine metaphor and mechanistic structure works well in mechanized organizations such as auto or airline manufacturers that have very mechanized operations. There is a great deal of job specialization, centralization, and standardization. The machine metaphor can help support assembly line operations and prioritize production concerns.

The machine metaphor and mechanistic structure may also work well to support the streamlined processes in other organizations. Organizations such as fast food enterprises or hospitals may demand job specialization to a high degree, and standardization for quality control purposes. These organizations may also be supported by horizontal, vertical, and spatial differentiation.

However, the machine metaphor does not work as well in organizations that require more input from organizational members and quicker response to changes in the environment. The machine metaphor suggests that each organizational member would have well defined roles and responsibilities much as cogs in a machine. The machine metaphor does not support much variance from the routines. There is a rigid and static quality.

In contrast, the organism metaphor works well in organic organizations with mixed horizontal, vertical and spatial complexity. The organism metaphor supports job expansion, and both functional and product organization which would also entail dual command structures.

Job expansion, department or project organization structures may lessen the boredom and fatigue often associated with job specialization and assembly line operations of mechanized organizations. On the other hand, expanded jobs may also make some organizational members uncomfortable with the increased demands, roles, and responsibilities.

The organism metaphor also supports somewhat decentralized organizations with cross functional teams. The matrix structure can support the life cycles of products or services from development through a more mature stage. Life cycles or organizations themselves are also highlighted by the organism metaphor. There is a dynamic quality.

The organism metaphor and an organic structure could work to support organizations such as professional architectural, law, engineering or marketing firms. These organizations have a mission and needs that require initiative and independence from organizational members. Members may work cooperatively on projects across departments. Matrix structures may optimize personnel and resources in these organizations.

However, the organism metaphor does not work as well to emphasize efficient and streamlined processes to the same extent as the machine metaphor. The organism metaphor may not support structures that are mechanized and rigid such as manufacturing organizations. Furthermore, the dual reporting structure may be confusing and redundant.

The mosaic metaphor works well in boundaryless or virtual organizations with limited horizontal and vertical complexity, and a high degree of spatial complexity.

The mosaic metaphor supports job expansion, project structure and decentralized organizations. It supports flat organizations.

The mosaic metaphor and boundaryless or virtual structures work well in organizations such as computer and technology firms. These organizations may involve projects requiring a great deal of innovation and technical expertise. Members may be working remotely on common projects across space and time. Cross functional and cross hierarchical teams may need to work cooperatively and quickly in the development of new products and services.

The organism metaphor could help members of mechanistic organizations see how they all fit together into one organization. Job and functional specialties, various departments or project teams could all be considered interconnected systems. The organism metaphor could also help reduce barriers and increase cohesion and cooperation across barriers.

The mosaic metaphor could also work well to represent the highly specialized, departmentalized, and centralized mechanistic structure. The pieces of the mosaic could represent different functional areas, products, services or customer and geography. They can be abstractly and fluidly manipulated and moved around while providing integration and unity.

The mosaic metaphor could help members see how they all fit together into one organization. The mosaic metaphor could help reduce the horizontal, vertical and spatial dimension barriers. The mosaic metaphor simultaneously recognizes differences and distance created by job specialties, functions, departments, etc. while simultaneously unifying them.

With regard to span of control, the machine metaphor characterizes organizations with a high degree of faulty social processing. The many layers of vertical differentiation preclude better coordination, communication, and attention to motivation leading to FSP. The barriers and distance between designers, engineers, management and operators for example suggests this.

The organism metaphor and organic organizations reduce FSP. Cross functional teams can reduce span of control and ensure responsiveness to environmental trends.

The mosaic metaphor and boundaryless or virtual organizations further reduce distance between organizational members and lower FSP results. Better coordination,

communication, and motivation should result for both organic, and boundaryless and virtual organizations.

Burns and Stalker (1961) conclude that there is no one best way to organize.

Rather, they suggest organizations should be appropriate to their environments.

Organic, and boundaryless or virtual structures are flatter and more responsive to the environment.

### Gaps and Limitations

The machine metaphor represents mechanized organizations utilizing job specialization, departmentalization, and centralized decision making authority.

Hierarchical organizations may result in a lot of horizontal and vertical differential.

Organizational members may be pigeon holed in their job specialties and grouped by departments for the sake of streamlined operations.

However, organizational members may have much more to contribute. In mechanized organizations supported by the machine metaphor, there may not be many opportunities for creative contributions and suggestions beyond the parameters of restrictive job specialties and departments. Mechanistic organizations may be underutilizing human resources.

Furthermore, a high degree of departmentalization may result in barriers or glass walls. Departments may compete for organizational resources. This could be counterproductive to efficiency and negatively impact productivity. There would be many blind spots or lost opportunity with regard to the organization's human and other resources.

Mechanistic organizations utilizing the machine metaphor may not be focused on job satisfaction and turnover. Job specialization can produce boredom and fatigue leading to burn out. Organizational members who are viewed as cogs in a machine could be seen as interchangeable and replaceable. Higher turnover could also result and this is costly.

A high degree of centralization and unity of command may further impede coordination, communication, and motivation of organizational members. Higher faulty social processing may result. Additionally, the organization may be rigid, slow or unresponsive to changes in the general and task environments.

The organism metaphor represents organic organization utilizing job expansion, functional and project organization, and some decentralization. These conditions create more opportunity for contributions and input which could increase satisfaction and improve turnover. However, these conditions also involve more responsibility for organizational members which may not work for all organizational members.

Furthermore, dual command structure may result in loss of reporting clarity and efficiency. Some organizations such as fire and rescue or the military require a clear chain of command, and unity of command, for example. Cross functional team organization cuts down on horizontal and vertical differentiation resulting in better span of control

Less horizontal and vertical differentiation results in more immediacy thereby reducing span of control. The organization may be more sensitive to environmental changes and be able to respond more quickly. Flat organizations work well here and are more responsive to change and less rigid than mechanistic organizations.

The mosaic metaphor representing boundaryless or virtual organizations may result in flatter organizations. Job expansion, project organization, and decentralized structures may appeal to organizational members desiring more input and responsibility. However, there could be too great a burden of responsibility placed on individual members and managers.

The lack of role and responsibility clarity may create ambiguity and uncertainty. It may make individual members and managers uncomfortable. There may be resistance on the part of some members who yearn for more definite roles and responsibilities and more dependence. In other words, organizational fit may become more important in all types of organizations.

#### Conclusion

Organizational structures range from mechanistic, organic or matrix, to boundaryless or virtual. There are at least six elements that differentiate organizational structure. They are job specialization, departmentalization, centralization or decentralization, unity of command, span of control, and formalization. In other words, there are horizontal, vertical, and spatial dimensions of organizations.

The machine, organism, and mosaic metaphors represent different organizational types. The machine metaphor represents mechanistic or hierarchical organizations. The organism metaphor represents organic or matrix organizations. The mosaic metaphor represents boundaryless or virtual organizations.

Mechanistic organizations have a high degree of horizontal, vertical, and spatial differentiation. There is unity of command and standardization. These organizations

also have a relatively high span of control potentially resulting in higher faulty social processing. Mechanistic organizations work well for fast food, manufacturing, or military organizations.

Organic organizations have medium horizontal, vertical, and spatial differentiation. There is mixed authority and dual command. There is medium span of control resulting in less faulty social processing. Cross functional teams lessen distance. Organic organizations work well in professional organizations.

Boundaryless or virtual organizations reflect horizontal complexity that is compressed, vertical complexity that is flatter and spatial complexity that is broad. Boundaryless or virtual organizations utilize more job expansion, project organization, and are decentralized. There can be multiple commands and low faulty social processing through the use of cross functional and cross hierarchical teams. The flatter structure allows for response to turbulent environments.

The following chapter considers the three metaphors in relation to management theory.

## Management Theory

### Introduction

This chapter will review the literature of management theory in relation to the machine, organism and mosaic metaphors. An analytical table is presented before the chapter proceeds to the analysis of the metaphors. Articulation of the gaps in the literature and limitations, or strengths and weaknesses over time, are included. Finally, the major themes will be recapped in the chapter summary.

### Literature

Organizational management theory has evolved over time. After the Civil War, the U.S. was transforming into an industrial, urban nation. This was a shift from the agrarian society the U.S. had been. Many opportunities existed for individuals to get rich and captains of industry emerged with monopolies in oil, meat, steel, sugar, and tobacco (Hellriegel & Slocum, 1992).

A watershed year for management theory was 1886. This was the year Henry Towne proposed the creation of Economic Section in the American Society of Mechanical Engineers. It was the year of Chicago's Haymarket labor riots, and it was year of birth for many landmark companies such as Sears, Roebuck and Company and Coca-Cola (Hellriegel & Slocum, 1992).

Henry Towne (as cited in Hellriegel & Slocum, 1992) presented a paper titled "The Engineer as an Economist" to the American Society of Mechanical Engineers. He urged the importance of combining the skills of good engineers and good businessmen to the management of industrial works. The Economic Section would focus on shop management and accounting.

Chicago's Haymarket Riots occurred during the peak of labor unrest. Labor had been regarded as a commodity and many employees were out of work due to lockouts and strikes. Richard Ely (as cited in Hellriegel & Slocum, 1992) advocated for less radical unions in his influential book, *The Labor Movement*. He cautioned unions to work within the existing economic and political system.

Three main "schools of thought" of management theory developed throughout the  $20^{th}$  century. They are classic or traditional management, human resources, and

whole systems. Classic or traditional management includes bureaucratic, scientific, and administrative management (Hellriegel & Slocum, 1992; Natemeyer & McMahon, 2001).

Classic or traditional management was developed by three main researchers:

Taylor, Fayol, and Weber. Taylor (1916) is most closely associated with scientific management. Other contributors were the Gilbreths and Gantt. Fayol (as cited in Hellriegel & Slocum, 1992) is most closely associated with administrative management and organizing principles while Weber (1946) is most closely associated with bureaucracy.

Frederick W. Taylor (1916), who was an American mechanical engineer, is associated with scientific management and was influenced by Towne. Taylor started out as a foreman at Midvale Steel Company in Philadelphia before working as a consultant at Bethlehem Steel. The focus of scientific management is the productivity of the worker (Hellriegel & Slocum, 1992).

Taylor (1916) felt theory evolved from practice and so conducted meticulous time and motion studies of coal shovelers and a machine shop. He examined movements, loads on the shovels, and different types of shovels to maximize efficiency of effort. He was exacting and was regarded as the "enemy of the working man" (Hellriegel & Slocum, 1992).

Taylor (1916) advocated four simple principles of scientific management. The first principle is knowledge and the second principle is the selection of workmen. The third principle is bringing knowledge and workmen together, and the fourth principle is the redivision of work responsibilities (Hellriegel & Slocum, 1992).

Taylor's (1916) first principle is for management to gather together the mass of traditional knowledge of the trades. The second principle is the selection of the workmen and to train them diligently. The third principle involves bringing together the gathered knowledge and the trained workmen with some resistance expected from the management side (Hellriegel & Slocum, 1992).

The fourth principle involves a total redivision of the work responsibilities. All of the work previously done solely by the workmen is to be divided into two parts with one part given to management to do. Management was to be accountable to the workmen for their part. This was to foster teamwork and cooperation, and a democracy (Hellriegel & Slocum, 1992).

The main effects purported by Taylor (1916) of scientific management are regular initiative of the worker, and new duties of management. The initiative or good will of the worker is obtained with regularity, and the new duties of management help to ensure efficiency and fairness (Hellriegel & Slocum, 1992).

Other notable contributors to scientific management were the husband and wife team of engineers, Frank and Lillian Gilbreth (as cited in Hellriegel & Slocum, 1992). Frank Gilbreth used motion pictures to study tasks and to break them down into individual movements. He worked with bricklayers and was able to reduce movements from eighteen to five and increase productivity by two hundred percent.

Lillian Gilbreth (as cited in Hellriegel & Slocum, 1992) was more concerned with the human side of industrial engineering and championed legislation for the protection of workers. She was influential in getting child labor laws passed in Congress and to develop other rules to ensure worker safety.

Yet another significant contributor to scientific management was Henry Gantt (as cited in Hellriegel & Slocum, 1992). He focused on control systems. In particular, Gantt developed a progress chart showing various stages of a project and associated deadlines. The Gantt chart is still widely used.

Henri Fayol (as cited in Hellriegel & Slocum, 1992) who was a French industrialist is associated with administrative management. Fayol advocated a top down approach to organizing with authority at the top. An important principle is chain of command with one boss ensuring a clear structure. The focus of administrative management is the manager and their actions.

Max Weber (1946), who was a German social historian, is associated with bureaucracy. Weber's contribution was not widely recognized until after his work was translated into English in 1947. Bureaucratic management is to improve efficiency, consistency, and predictability for the whole organization (Hellriegel & Slocum, 1992).

Bureaucratic management is comprised of seven principles. The seven principles of bureaucratic management are rules, impersonality, and division of labor, hierarchical structure, authority structure, lifelong career commitment, and rationality (Weber, 1946; Hellriegel & Slocum, 1992).

Rules are guidelines for behavior, impersonality ensures fairness, and division of labor allows organizations to use skilled and unskilled labor efficiently. A hierarchical structure is meant to reflect differing levels of authority and power based on expertise or seniority (Hellriegel & Slocum, 1992; Natemeyer& McMahon, 2001).

The authority structure determines who makes decisions of varying importance.

There are three types of authority structures: traditional, charismatic, and rational-legal

authority. Traditional authority is based on custom such as bestowed on kings.

Charismatic authority is based on perceived special personal and professional qualities.

Rational-legal authority is based on impersonal laws and rules which apply to everyone (Hellriegel & Slocum, 1992).

Life-long commitment guarantees job security as long as employees perform satisfactorily. Rationality refers to the assumption that organizations will use the most efficient means possible to achieve tasks and objectives. Additionally, rationality refers to the breakdown of complex tasks into more specific tasks and objectives (Weber, 1946; Hellriegel & Slocum, 1992).

Bureaucracy results in many benefits and efficiencies but rules can become rigid creating red tape which can waste time and money. Weber (1946) actually viewed bureaucratic management somewhat skeptically. He was cautious of bureaucracy's corrupting influence on the human soul and spirit (in cited in Hellriegel & Slocum, 1992).

The behavior and human resources school of management thought developed in the 1930's and 1940's. The shift was triggered in part by massive cultural and social changes in the U.S. Mass production was spurring the second Industrial Revolution. Society was becoming increasing consumer oriented and the general standard of living rose and working conditions improved. The workforce was gaining power through unions and managers were forced to recognize the human resources of their organizations (Hellriegel & Slocum, 1992).

Behavior and human resource management theory was developed by many researchers, but there were three influential contributors: Follett (1926), Barnard, and

Mayo (as cited in Hellriegel & Slocum, 1992; Roethlisberger, 1941). Follett contributed that coordination was vitally important. Barnard contributed that organizations need employee cooperation and communication. Mayo contributed breakthrough insights into of the human element in organizations.

Mary Follett (1926) was one of the first researchers to challenge traditional management. Follett suggested that management was a dynamic process in contrast to the static nature of traditional management. Follett felt as one problem was solved another problem was generated. She also felt workers should be involved in problem solving (Hellriegel & Slocum, 1992).

Follett (1926) observed managers at work and determined that coordination is vital to effective management. She felt coordination is best achieved by moving decisions to the lowest level closest to the action, at the early stages of planning projects, by addressing all factors in the situation, and by viewing coordination as a continuous process (Hellriegel & Slocum, 1992).

Chester Barnard (as cited in Hellriegel & Slocum, 1992) made two significant contributions to behavior management as detailed in his book *The Functions of the Executive*. Barnard viewed organizations as social systems that require employee cooperation. Barnard suggested managers' main roles were to communicate and motivate workers.

Barnard (as cited in Hellriegel & Slocum, 1992) also developed the acceptance theory of authority. The theory states employees need to "buy into" management's orders and the organizational goals. Acceptance occurs when employees understand the

orders, believe the orders are consistent with organizational goals, and see a positive benefit for themselves).

Elton Mayo (as cited in Hellriegel & Slocum, 1992; Roethlisberger, 1941), a Harvard professor, is closely associated with the Hawthorne studies. The Hawthorne studies were originally conducted by company engineers at Western Electric Company's Hawthorne plant in Chicago. The Hawthorne Tests began in 1924.

Briefly, in the Hawthorne experiments some physical factors such as lighting were manipulated for the test group but not for the control group. It was determined that employees responded positively regardless of the illumination manipulation. Elton Mayo (as cited in Hellriegel & Slocum, 1992; Roethlisberger, 1941) was called in to investigate the mysterious findings further.

Mayo (as cited in Hellriegel & Slocum, 1992; Roethlisberger, 1941) devised another experiment with his Harvard colleagues, Fritz Roethlisberger and William Dickson. Two groups of six women were placed in separate rooms with one being the control group and the other the test group. Again, regardless of the physical manipulations, productivity in both groups increased.

Mayo (as cited in Hellriegel & Slocum, 1992; Roethlisberger, 1941) proposed the alternative explanation of a complex emotional chain reaction. Workers responded positively to personal attention and concern. The groups had developed a group pride that motivated them to improve their performance and establish new group norms of productivity. Mayo called this the Hawthorne effect.

Furthermore, Mayo (as cited in Hellriegel & Slocum, 1992; Roethlisberger, 1941) suggested that leadership and relationships were not necessarily logical and

rational which is in contrast to traditional management. Mayo felt employee behavior is rarely a matter of simple cause and effect relationships based on scientific principles.

Rather employee behavior is determined by a complex set of factors.

Whole systems school of management thought developed in the 1950's. The original template for systems analysis developed during the World War II efforts by a team of mathematicians, physicists, and other professionals to track enemy movements. Systems analysis was gradually accepted into other organizations such as the Department of Defense (DOD) and private industry (Hellriegel & Slocum, 1992).

A system is an association of interrelated and interdependent parts. There is generally a sequence of inputs, transformation, output, and feedback. The system may be at different levels to include individual, group, department, an entire organization, or global multinational organization. There are two types of systems: closed and open, depending on whether they interact with their environment (Hellriegel & Slocum, 1992).

The theory of whole systems was first introduced into the literature by Ludwig von Bertalanffy as general systems theory in the 1950s and 1960s. He posited that organizations, like organisms, are open to their environments in a continuous cycle of input, transformation, output and feedback (O'Hair, personal communication, 2006).

Several terms associated with whole systems theory are homeostasis, entropy, differentiation, and integration. Homeostasis refers to self regulation while entropy is the tendency to deteriorate over time. Integration implies living systems are closely intertwined and functionally interdependent (Hellriegel & Slocum, 1992).

System evolution depends on the ability to move to more complex forms of differentiation and integration. Greater variety in the system facilitates its ability to deal with challenges and opportunities. This is a cyclical process of variation, selection and retention which is responsive to competition (Hellriegel & Slocum, 1992).

Furthermore, requisite variety states the internal regulatory mechanisms of a system must be as diverse as the environment. Equifinality captures the idea that there are many different ways of arriving at a given end state. Living systems may have flexible patterns of organization while still allowing for achievement of results (Hellriegel & Slocum, 1992).

Burns and Stalker (1961) add "The beginning of administrative wisdom is the awareness that there is no one optimum type of management system" (p. 379). The literature regarding management theory is summarized in the following table.

Table 3: Machine, Organism and Mosaic Metaphors

Management Theory

	MACHINE	ORGANISM	MOSAIC
LITERATURE	Traditional Theory: Bureaucratic; Scientific; and Administrative	Behavior and Human Resources	Systems Analysis and Whole Systems
	1890s – 1920's	1930 – 1940's;	1950's – 1970's
	Weber; Taylor; Fayol	Follett; Barnard; and Mayo: Hawthorne;	World War II Von Bertalanffy
	Authority; Bureaucratic; Efficient and Rational and Routine	Coordination, Cooperation, Attention and Group Norms	Computers; Life Cycles
	Economic Needs; Static	Social Needs; Dynamic	Environment; Dynamic
GAPS	HR; Norms; Environment	Efficiency; Rationality	Conflict
/LIMITATIONS	Conformity; Emotion	Requisite Variety	Technical

Analysis

The machine, organism and mosaic metaphors relate to different management theories. The machine metaphor represents classic or traditional management. The organism metaphor represents behavior and human resource theory. The mosaic metaphor represents systems analysis and the whole systems theories.

Classic or traditional management is scientific, administrative, and bureaucratic management as developed by Taylor (1916), Fayol (as cited in Hellriegel & Slocum, 1992), and Weber (1946). Although Taylor was considered to be the enemy of the working man, his principles seem to suggest that he was the friend of the working man. The stated intent was to foster cooperation, democracy, and teamwork by having management assume many of the duties of the worker.

The machine metaphor is evident in the time and motion studies of the coal shovelers by Taylor (1916) and the movement captures of Gilbreth (as cited in Hellriegel & Slocum, 1992). The effect could be seen as making work easier as well as more efficient. The contributions of the Gilbreths of the sequential steps of an activity could also be seen as making work easier by reducing the steps.

The machine metaphor is also evident in the breaking down of management tasks in administrative management. Administrative management involves the principles of planning, organizing, implementing and controlling as developed by Fayol (as cited in Hellriegel & Slocum, 1992). It was thought order and stability would result much as the order and stability of machines.

Administrative management importantly invokes chain of command. Managers may be encouraged to protect their authority, their resources, and to perform at

minimum productivity. Decisions making and adjustment to change may be slow. Professionals may feel authority should come more from competence than position and seniority (Hellriegel & Slocum, 1992).

The machine metaphor works well in organizations that are bureaucratic. Bureaucracy is associated with impersonal policies, rules and regulations, predictability, and scalar principles. It specifies predetermined routines and specialized sets of activities and tasks. Bureaucratic management emphasizes efficient functioning, and logical, rational thinking (Natemeyer & McMahon, 2001).

The image of a machine loyally and tirelessly churning out products reinforces ideas that work is impersonal, mechanical, routine, and repetitive. The machine metaphor reinforces ideas of rules and regulations, predictability, and rationality. However, the machine metaphor does not work as well in support of human behavior and human resources.

The organism metaphor works well to support behavior and human resource theories. The focus is on the humans behind the design, maintenance, and operation of the machines. Workers respond to personal attention and group norms, not just impersonal rules and routines. Workers are not as logical and rational as though by traditional management (Natemeyer & McMahon, 2001).

The organism metaphor also works well to reinforce the life cycle view of organizations. Whole systems theory represents organizations are living systems. The organism metaphor also emphasizes the interconnections between and within organizations and their environment. However, the organism metaphor falls short in ensuring requisite variety within the system (Hellriegel & Slocum, 1992).

In relation to whole systems theory, the mosaic metaphor is a move towards the more complex differentiation and integration required of systems thinking. Individual pieces comprising the mosaic abstractly represent the differentiation of the system. The mosaic taken as a whole represents the integration. The assumption is the human work force has different motivations and needs than originally thought by traditional management.

### *Gaps and Limitations*

Attitudes, customs, knowledge, norms and realities prevalent during the development of classic and traditional management theories were different than those experienced during the later development of behavior, human resource, and whole systems theories in the 20<sup>th</sup> century. Classic and traditional theories, which heavily emphasized the characteristics of the machine metaphor, couldn't take into account attitudes and norms that were revealed by later experiments regarding management.

Classic and traditional management theories tended to ignore many human and informal aspects of organizations. Human aspects include relationships such as peer pressure, and other social norms. Informal aspects include informal communication, dissent and participation. Furthermore, these theories didn't explain the how and why of productivity (Natemeyer & McMahon, 2001).

Classic and traditional management theories encourage conformity and conservative values because of the emphasis on impersonal rules and routines. These management theories emphasize efficient and rational use of human and natural

resources tending to disregard the safety and welfare of employees and the environment (Natemeyer & McMahon, 2001).

The behavior and human resource theories associated with the organism metaphor are a significant redress of many of the perceived gaps and shortcomings of the classic and traditional theories. The revelation by the Hawthorne studies that human behavior is not a simple matter of cause and effect but rather a complex emotional chain reaction is important for organizations. However, it is still not clear by the literature how to achieve similar effects.

The mosaic metaphor is associated with whole systems theories. The internal requisite variety demanded by whole systems thinking has not generally been achieved in most organizations. Organizations still tend not to include the diverse human element existing in an interconnected and turbulent global environment.

The mosaic metaphor encourages requisite variety demanded by whole systems theory. However, the mosaic metaphor with its emphasis on inclusion of diverse individuals and values may cause conflict and disagreements. There may also be lingering barriers and resistance to inclusion of diverse individuals at all levels of organizations limiting requisite variety.

The mosaic metaphor's focus on human emotion may erode logic and rationality. Furthermore, the mosaic metaphor encourages a certain level of challenge to the status quo through dissent and discussion. This can be time consuming resulting in a loss of efficiency and even productivity. This suggests the mosaic metaphor might be somewhat idealistic.

### Conclusion

Three different schools of thought develop beginning in the 19<sup>th</sup> century and continue into the 20<sup>th</sup> and 21<sup>st</sup> century. Classic or traditional management theory involves scientific management, administrative management, and bureaucracy and is focused on organizing principles as a means for control over the factors of production to achieve the highest level of efficiency.

Behavior and human resource theories developed in the 1930's and 1940's with an emphasis on supervision strategies to maximize motivation and coordination. Systems analysis resulted in whole systems theories developed during WWII that emphasized cause and effect relationships. The impact of an increasingly turbulent external environment (featuring unprecedented levels of diversity) on internal operations became increasingly important to organizational scholars at the turn of the century.

The machine, organism and mosaic metaphors of organizations correspond to these different schools of thought. The machine metaphor corresponds to classic or traditional management theories. The organism metaphor corresponds to behavior and human resource theories. The mosaic metaphor corresponds to theories that simultaneously analyze organizational operations in a dynamic relationship with the external environment.

The machine metaphor and traditional management theories supported the needs of manufacturing by framing leaders as those responsible for organizing the factors of production. This type of metaphor remains salient to organizations that produce things or services that are highly routine, allowing efficiency to be emphasized.

The organism metaphor and human resource theories alternatively focused on how leaders could leverage the human needs and motivation of the workforce to make the entire system more productive. The metaphor of an organism is useful for organizations that must coordinate internal operations, often leveraging a human action integration imperative.

Starting from the premise that systems can be closed or open to their environments, the mosaic metaphor of organizations represents a more complex form of whole systems thinking that includes the external environment while simultaneously allowing for analysis at multiple levels.

The individual pieces of the mosaic represent requisite variety in the system while the whole mosaic represents integration. The metaphor encourages leaders to engage in the multiple dimensional thinking necessary for internal integration and external adaptation. Leaders in organizations that operate in a competitive, turbulent environment where rapid adaption is critical and a human/technology interface is critical may benefit from employing the mosaic metaphor.

## Leadership Theory

### Introduction

This chapter will review the literature of leadership theory in relation to the machine, organism and mosaic metaphors. An analytical table is presented before the chapter proceeds to the analysis of the metaphors. Articulation of the gaps in the literature and limitations, or strengths and weaknesses over time, are included. Finally, the major themes will be recapped in the conclusion.

### Literature

#### Introduction

Management and leadership elude simple definitions given the complexity, mystery, and range of research topics and managers can be distinguished from leaders. According to the literature, managers are people who do things right whereas leaders are people who do the right thing. There is some consensus that leadership involves an influence process to achieve a common goal (Hellriegel & Slocum, 1992; Natemeyer & McMahon, 2001; Northouse, 2004; Robbins, 2005; Yukl, 2006).

Leadership has been considered from many different perspectives. Some perspectives are origins, behavior, motivation and performance, power, organizations, and organizational change and development. Other perspectives are functional, interdisciplinary, psychodynamic, and social identity (Hellriegel & Slocum, 1992; Natemeyer & McMahon, 2001; Northouse, 2004; Robbins, 2005; Yukl, 2006).

There are four main research approaches to leadership research. The first approach is transactional leadership including trait research. The second approach is behavior which transitions into the third approach which is contingency or style. Contingency or style focuses on the relationship between the leader's behavior and the situation. The fourth approach is charismatic and so called new leadership theories including transformational leadership (Hellriegel & Slocum, 1992; Natemeyer & McMahon, 2001; Northouse, 2004; Robbins, 2005; Yukl, 2006).

The research approaches tend to build on each other over time in apparent attempts to address shortcomings of previous versions; aspects of earlier theories are evident in later theories. For example, leadership research began with trait studies and

variations of trait studies continue with transformational leadership (Goethals, Sorenson & Burns, 2004; Hellriegel & Slocum, 1992; Yukl, 2006).

Other important leadership theories of relevance are creative imaging and visions, leader-member exchange theory focused on relationships, and implicit leadership theory and the related culturally endorsed leadership theory. Shared leadership, leadership styles, and bases of power are also important and follow the discussion of the four leadership approaches.

### Trait and Behavior Approach

The trait approach began in the 1940s with so called "Great Man" theories. The behavior approach began with the influential Ohio State and Michigan State Studies and continued with Blake and Mouton's (1967) Management Grid Theory. The contingency approach ensued before the charismatic and so called new leadership theories developed from the 1970s (Hellriegel & Slocum, 1992; Northouse, 2004).

The early trait studies of leadership searched for universal traits of leaders.

These were the so-called "Great Man" theories and have been largely debunked.

Subsequent trait studies however did uncover two generic leadership behaviors: Ohio State Trait Studies and the Michigan State Group Studies detailed in the following paragraphs (Hellriegel & Slocum, 1992; Northouse, 2004; Yukl, 2006).

The Ohio State Trait Studies discovered two generic leadership behaviors which were initiation and consideration. Initiating behavior includes production such as active planning, organizing, and controlling. Consideration behavior includes people such as

concern for employee comfort and well being (Hellriegel & Slocum, 1992; Northouse, 2004; Yukl, 2006).

Michigan State Group Studies discovered two generic leadership behaviors which were concern for production and concern for people. These two behaviors correspond closely with the two generic leadership behaviors of the Ohio State Trait Studies (Hellriegel & Slocum, 1992; Yukl, 2006).

Traits found in later studies to be consistently supported were intelligence, prosocial, assertiveness, self-confidence, energy-activity and task-relevant knowledge. Lord, DeVader, and Alliger (as cited in House & Aditya, 1997) found three traits were all significantly associated with follower perceptions of leadership: intelligence, dominance, and masculinity.

Behavior research was furthered by Mintzberg (as cited in House & Aditya, 1997). Mintzberg found evidence for ten generic leader behaviors divided into three categories: interpersonal, informational, and decisional roles. House and Aditya (1997) suggest there is a difference between generic leadership behaviors and specific leader behaviors.

According to House and Aditya (1997), there are generic task related behaviors and generic social maintenance related behaviors. Social maintenance related behaviors include establishing a supportive social climate, ensuring collaborative interaction, and providing appropriate infra structures. Specific leader behaviors vary by context and environment. It became apparent that neither the trait nor the behavior theories could account for all leadership effects spurring research in the contingency approach.

# Contingency and Style Approach

The two generic leadership behaviors of concern for production and people were apparently inconsistent, leading Blake and Mouton (1967) to develop Management Grid Theory. Management Grid Theory specifies five possible leadership styles which are produce or perish, team, middle of the road, country club style and impoverished.

The contingency approach takes into account the situation. The most influential research was Fiedler's (as cited in Hellriegel & Slocum, 1992) Least Preferred Coworker Theory, House's (as cited in Yukl, 2006) Path-goal Theory, Vroom and Jago's (1974) Decision Process Theory, and Hersey, Blanchard and Natemeyer (1979) Life Cycle Theory.

Fred Fiedler (as cited in Hellriegel & Slocum, 1992) contributed Least Preferred Coworker Theory to the contingency approach. The Least Preferred Coworker Theory attempts to elicit the leader's tendency towards task or relationship oriented behavior. The leader's preferences are then matched to a situation. The three situations are leader-member relations, task structure, and leader position power.

An important outcome of Lease Preferred Coworker Theory (Fiedler & Garcia as cited in House & Aditya, 1997) is that it led to the development of the Cognitive Resource Theory of Leadership. The hypothesis of Cognitive Resource Theory of Leadership is that stress results in less mature or previously dominant behavior by leaders. It was determined that when managers were under stress, their intellectual abilities were not used effectively. This theory has enjoyed considerable support.

Robert House (as cited in Yukl, 2006) and House and Mitchell (as cited in Hellriegel & Slocum, 1992) contributed Path-Goal Theory to the contingency approach. Path Goal Theory suggests leaders consider employee and task characteristics. The leader's task is to motivate employees, and the leader should choose one of four styles. The four leader styles are achievement, directive, participative, and supportive.

Victor Vroom and Philip Jago (1974) contributed the Leader Participation Model to the contingency approach. The Leader Participation Model involves a normative model which provides a set of rules to determine the amount and form of decision participation. Tasks are considered to be structured or unstructured. Three leader styles emerge which are autocratic, consultative, and group.

Hersey, Blanchard and Natemeyer (1979) contributed their Situational

Leadership Model to the contingency approach. The Situational Leadership Model
takes into consideration the maturity level of subordinates as they define it in the model.

Maturity level refers to ability and experience rather than chronological age. Leaders
are to use directive, coaching, supporting, or delegating styles.

# Charismatic and New Leadership Theory

There was a major shift in leadership studies in the mid 1970s with the so-called new leadership theories. New leadership theories attempt to explain how leaders are able to attain outstanding results, extraordinary levels of follower admiration, commitment, dedication, loyalty, respect, trust, motivation and performance (Hellriegel & Slocum, 1992; Natemeyer & McMahon, 2001; Northouse, 2004; Yukl, 2006).

The new leadership theories were developed by many researchers. The new leadership theories include charismatic leadership (Conger & Kanungo and Weber (as cited in Yukl, 2006); House (as cited in Hellriegel & Slocum, 1992); Shamir, House, and Arthur (as cited in Yukl, 2006), and transformational leadership (Burns, 1978) further operationalized by Bass (1990)(as cited in Yukl, 2006).

The new leadership theories also include visionary theories (Bennis & Nanus as cited in Yukl, 2006; Kousnes & Posner, 1987) operationalized by Sashkin (as cited in House & Aditya, 1997) and extended by Nanus (as cited in House & Aditya, 1997), and the Value Based theory of leadership held by House, Delbecq and Taris (as cited in House & Aditya, 1997). The leader effects of the new leadership theories include personal identification, and collective identification with the leaders' vision and values. The leader effects also include enhanced emotion, self-esteem and motive arousal.

All of the new leadership theories are based in part on charismatic leadership. Charisma is a Greek term meaning "divinely inspired gift" (Hellriegel & Slocum, 1992). There is some difference of opinion about the meaning of charisma, with some thinking it refers primarily to socially undesirable and destructive leadership (Lindholm as cited in Yukl, 2006).

Weber (as cited in Yukl, 2006) is most closely associated with the introduction of charismatic leadership into the literature. According to Weber charismatic leadership involves a leader being seen as exceptional by followers. A leader puts forth a somewhat radical vision in response to a crisis. The vision is met with some measure of success and the leader's exceptional status emerges.

Howell and House (as cited in House & Aditya, 1997) think there are two kinds of charismatic leadership: socialized and personalized. The emergence and effectiveness of charismatic leaders will be associated with leader's sense of collective interests and social responsibility rather than self-interest. As charismatic leaders will inevitably be criticized and resisted, they need to have a low affiliative motivation and high socialized power motivation (Yukl, 2006).

A socialized power orientation has been shown to be important in styles of leadership distinguishing charismatic and transformational leadership. Charismatic leaders advocate change and challenge the status quo. Substantial perseverance and risk taking is needed by these leaders to overcome the numerous obstacles (House & Aditya, 1997).

One of the defining characteristics of transformational leadership is charismatic leadership. Burns (1978) is closely associated with an early version of transformational leadership which involves a high degree of morality. Leaders and followers transcend self interest for the good of others and the collective good and raise each other up.

Bass (1990) (as cited in Yukl, 2006) continued to develop and distinguish transformational leadership. Transformational leadership involves four distinct characteristics: charismatic or idealized influence and leadership, individualized consideration, intellectual stimulation and inspirational motivation.

As stated by Burns (1978) in *Leadership*, transformational leadership can be distinguished from the type of transactional leadership characteristic of traditional management. New leadership theories stress cognitively oriented and emotionally appealing leader behaviors (Northouse, 2004; Yukl, 2006).

Cognitively oriented behavior includes environmental sensitivity, intellectual stimulation, and versatility. Emotionally appealing leader behaviors includes empowering, image building, risk taking, role modeling, supportive behaviors, and visionary frameworks (Yukl, 2006).

# *Implicit Leadership Theory (ILT)*

Another theory, Implicit Leadership Theory (ILT) (Lord, Binning, Rush & Thomas; Lord, DeVader & Alliger; Lord, Foti & DeVader; and Lord & Maher as cited in House & Aditya, 1997) looks at the evaluations people make about leaders.

Specifically, ILT examines the cognitive processes underlying evaluations and perceptions of leadership.

Lord, Binning, Rush, and Thomas (as cited in House & Aditya, 1997) define leadership as the process of being perceived by others as a leader. The process is either controlled and deliberate or automatic and spontaneous. According to Lord and Maher, once formed, the followers form a cognitive framework for subsequent evaluations (as cited in House & Aditya, 1997).

Lord, Foti, and DeVader (as cited in House & Aditya, 1997) assert that leadership perceptions can be explained in terms of categorization theory. They argue that leadership perceptions form a number of hierarchically organized cognitive categories, each of which is represented by a prototype. A person is categorized, based on the prototype in the observer's implicit theory.

According to Implicit Leadership Theory, societal cultural norms and values influence commonly held implicit theories of leadership. There are however, no

empirically supported theories considering cultural differences of organizational members contend Lord and Maher (as cited in House & Aditya, 1997).

National cultures and societies differ with respect to the degree of assertiveness and aggressiveness of leaders and other members, intrinsic or extrinsic incentives, achievement or task orientations, and short versus long term orientations. Investigators in the GLOBE research project are currently attempting to identify culturally endorsed implicit leadership theories (CILTs) in each of sixty countries (Robbins, 2005).

House and Aditya (1997) have proposed a theory of cross-cultural leadership that asserts the accepted, expected, and effective leader behavior varies by culture. Culturally Endorsed Implicit theories of leadership (CILT) specify the processes by which cultures influence leader behavior.

CILTs would indicate the expectations of leaders in relation to behaviors such as change and risk orientation, directive, proactive and visionary. Leader behaviors congruent with CILTs will be more effective; however some behaviors concerned with change will be effective even when not congruent with CILTs (House & Aditya, 1997).

The importance of person and task oriented leader behaviors are also contingent on the culturally endorsed, implicit theories of leadership. CILTs can be extended from the dyadic level to the cross cultural level. CILTs specify a number of interactions between cultural norms, leader acceptance, behavior and effectiveness, and organizational practices.

Knowledge of culture specific and universal aspects of CILTs will help to facilitate cross cultural communication, understand the scope of cultural influences on leadership and improve relationships. The theory remains to be tested however (House

& Aditya, 1997). The relative lack of research on leaders in other countries is indicated by the following quote by Chen and Van Velsor, "... there is only a very limited knowledge base regarding leadership behaviors of nontraditional and non-Western leaders" (as cited in House & Aditya, 1997).

Focus group research and interviews in thirty eight countries as part of the Global Leadership and Organizational Behavior Effectiveness Program (GLOBE) study revealed behaviors specified in the neocharismatic leadership paradigm might be universally accepted and preferred (House & Aditya, 1997).

Transformational leadership was found to be positively related to leader effectiveness and subordinate satisfaction in China, England, Japan, the Netherlands, Singapore, and the U.S. using the MLQ transformational leadership scales (Bass as cited in Yukl, 2006). Similar findings were found in research by Javidan and Carl in Canada, Geyer and Steyrer in Germany, and Messallam and House in Egypt (as cited in House & Aditya, 1997).

The specific behavior by which transformational leadership is accomplished may vary by diverse groups. They may be enacted aggressively or in a quiet unemotional and nonaggressive manner (House & Aditya, 1997). It seems reasonable to hypothesize that transformational leadership would be more effective in organizations that emphasize diversity initiatives.

There are differences among charismatic, transformational, and visionary leaders. However, House and Shamir (as cited in House & Aditya, 1997) see charismatic, transformational and visionary leadership as essentially the same. They all

stress leader behavior that is symbolic, appealing to follower emotions and highly motive arousing. The following sub section discusses visionary leadership.

## Creative Imaging and Vision

New organizational leadership paradigms also emphasize creative imaging and visions. Visions should appeal to hopes, ideals, and values. Visions should be challenging, simple and idealistic but realistic, and guide actions and decisions. It makes intuitive sense that there must be a concept, dream, idea, or goal first before it can be achieved according to Bennis and Nanus (as cited in Yukl, 2006).

Visions could be considered creative imaging which is often used to prime athletes and others to achieve outstanding results. Creative imaging can be used to good effect in organizations for conceiving, implementing, and managing change. It involves visualizing a strategy before carrying it out and manifesting it into reality (Hall, 2010).

Hall (2010) suggests guidelines for creative imaging. The guidelines include identifying a need for change, imagining the methods to implement it, and developing a vision based plan of action. "A vision without a task is but a dream; a task without a vision is drudgery; a vision and a task is the hope of the world" Anonymous quote from 1730 (as cited in Hall, 2010).

Creative imaging and vision making in the real world is detailed in Kanter's (as cited in Hall, 2010) *The Change Masters*. Kanter notes the connection between leadership and visions. Kanter views visions as the products of many imaginations and the positive effect on innovation and productivity.

According to Kanter(as cited in Hall, 2010), change masters and leaders need to ask questions rather than assuming answers, be open to possibilities, and otherwise exhibit flexibility, responsiveness, and sensitivity. Kanter suggests the overuse of analytical, rational techniques stifles innovation and a leap of imagination is sometimes appreciated and also required.

Kanter (as cited in Hall, 2010) describes a small professional firm, a nonprofit, and three other organizations that have achieved dramatic turnarounds involving a shift from an old economic model to a new model embracing change. The three steps of the creative imagining process outlined above were critical to the transformation.

Visioning is important in small companies as well as large, and nonprofit companies. A Philadelphia speech pathologist, Marilyn Nyman, developed her private practice from a part-time job out of her home to a company employing fifteen people based in a corporate center. Compatible Technology Institute, a nonprofit company used creative imaging techniques (Hall, 2010).

Compatible Technology Institute envisioned people in India becoming better nourished and more self sufficient by using untapped resources. Compatible Technology Institute makes high protein, nutritional cookies from previously discarded soybean by-products. They also developed a process to compress vegetable by-products into household fuel and set up cloth weaving capabilities in leper communities (Hall, 2010).

Three other organizations described by Kanter (as cited in Hall, 2010) with dramatic turnarounds are Chipco, an assembly plant of a large manufacturing company,

General Motors at its plant in Tarrytown, New York, and 3M in Minnesota led by Chairman Allen Jacobson.

Chipco developed a way to empower its grassroots workers and supervisors. A middle manager envisioned using production people to solve production problems.

Kanter (as cited in Hall, 2010) states this visionary middle manager had to really sell the idea and began by identifying, imagining, and planning how the manager and teams could function better.

Having managers and teams function better would seem to be obvious, but ran counter to the company's prevailing assumptions and attitudes. Chipco referred to production people on occasion as "animals". The new system improved efficiency and employee satisfaction according to Kanter (as cited in Hall, 2010).

General Motors (GM) fostered visions for a better quality of work life for employees. GM transformed the company known for its management/labor conflicts into the instigator for "a new era" in industrial relations, according to Business Week. At the Fleetwood plant in Detroit employee participation groups used teams and displaced disgruntled workers (Hall, 2010).

At 3M, known already as "a hothouse of innovation", there still existed the need for change, in this case to reduce costs to compete with foreign competitors. Rather than cutting the R & D budget, the company chose to capitalize on their own creativity and expertise to solve the manufacturing issues of efficiency. Kanter found the company reduced costs, manufacturing time and waste by 35 percent resulting in the best profit margin since 1980 (as cited in Hall, 2010).

Kanter (as cited in Hall, 2010) also found, in each case, problems were identified, new methods envisioned of participative management, and plans of action were implemented yielding higher quality work, lower absenteeism, and fewer grievances. Hall (2010) sees the creative imaging and visioning process as accessible to everyone and simply a way of telling a story whether personal or of an organization. She maintains the vision develops out of common ground.

According to Hall (2010), the common ground is that human beings possess imagination and language to initiate change and to articulate that change to others. She suggests by relating in stories what has happened, what is happening, and what will happen, we are engaging in the process.

Metaphors can be important components of visions. Metaphors provide emotion arousing, memorable, and vivid representation of preconceived experience (Ortony; Taylor, Asping, Elliot, Charlton, Hudson, Lawton, Holton & Wilson as cited in Cleary & Packard, 1992). "The images created through metaphorical language influence our thought processes in fundamental ways" (Cleary & Packard, 1992, p. 2).

# *Leader-Member Exchange Theory (LMX)*

Another trend in the new leadership theories in the 1990s is the focus on relationships. Leader-Member Exchange Theory (LMX) distinguishes itself because of its emphasis on relationships rather than traits. Graen and Uhl-Bien (1995) state LMX is about the development and effects of separate dyadic relationships between superior and subordinates.

Graen and Uhl-Bien (1995) also contend Leader-Member Exchange theory prescribes a high degree of mutual influence and obligation between superiors and subordinates resulting in important positive outcomes. However, the mechanisms by which high quality relationships are created and maintained are of question as are the attributes of high quality relationships (House & Aditya, 1997)

Chen and Velsor (as cited in House & Aditya, 1997) focus on the degree of difference between leaders and subordinates. They suggest a need to investigate at the dyadic level of analysis with Leader Member Exchange (LMX) Theory and Path-Goal Theory providing theoretical guidance. Presumably, very close relationships could almost be considered shared leadership.

# Shared Leadership

Leadership research in the 1990s has also focused on shared leadership. There is now some preliminary evidence and speculation that concentration of leadership in a single chain of command may be less optimal than shared leadership in certain task environments (Eisenhower Leadership Group as cited in House & Aditya, 1997).

The consensus at the Dwight D. Eisenhower Leadership Group (as cited in House & Aditya, 1997) is that distributed leadership is more effective. Distributed leadership reflects a strong egalitarian orientation. Distributed leadership can take three forms: delegated, co-leadership, and peer leadership.

Delegated leadership is likely when the job involves large, complex organizations. There is one leader in each firm who has final decision authority over all strategic decisions. However, many situations may require the division of task and

person oriented behaviors or good cop – bad cop roles (Eisenhower Leadership Group as cited in House & Aditya, 1997).

Co-Leadership concerns the division of roles, as first suggested by Robert Bales of the Harvard Laboratory Studies (as cited in House & Aditya, 1997). There are two separate roles: task leader and social leader. The findings by the Eisenhower Leadership Group (as cited in House & Aditya, 1997) indicated the person who is judged by the group to have the best ideas in not generally the best liked.

Peer Leadership is the distribution of specific leader behaviors throughout the entire group or work unit. It's rare for one person to hold both roles simultaneously and the role dilemma becomes more acute with time according to the Eisenhower Leadership Group (as cited in House & Aditya, 1997).

The Eisenhower Leadership Group (as cited in House & Aditya, 1997) also found there is a trend toward leaderless organizations. Greater power distribution and sharing would be characteristic of these types of organizations. Leaderless organizations with an empowered workforce and customer base are a logical extension of transformational theory.

## Leadership Styles

There are many different styles of leadership such as autocratic, charismatic, democratic, distributed, dysfunctional, innovative, invisible, laissez-fair, narcissistic, participative, reconstructive, shared, socio-emotional, strategic, transactional, tyrannical, and visionary to name a few. The styles of leadership can be placed on a leadership continuum with autocratic at one end and democratic at the other according

to Lewin and Lippitt (as cited in Natemeyer & McMahon, 2001), and Tannebaum & Schmidt (1973).

Autocratic leaders tend to take a top down approach with regard to authority. Autocratic leaders also tend to make decisions without much input or involvement of subordinates. They tend to be concerned with production more than people. It can set a negative climate which adversely affects outcomes (Bass & Etzioni as cited in Yukl, 2006; Goleman, Boyatzis & McKee, 2002; Tannebaum & Schmidt, 1973).

Democratic and participative leaders involve subordinates more in many aspects of leadership. Democratic and participative leaders share decisions, information, power and responsibility more readily. Democratic and participative leaders balance concerns for production with their concerns for people. It can result in a positive climate which translates into better outcomes (Goleman, Boyatzis & McKee, 2002: Lewin & Lippitt as cited in Yukl, 2006; Tannebaum & Schmidt, 1973).

Visionary leadership inspires and involves all organizational members by an emotionally appealing and uplifting image or vision of the future. It results in buy in and much more positive climates which translate into outstanding outcomes. The visionary leader reframes and sets individual jobs within the larger picture and vision (Goleman, Boyatzis & McKee, 2002).

### Power Orientation

Leaders enjoy both position and personal power. Leaders derive position power from their legitimate position in the organization. Their position usually confers

resources of reward and punishment as well as ecological and informational sources of power (Bass & Etzioni as cited in Yukl, 2006; French & Raven, 1959).

Personal power derives from expert and referent sources of power. Referent power is the degree to which leaders are liked and respected by subordinates.

Numerous studies have shown in general that personal power results in more satisfied subordinates (Bass & Etzioni as cited in Yukl, 2006; French & Raven, 1959).

The following table summarizes the three main approaches to leadership research: transactional, contingency and situation, and finally new leadership theories.

Table 4: Machine, Organism and Mosaic Metaphor

# Leadership Theory

	MACHINE	ORGANISM	MOSAIC
LITERATURE	Transactional and Behavior	Participative	Transformational
	Trait: "Great Man"; Ohio & Michigan	Contingency and Situational Theories	Charismatic; and New Leadership LMX and CILT
	1940's -	1960's –	1970's -
	Stogdill; Blake and Mouton	Fiedler; House; Vroom & Jago: Hersey & Blanchard	Weber; House; McClelland; Lord; Burns; Bass; Yukl Graen & Uhl-Bien
	Initiation v. Consideration	People v. Production	People & Production
LEADER STYLE	Autocratic	Democratic	Charismatic; Visionary; and Shared
POWER ORIENTATION	Position/ Personalized	Personal and Position/ Socialized	Personal and Position/ Socialized
MECHANISM/ VISION	Control	Contingent Supervision	Creative Imaging Bennis & Nanus; Hall
GAPS/ LIMITATIONS	Stifles Creativity	Complicated	Theory; Concepts

Analysis

The machine, organism, and mosaic metaphor represent different leadership theories. The machine metaphor is representative of the early trait or "Great Man" theories and transitions into the contingency school. The organism metaphor is associated with contingency and situational theories. The mosaic metaphor best represents charismatic and the new leadership theories including shared leadership.

The machine metaphor and early trait theory suggest leaders are born and not made. Traits such as gender or height, for example, determine the leader; taller males are more likely to be leaders than shorter males or females. This would preclude the possibility then of shorter males or females becoming leaders through education, experience, and talent.

The machine metaphor supports the concept of the engineer as leader, which is traditionally associated with social elite. Additionally, the machine metaphor and early trait theory link dominant and masculine behaviors as well as elite status in society with the leadership role. This suggests it is next to impossible for a woman to emerge as a leader and it is difficult to associate leadership with the female gender as a result.

Traditionally, leadership has been the domain of white males in western societies. The characteristics, concepts, and traits of leaders were based on and defined by white males. Then white males have displayed and embodied the behaviors and traits of leaders in a reinforcing cycle. Leadership research reflected similar bias, limitations and oversights (Yukl, 2006).

The Ohio State Trait Studies and the Michigan State Group Studies represent a shift in thinking from early trait and Great Man theories to contingency and situational theories. The Ohio State Trait Studies and the Michigan State Group Studies also mark a transition between the machine metaphor and the organism metaphor. Two primary leadership behaviors were identified as being initiation and consideration, or concern for production and people (Yukl, 2006).

The machine metaphor better reflects initiation or concern for production while the organism metaphor better represents consideration or concern for people. The machine metaphor also supports transactional leadership. Position affords transactional leaders resources of reward and punishment as well as informational resources.

Interactions between leaders and subordinates are based primarily on economic exchange. Economic exchange is rather contractual and mechanical (French & Raven, 1959; Yukl, 2006).

Furthermore, the machine metaphor and concern for production supports autocratic leaders. Autocratic leaders tend not to be concerned for people as they pursue maximum production and profit for key stakeholders. Maximum production furthers their interests as profits are not shared equitably. Autocratic leaders tend to have a personalized power orientation.

The organism metaphor supports contingency and situational theories with their greater focus on consideration and concern for people. The concern for people includes an interest in developing subordinates by identifying their need for supervision and training. Different leadership styles provide appropriate levels of involvement with subordinates.

Overall, the organism metaphor and concern for people supports leaders who are more democratic and participative. Leaders are interested in involving subordinates in decisions. These leaders have more of a socialized power orientation, relying on expert and referent sources of power (French & Raven, 1959; Bass, 1990).

The mosaic metaphor better represents Charismatic Leadership (House & Aditya, 1997), Culturally Endorsed Implicit Leadership Theory (House & Aditya, 1997), and Graen and Uhl-Bien's LMX theory (1995). These theories represent a movement toward higher quality relationships, mutual respect and tolerance which are the basic tenets of mosaic metaphor.

Charismatic leaders have a socialized power orientation and their source of power is personal. The leader's motivation is altruistic and intrinsic. The goal is to improve the performance of the whole organization so everyone benefits. Nelson Mandela is an example of a charismatic leader exhibiting such behavior in his position as President of South Africa.

The mosaic metaphor helps support the main characteristics of transformational theory as identified Bass (1990) and Burns (1978). Importantly, the mosaic metaphor supports symbolic leader behavior, appeals to follower emotions and is highly motive arousing particularly in terms of creative contributions, dissent and relationships (House and Shamir (as cited in Yukl, 2006).

The mosaic metaphor also works well to enhance diverse organizational members self and collective efficacy. The mosaic metaphor works well to enhance self efficacy by recognition of individuals' backgrounds and uniqueness. The mosaic metaphor works well to enhance collective efficacy by encouraging a sense of pride in a

diverse organization, now more capable of accomplishing extraordinary things together (Yukl, 2006).

The mosaic metaphor emphasizes that leaders and followers are relatively equal pieces of the same mosaic. Leaders have a socialized power orientation. Leaderless organizations with shared power and profit grow out of the same fundamental values represented by the mosaic metaphor: mutual respect for individual values and reciprocal influence processes.

Respect for individual values means allowing for full expression of those values and new organizations can result from this expression. Bass, Burger, Doktor, and Barrett (as cited in Yukl, 2006) found managers from all countries desire to get work done while using less authority. Leaders and followers are involved in a mutual influence process and are expected to be at least as diverse as the overall population.

Management, leaders and members of organizations adhering to the mosaic metaphor share position, power, profits, risk and rewards, and salaries more equitably. This could be a controversial idea in some circles and contrary to the very fabric of many organizations as they exist today with outrageous salaries and perks for top executives.

Astin and Astin (as cited in House & Aditya, 1997) state, "A leader is not necessarily a person who holds some formal position of leadership or who is perceived as a leader by other." They define a leader as ". . . one who is able to effect positive change for the betterment of others, the community, and society."

Astin and Astin (as cited in House & Aditya, 1997) go on to say "All people, in other words, are potential leaders. Moreover, the process of leadership cannot be

described simply in terms of the behavior of an individual: rather, leadership involves collaborative relationships that lead to collective action grounded in the shared values of people who work together to effect positive change" (as cited in House & Aditya, 1997).

## Gaps and Limitations

The machine metaphor contrasts with the organism and mosaic metaphor in relation to leadership theory and styles. The machine metaphor and trait theory restrict the role of leader to engineer who are generally concerned with production processes. The leader's focus and priorities may be more on manufacturing than people. The leader's style may be more autocratic.

In terms of the limitations of leadership styles, autocratic leaders do not take advantage of the creativity, contributions, skills and talents of subordinates. By maintaining a tight hold on communication, decision, and power, they are inherently limiting the potentially valuable contributions of other organizational members.

The organism metaphor and contingency theory look at both the behavior of leaders and the situation. There may be a lot of information to process about organizational members which contributes to complicating the leadership demands.

Leaders may not be able to process the information or change their styles. The leader's style may be more democratic.

Democratic leaders allow for more subordinate involvement in terms of communication, decisions and power sharing. They thereby reap many contributions of subordinates as well as maintain better relationships. However, this type of leadership

does not go far enough in including and motivating diverse organizational members, particularly as leaders.

The mosaic metaphor, charismatic and new leadership theory including transformational theory seem somewhat contradictory in that they place demands on leaders to be extraordinary while simultaneously suggesting leaders take a lessened role with other organizational members. It may suggest leader qualities are restricted to a few special people while seeking to develop these qualities in others. The leader's style is expected to be charismatic and visionary.

Visionary leaders are to solicit ideas from all organizational members. There may be dynamics at work in the organization preventing full participation of members. There may be a history of apathy or other social norms operating in a negative way. The organizational members may not be as diverse as desirable or restricted in other ways to participate.

Leadership in many organizations is still predominant male. It's a catch 22 situation whereby there are fewer women and minorities in leadership positions and therefore it is an excuse to be excluded from participation. Without adequate models and participation of women and minorities as leaders, the biased cycle continues.

### Conclusion

Leadership has been defined as an influence process to achieve a common goal.

Managers have been distinguished by leaders. Managers do things right and ensure
adherence to policies and maintain order. Leaders do the right things and are change
agents who put forward an inspiring vision of the future.

There are many perspectives and approaches to leadership research. Four main approaches to leadership research are transactional including early trait studies, behavior, contingency and situational theories, and so called new leadership theories such as transformational leadership based on charismatic leadership. The machine, organism, and mosaic metaphors correspond with the identified leadership approaches.

The machine metaphor corresponds to early trait research and aspects of behavior theory emphasizing concern for production. Leadership according to the machine metaphor is relatively autocratic and transactional. The leader's power and status is based primarily upon position and employee compliance is assured through rewards and punishments. There is neither solicitation of input from followers nor development of quality relationships which may stifle creativity and innovation.

Leaders would benefit from using the machine metaphor in situations where control of operations or close supervision of employees was appropriate and required. Also, in crisis situations with little time for discussion and the need for immediate decisions, the machine metaphor may be appropriate. However, the machine metaphor will not function well for leaders in organizational situations requiring more responsiveness in operations and input from employees who also desire autonomy.

The organism metaphor corresponds to other aspects of behavior theory, contingency theories, and includes concern for people as well as production.

Leadership according to the organism metaphor is more democratic and participative.

Leaders would benefit from using the organism metaphor in situations where more attention needs to be paid to human and environmental resources. However, the

organism metaphor will not function well for leaders in organizational situations requiring top down leadership due to constraints such as information, time, or other.

The mosaic metaphor corresponds closely to the new leadership theories. The mosaic metaphor is associated with the new leadership theories, personal power and a socialized power orientation. Leaders would benefit from using the mosaic metaphor in situations where maximum cooperation, commitment, and input are appropriate and required from a diverse workforce. However, the mosaic metaphor will not function well for leaders in organizational situations where there is no diversity and operations are already rigid and streamlined with a high level of resistance anticipated.

Finally, there is no one best leadership theory or style. The leadership research has indicated however, that there are two main leadership behaviors: concern for production and concern for people. The mosaic metaphor offers an additional way for leaders to integrate the concerns for production and people because of its focus on the contributions of unique individuals bringing the whole selves to the workplace.

Furthermore, most people around the globe wish to get work done with less authority and with more individualized attention and motivation. New leadership theories such as transformational leadership emphasize the appeal to emotions, motivation, and relationships through simple and symbolic visions. The mosaic metaphor makes such an appeal.

The following chapter looks more closely at emotion, motivation, power, and relationships.

# Emotion, Motivation, Power, and Relationships

#### Introduction

This chapter will review the literature on emotion, motivation, power and relationships in relation to the machine, organism and mosaic metaphors. An analytical table is presented before the chapter proceeds to the analysis of the metaphors.

Articulation of the gaps in the literature and limitations, or strengths and weaknesses over time, are included. Finally, the major themes will be recapped in the conclusion.

### Literature

Emotion, motivation, power, and relationships will be defined and discussed. Emotions are feelings. Six universal emotions have been identified: happiness, surprise, fear, sadness, anger, and disgust. Emotions can be distinguished from affect and moods. Emotions are intense feelings while affect is a generic term for a broad range of feelings. Moods are less intense and lack a contextual stimulus (Hellriegel & Slocum, 1992; Robbins, 2005).

Motivation is influence that elicits and sustains behavior. Many factors affect motivation including emotional labor and intelligence, individual differences, job characteristics, organizational practices, power and relationships. Emotional labor is a relatively new term in the 21<sup>st</sup> century to describe organizationally desired emotions during the execution of one's interpersonal relations (Robbins, 2005).

Emotional labor also involves the tension between displayed and felt emotions. It involves the conflict and choices when the emotions one feels conflict with the

emotions one is required to display for the sake of appropriateness and continued good relationships (Hellriegel & Slocum, 1992; Robbins, 2005).

Emotional intelligence involves awareness and understanding of emotions.

Individual differences are their attitudes, needs, personality, and values. Job characteristics are the dimensions of the job. Organizational practices are the rules, regulations, rewards, and policies. Relationships develop based on these factors and all of these factors interact (Goleman, Boyatzis & McKee, 2002; Hellriegel & Slocum, 1992; Robbins, 2005).

Notable research on emotion intelligence is contributed by Goleman, Boyatzis & McKee (2002) in *Primal Leadership* which is based in part on McClelland (1966).

McGregor (1957) contributed to relationship research with Theory X and Theory Y, which specify certain attitudes of subordinates. Fletcher (2001) contributed further to relationship theory with relational practice (Robbins, 20205).

The emotional intelligence model relies on the work of David McClelland (1966). McClelland (1966) suggested organizations should discard the traditional criteria for determining leaders and instead focus on the development of distinguishing competencies for outstanding performers. Developing a competency model of this sort has become standard practice in organizations (Goleman, Boyatzis & McKee, 2002).

Goleman, Boyatzis & McKee (2002) coined the term "primal leadership" and believe great leadership works through the emotions. According to Goleman, Boyatzis & McKee, emotional intelligence involves four domains: self awareness, self management, social awareness, and relationship management. Self awareness underpins the other three domains and involves being aware of one's own emotions.

Self awareness means having a deep understanding of one's emotions and values. It results in being realistic and relying on intuition to do what feels right. Self management involves the drive to achieve goals by being able to manage negative feelings of anger and frustration. It allows for openness and transparency (Goleman, Boyatzis & McKee, 2002).

Social awareness is in a word empathy. Empathy is the ability to tune in to other people's emotions and respond appropriately. This allows a people to stay in sync emotionally. It is a critical skill that goes officially unrecognized in organizations, however. Finally, relationship management involves handling other people's emotions. Relationship skills become more important as more and more individuals work closely in groups and teams (Goleman, Boyatzis & McKee, 2002).

Goleman, Boyatzis & McKee (2002) states primal leadership is unique in that it builds on links to neurology. Connections with others occur through an open loop nature of the limbic system. Primal leadership creates resonance or a good feeling in those they lead. Resonance brings out the best in people and is a reservoir of positivity. Resonance occurs when individual's emotional centers are in sync in a positive way.

Furthermore, Goleman, Boyatzis & McKee (2002) asserts better emotional climates lead to an increase in customer satisfaction. Leaders manage emotions as well as meanings for groups and organizations. Additionally, leadership is distributed and doesn't exist only in the person at the top of an organization but in every person (Goleman, Boyatzis & McKee, 2002).

Leaders are engaged in an influence and motivating process with subordinates.

Power is the basis of their influence. Leaders have five different bases of power. The

five different bases of power are reward, coercive, legitimate, expert, and referent.

Power is also at the heart of many approaches to motivation and relationships (French & Raven, 1959).

There are three main approaches to motivation research and theory: the content approach, the process approach, and reinforcement theory. The content approach involves inner needs and asking "What motivates people?" The process approach involves external needs and asking "Why do people choose certain behaviors?" and reinforcement theory asks "How do outcomes of behavior motivate?" (Hellriegel & Slocum, 1992).

Influential research on content motivation is Maslow's (1943) hierarchy of needs and Herzberg's (1967) two factor model. Vroom contributed expectancy theory, Adams contributed the equity model to process motivation, and Skinner contributed to reinforcement theory which involves behavior modification (as cited in Hellriegel & Slocum, 1992; Robbins, 2005).

Abraham Maslow (1943), a psychologist contributed the hierarchy of needs depicted visually in a pyramid. Maslow suggested people have a complex set of needs. A need is a strong feeling of deficiency that creates an uncomfortable tension which the individual strives to reduce (as cited in Hellriegel & Slocum, 1992; Robbins, 2005).

Maslow's (1943) hierarchy of needs pyramid divides into lower and higher level needs. Basic human needs are on the lower level, while internal psychological and social needs are in the higher level. Self actualization needs are at the highest level of the pyramid (as cited in Hellriegel & Slocum, 1992; Robbins, 2005)

According to Maslow (1943) basic human needs include physical needs such as clothing, food, and shelter and security needs such as safety and stability.

Psychological and social needs include affiliation such as acceptance and belonging, and esteem needs such as achievement, recognition, and respect. Self actualization is the need to achieve one's highest potential (Hellriegel & Slocum, 1992; Robbins, 2005).

In general, Maslow (1943) contended that individuals seek to satisfy lower level needs first. Once a lower level need is satisfied, higher level needs become salient. However, Maslow never intended for the pyramid to be static; need satisfaction and salience is dynamic (Hellriegel & Slocum, 1992; Robbins, 2005).

Another influential contributor to content motivation is Frederick Herzberg (1967). Herzberg's (1967) two factor model looks at the content of jobs and their tasks. He conducted a major study examining the relationship between job satisfaction and productivity. Herzberg found a particular job characteristic might increase satisfaction but its absence did not necessarily indicate dissatisfaction (Hellriegel & Slocum, 1992; Robbins, 2005).

Herzberg (1967) determined there were two continuums of factors: motivators and hygiene. Motivator factors involved satisfaction feelings while hygiene factors involved dissatisfaction feelings. The motivator factors ranged from satisfaction to no satisfaction and the hygiene factors ranged from no dissatisfaction to dissatisfaction (Hellriegel & Slocum, 1992; Robbins, 2005).

Furthermore, motivator factors were intrinsic to the job such as achievement, advancement, recognition, and responsibility. Hygiene factors were extrinsic to the job

such as co workers, salary, and security according to Herzberg (1967) (Hellriegel & Slocum, 1992; Robbins, 2005).

Vroom (as cited in Hellriegel & Slocum, 1992) contributed expectancy theory to the process approach of motivation theory. Expectancy theory states decisions regarding effort depend on perceived first and second order outcomes and their valence. It includes three variables: effort-performance linkage, performance-reward linkage, and attractiveness of outcome (Robbins, 2005).

J. S. Adams (as cited in Hellriegel & Slocum, 1992) contributed the equity model to the process approach. The equity model involves the concept of fairness with the assumptions employees make comparisons. Adams suggested individuals mentally form ratios comparing their inputs and outcomes with similar others to determine its perceived fairness. Furthermore, employees will act to correct perceived inequities in terms of quantities or quality (Robbins, 2005).

B.F. Skinner (as cited in Hellriegel & Slocum, 1992), a psychologist, contributed the foundations of reinforcement theory. Reinforcement theory states behavior is a function of its consequences. There is a pattern of stimulus, response or behavior, followed by consequences or reinforcement. Types of reinforcement include positive, avoidance, punishment, and extinction – all designed to encourage desired behavior and discourage undesirable behavior.

Research related to relationships includes Douglas McGregor's (1957) Theory X and Theory Y. McGregor, author of *The Human Side of the Enterprise*, contributed a theory which involves assumptions and attitudes of subordinates. These are the so-

called "Economic Man" theory and "Social Man" theory respectively (Hellriegel & Slocum, 1992; Robbins, 2005).

McGregor (1957) suggests Economic Man and Theory X involve a set of negative assumptions about subordinates. Subordinates are viewed as being motivated primarily by economic incentives. Social Man and Theory Y involve a set of positive assumptions. Subordinates are viewed as having other than economic and extrinsic motivation (Hellriegel & Slocum, 1992; Robbins, 2005).

McGregor (1957) suggests Theory X employees inherently dislike work, require close supervision, avoid responsibilities, and place economic security above all else. Theory Y states employees like to work, exercise self control and direction, learn to accept or even seek responsibility, and make innovative decisions (Hellriegel & Slocum, 1992; Robbins, 2005).

This author proposes a third perspective involving both positive and negative assumptions called Theory XY. Theory XY combines the assumptions of McGregor's (1957) Theory X and Theory Y. Theory XY suggests subordinates are more complex with some disliking work and others liking work, some of the time. Some subordinates avoid responsibility and others seek responsibility, some of the time. Finally, some subordinates require close supervision while others prefer to work independently.

Theory XY involves the Whole Person in contrast to Economic Man and Social Man. First of all, Whole Person recognizes that it is not acceptable to refer to women as men and therefore the name reflects this concern. Secondly, Whole Person suggests people are motivated by both economic incentives and social incentives simultaneously

to varying degrees. Rather, Whole Person involves growth and learning with the assumption economic incentives are assumed and social incentives are more developed.

Another researcher who contributed to relationship theory is Fletcher (2001). Fletcher, in *Disappearing Acts*, researches relational practice. Relational practice involves collaborative work which is often seen as "women's work." Fletcher's research relies on the work of Mary Follett in the 1920s and Jean Miller's *Toward a New Psychology of Women*.

Fletcher (2001) investigated the "disappearing acts" of six female engineers at a major high-technology company in the northeastern U.S. There were disconnects between the new relationship skills being required for effective team work and antiquated performance appraisal systems designed to recognize and reward more measureable skills.

Fletcher's (2001) findings suggest there is a traditional logic of effectiveness that suppresses behavior regarded as feminine even when those behaviors are in line with organizational goals. She developed a feminine logic of effectiveness which redefines feminine. It clarifies the difference between stereotypical notions of feminine and defines it in more concrete terms as a belief system about effectiveness and growth.

Relational practice offers organizations a model of effectiveness based on mutuality and growth-in-connection. It involves four behaviors: preserving, mutual empowering, self-achieving, and creating teams. Preserving has to do with doing whatever it takes for whole task accomplishment while mutual empowering is enabling others. Self-achieving has to do with self achievement and creating teams have to do with teamwork (Fletcher, 2001).

Fletcher (2001) found the female engineer-project relationship was much like a mother-child bond in terms of connecting, nurturing, and protecting the project as a whole without regard to individual needs such as hierarchy or status. Mutual empowering involved empathic teaching and removing barriers by being sensitive to the emotional and relational context. It reflects a concept of expertise and power that is fluid and interdependent.

Self achieving refers to enhancing one's professional effectiveness and growth. Maintaining relationships and making things right after a relationship rupture were important. Qualities involving self awareness, reflection, and empathy were also important as were making requests in a certain way that elicited a warm response. Creating team fosters group life. It is concerned with the experience of the team rather than the identity of the team (Fletcher, 2001).

Other recent research on the brain indicates the importance of relationships. It was thought at one point in time that human brains were rather isolated and self contained as independent structures. The new research reveals brains are designed to be directly influenced by interactions with other brains. "Our sense of self is created within the relationships we have with each other". Evolutionary factors have favored a malleable, social organ (Siegal & Hartzell, 2004, p. 96).

Finally, Robbins (2005) reminds us that behavior, emotional expression, expectations, and motivation theories are culture bound. Most of the contemporary theories were developed in the U.S., for example. Employees in service industries in the U.S. are encouraged to be friendly and smile whereas in Israel, smiling can indicate

inexperience. In Moslem societies, smiling can indicate attraction to another person, so it is discouraged for women.

The following table summarizes the literature of emotion, motivation, power, and relationships in relation to the machine, organism, and mosaic metaphors.

Table 5: Machine, Organism and Mosaic Metaphors

Emotion, Motivation, Power, and Relationships

	MACHINE	ORGANISM	MOSAIC
EMOTION	Lack of Empathy and Dissonance	Awareness	Empathy and Resonance Goleman, Boyatzis & McKee
MOTIVATION	Physical Needs Maslow	Psychological and Social Needs Maslow	Psychological; Social; and Self-Actualization
	Hygiene Factors Herzberg	Motivator Factors Herzberg	Motivator Factors Herzberg
	Economic and Extrinsic Motivation	Extrinsic and Intrinsic Motivation	Intrinsic, Extrinsic; and Altruistic
POWER	Reward and Coercion	Expert and Referent	Expert and Referent
RELATIONS	Theory X: "Economic Man" McGregor	Theory Y: "Social Man" McGregor	Theory XY: "Whole Person" Wilsey
		Emotion	Relational Practice
GAPS/	Emotion; Psychological, and	Mixed	Conflict
LIMITATIONS	Social Needs Exclusive; Elitist	Barriers	Resistance; Idealistic; Unrealized

# Analysis

Motivational theories generally distinguish between economic and physical needs, and psychological and social needs. Theories also generally distinguish between extrinsic and intrinsic motivations. Early theories tended towards rationally decided behavior but emotions, intuition, and relationships have become salient since the 1980s (Fletcher, 2001; Goleman, Boyatzis & McKee, 2005; Natemeyer & McMahon, 2005; Robbins, 2005).

Emotional intelligence in individuals and emotional climate in organizations has been shown to create value for organizational members and customers alike.

Individuals having a high degree of emotional intelligence would be demonstrating emotional awareness and management of themselves and others as well as empathy.

There are undoubtedly untold daily examples of the importance of this skill.

A typical organizational scenario might involve downsizing or a hostile takeover. This is a very emotional and stressful time for organizational members.

Leaders with limited emotional intelligence might break the news in a cold and distant manner with no additional support. Leaders with more emotional intelligence would be empathic and provide opportunities for more communication and follow up.

The machine, organism, and mosaic metaphors correspond to different content and process theories as developed by Maslow (1943), Herzberg (1967), Vroom and Adams (as cited in Hellriegel & Slocum, 1992). Each metaphor also relates to motivations ranging from extrinsic, intrinsic, and altruistic as well as to particular assumptions about subordinates as associated with McGregor (1957).

The machine metaphor represents economic and extrinsic motivation. It also represents Maslow's (1943) physical needs such as clothing and food as well as to safety needs for shelter. The machine metaphor corresponds to the hygiene factors in Herzberg's (1967) two factor model. Hygiene factors are on the dissatisfaction continuum and include job security.

The machine metaphor and economic, extrinsic incentives presume an external, mechanical reality devoid of internal needs. It suggests it is enough for organizational members to have a job that pays money with which to provide for basic necessities such as clothing, food, and shelter. Leaders wield resources of reward and punishment accordingly.

After all, machines don't have motivation needs besides impersonal repair and replacement of broken or worn parts. Machines require only such mechanical maintenance to continue production. However, to state an axiom, people are not machines.

The organism metaphor represents psychological, social, and intrinsic motivation as well as physical and extrinsic needs. It represents Maslow's (1943) psychological and social needs such as achievement, affiliation and belonging as well as the physical needs. The organism metaphor corresponds to Herzberg's (1967) motivator factors. Motivator factors are on the satisfaction continuum and include achievement, recognition, and responsibility.

Unlike the machine metaphor and economic, extrinsic incentives, the organism metaphor acknowledges people are not machines. People have internal needs having to do with their being human beings. Human beings have complex inner drives for

achievement, affiliation, and belonging. It seems economic and extrinsic incentives are necessary but not sufficient to motivate more completely. Leaders rely on expert and referent power to motivate.

The mosaic metaphor represents not only intrinsic motivation but also altruistic. It corresponds to Maslow's (1943) self actualization needs. Unique individuals are highly motivated to achieve their best and their potential. The mosaic metaphor also relates to Herzberg's (1967) motivator continuum. Leaders are best conceived as facilitators.

An organization utilizing the machine metaphor may not recognize the complex nature of human resource motivation. Such an organization may focus attention on pay and job characteristics for example but ignore other potential incentives. Organizations utilizing the organism metaphor might be open providing other incentives such as onsite daycare or flexible working hours. Organizations utilizing the mosaic metaphor may seek out ways to enhance opportunities for individual achievement.

Expectancy theory, pay equity, and reinforcement models tend to combine rational decision making concerning effort and motivation with emotional and intuitive aspects. Behavior and effort is modified initially by rational assessment of fairness for example but there is clearly an emotional element. Some possible emotional responses include anger, hostility, and resentment for unequal pay for doing the same job which could adversely affect production.

Inequalities could also adversely affect the emotional climate which would further erode productivity and possibly satisfaction and turnover. It could create dissonance rather than resonance which is known to contribute to positive outcomes.

The machine, organism, and mosaic metaphors correspond to Theory X, Theory Y, (McGregor, 1957), and to Theory XY respectively. The machine metaphor relates to the Theory X view of employees. The organism metaphor relates to the Theory Y view of employees. The mosaic metaphor relates to Theory XY.

The machine metaphor and Theory X state employees are lazy, dislike work and responsibility, and require supervision. The organism metaphor and Theory Y state employees like work and seek responsibility. They are engaged and self motivated. Theory XY states that some employees dislike work and require supervision while other employees like work and seek responsibility. The mosaic metaphor and Theory XY is complex involving the whole person.

In relating Maslow's (1943) hierarchy to Theory X and Theory Y (McGregor, 1957), Theory X corresponds to lower level needs and extrinsic motivation. Theory Y corresponds to higher level needs and intrinsic motivation. Theory XY corresponds to self actualization (Natemeyer & McMahon, 2001).

The assumptions organizations make about subordinates have far reaching repercussions concerning their leadership. If leaders assume subordinates are not able or willing to contribute their best, leaders will use a more directive style of leadership. If leaders assume subordinates are cooperative and motivated to do their best work, subordinates will be invited to contribute more by the use of participative leadership (Hellriegel & Slocum, 1992).

The mosaic metaphor supports relational practice as developed by Fletcher (2001). Relational practice suggests the strategic value of stereotypical female behavior such as a focus on the whole task, empathy, and the maintenance of healthy and

inclusive relationships. More than the machine and organism metaphors, the mosaic metaphor specifically encourages the involvement and respect for diverse organizations.

As evidenced in Fletcher's (2001) research, an organization utilizing the machine metaphor may better support individual ambitions rather than team efforts. An organization utilizing the organism metaphor might support team and project efforts but the mosaic metaphor captures the concept of cohesive, one for all teamwork more effectively. It makes intuitive sense that a team engaged in collaborative efforts results in better outcomes of quality and quantity than a team divided by competitive efforts.

# Gaps and Limitations

Organizations utilizing the machine metaphor largely ignore the role emotion plays in motivation. There may be loss of productivity and satisfaction as a result.

Organizations utilizing the organism metaphor acknowledge the role of emotion and personal relationships and social norms allowing for better management of this.

Organizations utilizing the mosaic metaphor fully recognize the role of emotion.

Maslow's (1943) Hierarchy of Needs, although largely not supported, has provided a conceptual and theoretical foundation for much of the thinking regarding motivation including transformational theory.

The machine metaphor assumes motivation based primarily on economic and extrinsic incentives. If the reward system is appropriately designed this could stimulate efforts to exceed and motivate. However, the reward system may not be appropriate and too narrowly focused on measureable outcomes. Leaders rely on reward and coercion to ensure compliance.

The machine metaphor with economic incentives works well in piece manufacturing or sales organizations with measurable, quantifiable outcomes.

Organizational members earn more or less depending on their skill and speed to produce goods or provide services based on a quota system. The system supposedly rewards higher producers better than lower producers.

The organism metaphor assumes motivation is based primarily on social and intrinsic incentives. It would be important for the organizational systems to support the desired behavior. However, the reward systems could be in conflict and thereby confusing to organizational members. Leaders rely on expert and referent power to ensure cooperation and collaboration though rewards and coercion since provides a foundation.

The organism metaphor and psychological and social rewards work well in service organizations such as counseling or education. The work may be intrinsically rewarding thereby circumventing better economic incentives. However, lower economic incentives may drive some otherwise intrinsically motivated individuals towards better conditions and pay.

The mosaic metaphor assumes motivation is based primarily on intrinsic motivation and self actualization needs. Additionally, emotional intelligence plays a large part of creating resonant organizations which bring out the best in organizational members. Leaders rely on expert and referent power and leaders can come from any level of the organization.

The mosaic metaphor works well where motivation is complex with self actualization in organizations such as high technology or professional firms. This type

of work requires a very high level of expertise by most organizational members which in turn requires high need to achieve and perform at best. Intrinsic rewards are important but generally so are extrinsic. There is a need for autonomy and collaborative and positive work climates.

The machine metaphor with its impersonal focus on efficiency and production does not work well in the area of human emotion and motivation. Machines do not have feelings and continuing operating as long as they have a squirt of oil and a screw tightened periodically. The machine metaphor just does not encompass the emotional sphere. Therefore, little emotional awareness and management is assumed to be lacking.

The organism metaphor with its personal focus on human motivation and social systems works well in the area of human emotion. Living beings have feelings which either motivate or demotivate. The organism metaphor assumes a better understanding of emotional intelligence involving self awareness and management as well as social awareness and relationships.

The mosaic metaphor with its focus on recognition of unique individuals works very well to value human emotions and motivation. The mosaic abstractly and symbolically represents the complexity and fluid nature of emotion and motivation. They are constantly in flux as are the abstract pieces of the mosaic. Furthermore, the mosaic represents the permeable boundaries between individuals and shows the contagious nature of emotion.

#### Conclusion

Motivating, retaining, and rewarding organizational members successfully can mean the difference between failure and success for organizations. Motivation theories attempt to explain the processes by which certain organizationally desirable behavior is elicited and maintained.

Motivation and power can be distinguished by whether it is achieved through external, extrinsic means or by internal, intrinsic means. The machine, organism, and mosaic metaphor correspond to the expression of external, internal, or altruistic motivations, respectively.

There are three main types of motivation theory: content, process, and reinforcement theory. The content theories include Maslow's hierarchy of needs, and Herzberg's two factor model. The process theories include expectancy theory and equity theory. Reinforcement theory involves encouraging desired behavior or discouraging undesirable behaviors.

There are also different views of employees labeled Theory X, Theory Y, and Theory XY. Theory X states that employees are lazy and motivated by economic incentives. This is "economic man". Theory Y states employees are motivated by social needs. This is "social man." Theory X or Theory Y alone is insufficient.

Theory X and Theory Y should be combined into a Theory XY. Theory XY states that some individuals are motivated extrinsically and others intrinsically, or more probably from a combination of the two. Theory XY addresses the gaps of the Theory X and Theory Y views. In so far as possible, organizational systems should be flexible enough to respond to individual organizational member's motivation needs.

### PART FIVE: CONCLUSIONS

### Introduction

This part is the conclusions regarding the three metaphors being analyzed. The part includes a summary of the findings, consideration of the practical applications, threats to validity, and scholarly contribution.

### *Summary*

Environments have a profound effect on many aspects of organizations, including their survival and whether they thrive in meeting changes and challenges, as well as threats and opportunities. Environments include both general and task, which are demographics, cultural, economic, and political systems and customers, suppliers, competitors, and technology, respectively.

Significant changes in the environment have helped to define at least three eras: the Industrial Revolution of the 19<sup>th</sup> century the environmental and human resource paradigm of the 20<sup>th</sup> century, and the current global, information revolution of the 21<sup>st</sup> century. Organizations, organizational structure, management and leadership theories and styles have also changed and evolved as the norms of society shift with environmental changes and challenges.

One of the most important challenges of organizational theory is in the area of increased diversity within organizations due to changing demographics in society. Diversity creates challenges of external adaptation and internal integration. Diversity represents both threat and opportunity to organizations. The question remains how to get the most out of a diverse workforce? The mosaic metaphor may be one answer.

The machine, organism, and mosaic metaphors have been described and explored as potential guidance for organizations. There is also corresponding tension between machine, organism, and mosaic metaphors. The metaphors stand in contrast to each other and serve to highlight the tensions between different types of organizations, management and leadership theories, as well as motivation theories and relationships.

The machine metaphor and the mechanistic organizations it represents work well with manufacturing organizations with the need to maximize capacity and output. The impersonal rules and regulations of traditional management and autocratic leaders parallel the efficient, impersonal operations. Many other aspects of organizations are ignored and overlooked such as emotion, motivation, other needs, and relationships.

The organism metaphor and the organic organizations it represents work well with professional and service organizations with the need to optimize individualized service. The personal nature of participative management and democratic leaders works to involve organizational members and be more responsive to the general and task environments. There is attention to emotion, motivation, and relationships.

The mosaic metaphor and the boundaryless and virtual organizations it represents work well in dynamic, technology industries in turbulent environments. The mosaic metaphor serves to support a multiple of commands and views leading to enhanced creativity, innovation and responsiveness. The mosaic metaphor provides an immediately accessible and guiding image of diversity in action while providing a unifying framework setting up collaborative systems.

Different management and leadership theories involve certain tensions which the three metaphors highlight differently. There is tension between traditional and

alternative management, between top down and bottom up leadership, between competitive and collaborative styles, between masculine and feminine styles, between homogeneous and heterogeneous, and between static and dynamic organizations.

The machine metaphor most closely represents traditional management, top down leadership, competitive and masculine styles as well as homogeneous, static organizations. The organism metaphor most closely represents transition towards alternative management, lateral leadership, and collaborative styles. The mosaic metaphor most closely represents alternative management and leadership, collaborative and feminine styles as well as dynamic organizations.

There is also a tension between competing ideas of the very definition of leadership. The overarching themes that emerge run throughout organizations and contrast transactional leadership from transformational leadership. Leadership could be redefined as a "mutual influence process" between individuals acting as leaders and other organizational members and stakeholders. Additionally "mutual organizational goals" could be solicited and refined.

There is tension also regarding the role of emotion, motivation, power and relationships in organizations, which the three metaphors serve to highlight. The machine metaphor emphasizes impersonal, non emotive and supposedly rational interactions based on transactional motivation and relationships. In contrast, the organism metaphor emphasizes awareness of emotion and complex motivation. The mosaic metaphor most fully supports the role of emotion and complex motivation needs as well as cooperative relationships.

The various merits of each metaphor, organizational type, management and leadership theory will have to be weighed independently and individually by organizations. Ultimately, the appropriateness of each metaphor, organizational type, and leadership style must be determined on a case by case basis in response to the general and task environment.

### Practical Applications

The strength of metaphors, in general, is to look at organizations and members differently. The metaphors can be seen as different spokes on a metaphor wheel relating to organizational structures, and management and leadership styles. The machine, organism, and mosaic metaphors along with their respective view of organization represent contrasting and complementary perspectives.

The gaps and limitations related to the machine metaphor are addressed by the organism and mosaic metaphors and vice versa. The mosaic metaphor tends to take the organism metaphor to the next level. The strength of each of the metaphors is to view organizations from their unique perspective and their weakness is the other metaphors' strength.

Tolerance for different others is a learned habit of mind that is all the more challenging in complex and diverse organizations, yet all the more needed. The mosaic metaphor of organizations can help bridge the gaps between past and future diversity efforts, bridge some of the gaps in the leadership literature and foster greater creativity, discussion, innovation, and tolerance.

## Threats to Validity

Validity involves the best approximation of the truth and generalizability. The first threat to validity of organizational metaphors involves the ability of metaphors, in general, to act as bridges. The second threat to the validity is in the definition of the three metaphors. The third threat to the validity is accepting that the three metaphors extend to and represent different organizational structures, management and leadership styles, and other issues as presented.

The fourth threat to validity, and possibly the most important, is of the ability of organizational metaphors to aid and guide organizational leaders and members in meeting the threats and opportunities existent in the changing environment. Finally, the fifth threat to validity then is being able to accurately identify the threats and opportunities in the environment which may or may not be aided by metaphors.

The first three threats to the validity of metaphors can be addressed by thorough examination of the definition and efficacy of metaphors, in general, and a careful refinement of the definition and concepts of the three organizational metaphors. The fourth threat to the validity of organizational metaphors may be addressed by designing experiments which test the hypotheses.

For example, a simple experiment could be designed whereby organizational members are randomly assigned to different fictional organizations using different metaphors. The organizational members could be surveyed as to whether they anticipate the metaphors making any difference in their level of commitment and satisfaction, or even their willingness to be hired, provided they have the requisite skills.

It would also be worthwhile to apply the different metaphors in a controlled experiment to investigate any effects on individuals and the organization. A possible research study would be to introduce different metaphors in similar organizations to investigate the effects if any over time.

Scholarly Contribution and How the Mosaic Metaphor Can be validated by Organizational Researchers

Due to the limited scope of this dissertation many important aspects of organizations were not analyzed sufficiently. Other aspects worthy of consideration are organizational communication, culture, conflict, and ethics. Additionally, the level of analysis here is organizational, but the mosaic and other metaphors have relevance at the individual and societal level. It would also be worthwhile to investigate the articulation of the mosaic individual with a mosaic organization to see what emerges.

The mosaic metaphor reminds us to remain open to complexity and not reduce things to one dimensional black and white rendering or to submit too readily to majority view. This is the power of metaphor in general and the power of the mosaic metaphor in particular. The mechanism is the valuing of diverse individuals, while simultaneously guiding and unifying.

The mosaic metaphor of organizations has not yet appeared in the literature and yet is useful to cope with many challenges facing organizations in the 21<sup>st</sup> Century. The mosaic metaphor is not however, meant to be prescriptive. It is said a picture is worth a thousand words; perhaps one word, mosaic, is worth a thousand pictures.

#### REFERENCES

- Alland, A. (1980). To be human. New York, NY: J. Wiley & Sons, Inc.
- Bass, B.M. (1990). Bass & Stogdill's Handbook of leadership: Theory, research, & managerial applications. (3<sup>rd</sup> ed). New York, NY: The Free Press.
- Blake, R.R., & Mouton, J.S. (1967). Grid organization development. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 436-445). Long Grove, IL: Waveland Press.
- Brown, L.R. (2009). *Plan B 4.0: Mobilizing to save civilization*. New York, NY: W. W. Norton & Company, Inc.
- Brown, L. R. (2011). World on the edge: How to prevent environmental and economic collapse. New York, NY: W.W. Norton & Company, Inc.
- Burns, J. M. (1978). Leadership. New York, NY: Harper & Row.
- Burns, T., & Stalker, G.M. (1961). Mechanistic and organic systems. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 375-380). Long Grove, IL: Waveland Press.
- Cleary, C., & Packard, T. (1992). The use of metaphors in organizational assessment and change. *Group & Organizations Management*, 17.3, 229-313.
- Elections Canada (1986). *Representation in the federal government*. Ottawa, Ontario, Canada: Ministry of Supply and Services Canada.
- Follett, M.P. (1926). The giving of orders. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 19-28). Long Grove, IL: Waveland Press.
- Fletcher, J.K. (2001). *Disappearing acts: Gender, power, and relational practice at work.* Boston, MA: Massachusetts Institute of Technology.
- Foss, M. (1949). Symbol and metaphor. Princeton: Princeton University Press.
- Friedman, T. (2006). The world is flat. New York, NY: Penguin Publishing.
- French, J.R., Jr., & Raven, B. (1959). The bases of social power. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 253-267). Long Grove, IL: Waveland Press.

- Gibbon, J. M. (1938). Canadian mosaic. Canada: T.H. Best Printing Co. Ltd.
- Gillmor, D., & Turgeon, P. (2000). *Canada: A people's history*. Toronto, Ontario, Canada: McClelland & Stewart Ltd.
- Goethals, G. R., Sorenson, G. J., & Burns, J. M. (2004). *Encyclopedia of leadership*. Thousand Oaks, CA: Sage.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Boston, MA: Harvard Business School Publishing.
- Gozzi Jr., R. (1999, Winter). The power of metaphor: in the age of electronic media. *ETC.: A Review of General Semantics*, 56.4, 380.
- Graen, G.B., & Uhl-Bien, M. (1995). Relationship -based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years. In P.G. Northouse (Ed.), *Leadership: Theory and practice* (pp. 147-168). Thousand Oaks, CA: Sage Publications, Inc.
- Harvey, C.P., & Allard, M.J. (2005). *Understanding and managing diversity*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Hall, L. (2010). Can you picture that? Training & Development Journal, Sept. 1990: 79.
- Harvey, C.P., & Allard, M.J. (2005). *Understanding and managing diversity: Readings, cases, and exercises.* Upper Saddle River, NJ: Pearson Education, Inc.
- Hellriegel, D., & Slocum, J.W. (1992). *Management*. Reading, MA: Addison-Wesley Publishing Co.
- Hersey, P., Blanchard, K.H., & Natemeyer, W.E. (1979). Situational leadership and power. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 321-329). Long Grove, IL: Waveland Press.
- Herzberg, F. (1967). One more time: How do you motivate employees? In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 81-95). Long Grove, IL: Waveland Press.
- House, R.J., & Aditya, R.N. (1997). The social scientific study of leadership: Quo Vadis? *Journal of Management*, 23, 409-473.
- Kouzes, J.M., & Posner, B.Z. (1987). *The leadership challenge: How to get extraordinary things done in organizations*. San Francisco, CA: Jossey-Bass.

- Marshak, R.J. (1993). Managing the metaphors of change. *Organizational Dynamics*, 22.1.
- Maslow, A.H. (1943). A theory of human motivation. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 55-72). Long Grove, IL: Waveland Press.
- McClelland, D.C. (1966). Achievement motivation. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 73-80). Long Grove, IL: Waveland Press.
- McGregor, D.M. (1957). The human side of enterprise. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 41-54). Long Grove, IL: Waveland Press.
- Merriam-Webster. (1997). Merriam *Webster's collegiate dictionary.* 10<sup>th</sup> Ed. Springfield, MA: Merriam-Webster, Inc.
- Morgan, G. (1943). *Images of organization*. Thousand Oaks, CA: Sage Publications.
- Natemeyer, W. E., & McMahon, J. T. (2001). *Classics of organizational behavior*. Long Grove, IL: Waveland Press.
- National Defence Headquarters. [Brochure]. (2000). *Defence performance and outlook* 2000: making a difference at home and abroad. Ottawa, Ontario, Canada: Minister of Defence.
- Northouse, P. G. (2004). *Leadership: Theory and practice*. Thousand Oaks, CA: Sage Publications.
- Organization for Economic Cooperation and Development (OECD). 2010. Education at a glance.
- Ott, S. (1989). The organizational culture perspective. Chicago, IL: Dorsey Press.
- Porter, J. (1965). *Vertical mosaic: An analysis of social class and power in Canada*. Toronto, Ontario, Canada: University of Toronto Press.
- Robbins, S.P. (2005). *Essentials of organizational behavior*. Upper Saddle River, NJ: Pearson Education Inc.
- Roethlisberger, F.J. (1941). The Hawthorne experiments. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 29-40). Long Grove, IL: Waveland Press.

- Sauvé, V.L., & Sauvé, M. (1997). *Gateway to Canada*. Toronto, Ontario, Canada: Oxford University Press.
- Secretary of State of Canada. (1997). Symbols of nationhood. Ottawa, Ontario, Canada.
- Siegal, D. J., & Hartzell, M. (2004). *Parenting from the inside out*. New York, NY: Jeremy Tarcher/Penguin (pp. 51, 55, 95, 98).
- Sue, D. (1991). A model for cultural diversity training. *Journal of Counseling & Development*, 70:1, 99 105.
- Tannebaum, R., & Schmidt, W.H. (1973). How to choose a leadership pattern. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp268-279). Long Grove, IL: Waveland Press.
- Taylor, F.W. (1916). The principles of scientific management .In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 3-18). Long Grove, IL: Waveland Press.
- Thomas, K. M. (2005). *Diversity dynamics in the workplace*. Toronto, Ontario, Canada: Wadsworth.
- U.S. Energy Information Administration. [Brochure]. (2011). Washington, D.C., U.S. Energy Information Administration
- Vroom, H.V., & Jago, A.G. (1974). Decision making as a social process. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 280-293). Long Grove, IL: Waveland Press.
- Weber, M. (1946). Bureaucracy. In W.E. Natemeyer, & J.T. McMahon (Eds.), *Classics of organizational behavior* (pp. 351-357). Long Grove, IL: Waveland Press.
- Wikipedia (2009). Cultural Mosaic. Retrieved June, 2009 from http://en.wikipedia.org/wiki/Cultural\_mosaic.
- Wikipedia (2012). Industrial Revolution. Retrieved October, 2012 from http://enwikipedia.org/w/index.php?title=Industrial\_Revolution&printable=yes.
- World Watch Institute. (2010). *State of the world: Transforming cultures from consumerism to sustainability*. New York, NY: W. W. Norton & Company.
- Yukl, G. A. (2006). *Leadership in organizations*. Upper Saddle River, NJ: Pearson Education, Inc.