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The Human Side of Change: Towards a Pragmatic, Evolutionary Conception of Cognition and Emotion in Organizational Change

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THE HUMAN SIDE OF CHANGE: TOWARDS A PRAGMATIC, EVOLUTIONARY
CONCEPTION OF COGNITION AND EMOTION IN ORGANIZATIONAL CHANGE

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in Education at Virginia Commonwealth University.

by

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Abstract

THE HUMAN SIDE OF CHANGE: TOWARDS A PRAGMATIC, EVOLUTIONARY CONCEPTION OF COGNITION AND EMOTION IN ORGANIZATIONAL CHANGE

By Jason Wayne Smith, Ph.D.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Education at Virginia Commonwealth University.

Virginia Commonwealth University, 2009

Major Director: Kurt Stemhagen, Ph.D.
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This dissertation synthesizes and analyzes an emblematic sample of three prevalent psychological approaches to organizational change and learning, giving particular attention to the conception of cognition and emotion. It also explores some of the philosophical and psychological assumptions undergirding these approaches. A web model depicting various epistemological influences is offered as a tool for exploring influences on the psychological research within and beyond this study. A second conceptual model is also offered as a tool for considering the hierarchical treatment and preferential placement of cognition over emotion theory and practice. The project draws on general philosophy,
psychology, evolutionary theory, and multiple other disciplines in the effort to understand why cognition is afforded a hallowed place while emotion is treated as an unruly subject. Dewey’s experiential, evolutionary psychology of emotion is repositioned as an alternative to what might be considered a Jamesian depiction of the relationship between cognition and emotion. Some of the implications of Dewey’s pragmatic reading and application of Darwinian naturalism are explored to raise awareness of the way that various interests are served through the rigid classification of human experience. Finally, an organizational fable is offered to help connect the project to the genuine problems that the reader brings to the text.
Chapter 1: Background and Context of the Problem

Introduction

I became intrigued with organizational change and the role of emotion while working within the nonprofit sector. Though I did not have language to express it at the time, I was frustrated by the way in which change seemed to be treated as a generic stimulus-response mechanism. I was also concerned with the way that employees’ responses to change initiatives were divided into either-or categories of resistance or acceptance, as though these were the only options and all thoughts, beliefs, emotions, and behaviors could easily be identified as one or the other. As I delved into the literature on organizational change in search of a researchable question related to the role of emotions in organizational change, I found three seemingly distinct psychological research approaches, each with varying conceptual constellations. While often employing the same terms, the conceptualization of change, organizations, and emotion seemed to vary, at times considerably. What they had in common was that cognition and emotion were treated as distinct categories with cognition preferentially positioned over emotion.

In time I realized that addressing the role of emotions in change could not be explored without addressing agency and the relationship between cognition and emotion. Bredo (2006) stated that in historical psychological research, “One effect of ignoring the apparent aims and intentions of those being observed was great neglect of the mental and emotional aspects of human life” (p. 9). He emphasized the importance of various
psychological traditions, but he also critiqued the under-emphasis of emotion in all of the psychological approaches: “Science or cognition is often accorded the highest status. But if cognition is king, who is taking care of affect?” (p. 27). This project asks why cognition is king and considers whether an alternative depiction might yield a more productive conceptualization of the relationship between emotion and cognition in learning and change theory.

In this chapter I provide a theoretical context and disciplinary background for the project. I describe three clusters of psychological research which are each explored in subsequent chapters. Several philosophical problems are identified. In each section of the chapter I attempt to give some working definitions to aid in the reading of the project. Towards the end of the chapter, the context and background are consolidated into a single statement of the problem that this project seeks to address. Research questions are followed by a brief outline of the project in order to help facilitate the reading of future chapters. Finally, the limits and rationale for this study’s approach is given.

Disciplinary Context

Human resources is a field that has evolved considerably since 1900 (Mathis & Jackson, 2005). Much of the research and resulting literature on organizational change has been generated from the human resource (HR) fields: human resource management (HRM), human resource development (HRD), and organizational development (OD). HRM primarily focuses on organizational behavior (e.g., performance, policy, and procedures), HRD focuses on individual adult learning within the world of work, and OD focuses on organizational readiness for change at the group level (Walton, 1999).
People within the HR field continue to seek a professional identity that moves beyond old conceptions of a personnel office and the training department. Social legislation in the 1960s and 1970s forced what had been called personnel departments to be increasingly concerned with legal ramifications of policies and procedures involving employees (Mathis & Jackson, 2005). The behavioral treatment of these and other organizational functions are now most closely related to HRM. HRD focuses on individual, adult learning – having emerged out of an individual psychological research community. OD approaches organizational issues from a social psychological or systems perspective; it also draws heavily from learning theory but focuses on learning as a social process.

Revealing and analyzing the assumptions that underlie practice is a critical part of the process of professional recognition (Merriam & Brockett, 1997). Unfortunately, Elias and Merriam (1995) noted that few adult educators pay adequate attention to philosophies that underlie their practice. Gilley, Dean, and Bierema’s (2001) Philosophy and Practice of Organizational Learning, Performance, and Change began the work of identifying the philosophical underpinnings of the emerging field. They indicated that over the last fifteen years, HR practitioners have aligned themselves with one of the following philosophical orientations: organizational performance, organizational learning, and organizational development (Gilley, Dean, & Bierema, 2001).

The psychological-philosophical approaches of the three psychological research traditions might also be called behavioral materialism, individual developmentalism, and social developmentalism. These titles leave room for both teleological and epistemological
considerations, and therefore are used to group the families of research presented in this study. Chapter 2 goes into greater detail about the importance of teleology and epistemology in this project, but they can briefly be defined as: 1) teleology is an orientation towards human understanding that focuses either on original causes or on purposive goals; 2) epistemology is the philosophical concern “with the nature, origin, and limitation of knowledge” (VandenBos, 2007, p. 337). Each of the three clusters of research mentioned above is explored in chapters 4-5 respectively. This project seeks to build on the work of Gilly, Dean, and Bierema (2001) by identifying and critiquing some of the assumptions that shape these approaches to organizational change and their treatment of the relationship between cognition and emotions.

As a discipline, human resources is at a crossroads where recognition as a support function and as a leadership role in organizational change converge; it is seeking professional identity and recognition as a strategic partner to executive leadership in organizations (Ulrich & Eichinger, 1998; Short, Bing, & Kehrhahn, 2003), uniquely positioned to address the human side of change (Conner & Ulrich, 1996; Miller, 2003). Miller (2003) indicated that “leaders consistently underestimate the human response to change and its critical role in the ultimate success or failure of organizational change initiatives” (p. 49). Depending on whose theory one reads, exactly what is meant by the human response to change varies. For some, the uniquely human side of change is cognitive and for others the focus is on emotions.

A working definition for cognition and emotion will be helpful for the reading of this project. Cognition is defined broadly as “all forms of knowing and awareness such as
perceiving, conceiving, remembering, reasoning, judging, imagining, and problem solving” (VandenBos, 2007, p. 186). In some of the research presented within the three psychological research strands, cognition is seen as an intelligent behavior to refer to associations of ideas, environmental conditions, and human responses (e.g., Skinner - see chapter 4). Some of the research emphasizes highly developed mental processes possessed by humans which allow individuals to structure increasingly stable representations of reality (e.g., Piaget – see chapter 5). Other researchers emphasize the social role in developing and passing on more stable or adaptive understandings of human experience (e.g., Vygotsky – see chapter 6). Whether viewed as intelligent behavior, individual psychological processes, or social psychological interactions, cognition is presented as a uniquely adaptive capacity connected to rationality and more accurate representation of material facts or rational structures. Psychological research often presents mental processes as active, purposive, learned and essential to adapting to change, while emotions are presented as a passive bodily response to be controlled (Solomon, 2007).

A working definition for emotion may prove to be the most elusive, given that the lack of conceptual clarity related to this phenomenon is one of the reasons for the study. Emotion is defined by the American Psychological Association (APA) as:

A complex reaction pattern, involving experiential, behavioral, and physiological elements, by which the individual attempts to deal with a personally significant matter or… The specific quality of the emotion (e.g., fear, shame) is determined by the specific significance of the event. For example, if the significance involves threat, fear is likely to be generated; if the significance involves disapproval from another, shame is likely to be generated. Emotion typically involves feeling but differs from feeling in having an overt or implicit engagement with the world. (VandenBos, 2007, p. 325)
For some, emotion is seen as the antithesis to cognition and sober inspection (e.g., Plato – see chapter 2). It is unbridled passion, a bodily perturbation, and a distraction from knowledge, perhaps with the exception of a quiet zest for learning (e.g., Thorndike – see chapter 4). For others, it is a motivating psychological force that plays a supportive role in individual mental structuring of reality that lacks higher rational capacity (e.g., Piaget or Maslow – see chapter 5). Still for others, it is believed to be a social construction that is culturally mediated and serves a supportive role in social systems (e.g., Schein or Katz and Kahn – see chapter 6). These descriptions of emotions are not intended to infer that cognition and emotion are in opposition or completely distinct. Nor does it seek to reduce emotion to cognition or the converse. They are given as a starting point for understanding how change theory treats the relationship between cognition and emotion. In the APA definition of emotion, and the brief introductory statements that followed it, emotion is generally conceived of as something that is externally generated or induced which can be either consciously or unconsciously experienced by the individual.

Organizational Change, Emotion, and Agency

Turner (2007) indicated that learning theory has important implications for how organizational change is conceived, particularly concerning agency and the treatment of emotions. He presented this possibility in response to what he saw as a generic treatment of institutional change or innovation. He addressed two current interpretations of the participant’s need to own a change that flows from the objectification of change as a generic physiological stimulus. Turner was particularly concerned with the way that cause and effect models impact the way affect is treated in organizational change.
In the first interpretation, “local participants need to be given time to accept it and possibly to be managed into it. Behaviorist portrayals of organizational change can point to the direct management of participants or indirect management by shaping the environment to produce acceptance and desired behaviors. This can be dressed up in terms that treat all change as generic: ‘Change raises anxiety and emotional responses, and we need to be able to manage the emotions of the participants’” (Turner, 2007, p. 131). Turner believed that this is the most dangerous approach, “because it presumes that the participants are not able to manage their own emotions, at the same time as it attempts to remove any cultural meaning or content from the process of change” (p. 131). Behavioral patterns and human control are based on environmental stimuli, conditioned responses, and individual differences in this approach.

According to Turner (2007), the second interpretation abandons the participants, expecting them to work out the change for themselves. The participants need to come to a rational, cognitive understanding of the process on their own and then more desirable emotional responses will follow naturally. It leaves leaders questioning whether they have a legitimate role in giving guidance to the intrapersonal or intrapsychic part of change in which each participant must come to terms with the innovation. Mental models, ownership, and emotion responses in this interpretation are individual constructions.

Finally, Turner asserted that Vygotsky’s social-psychological learning theory establishes a framework that provides a legitimate role for leaders, recognizes the importance of participants, and grants a vital understanding of the role of culture and content to the change process. Turner appears to be unaware of the link between
Vygotsky’s learning theory and several theorists who will be considered in this project under the social developmental paradigm. Specifically, Turner’s comments do not acknowledge that Lewin, Katz and Kahn, Schein and others within the social developmental approach to organizational change draw on Vygotsky directly or indirectly (see chapter 6). The way that these approaches built on Vygotsky’s theory may require some tempering of Turner’s optimism. Still, his presentation of behavioral, individual learning, and social learning theory as it applies to organizational change is another piece of evidence that the theoretical families used in this project (behavioral materialism, individual developmentalism, and social developmentalism) are consistent with the way in which others who have identified a problem with the treatment of cognition and emotion group the approaches.

Turner’s (2007) project, in *Theory and Practice of Education*, was to propose that more complex research models should be used within educational research. His comments on organizational research fell within this agenda and were limited to five or six paragraphs at the end of chapter 8: “Learning and Teaching.” In this chapter he used Vygotsky’s learning theory as an alternative to bias in psychology and educational research towards an atomistic stimulus-response paradigm.

Though brief, Turner’s comments about institutional change signal an important philosophical problem. Some change theorists view intelligent behavior or knowledge as fixed, discrete, objective, and hierarchical; thus, they elevate the role of rationality and cognition. This approach tends to leave little room for understanding the role of emotion and its relationship to cognitive aspects of learning. Foundational or fundamental views
based on universal and absolute assumptions then serve as a mechanism of control, a way of maintaining conceptual purity within scientific communities. Interaction between different research families is discouraged and prevented – to the extent that it can be. As a result, different communities addressing organizational change tend to be isolated from each other and restrict novel associations of ideas related to the possible interaction between emotion and cognition.

One of Turner’s main concerns with organizational change theory appears to be that emotions are presented as something that must be managed for participants. These individuals are seen as unable to manage their own emotions. The secondary concern is that other research leaves the participant to their own devices in overcoming emotional reactions to change. Both of these concerns fall short of questioning traditional conceptions of emotions as destructive forces that must be managed or overcome, though they do signal an important philosophical problem with the way that emotions are commonly conceived. Where Turner was implicit, Antonacopoulou and Gabriel (2001) were explicit, noting the tendency to identify emotion as a negative factor that should be controlled or even eliminated. Nevertheless, Turner (2007) identifies two problems that are germane to this project: research families operate in some level of isolation from each other and current research on organizational change often treats agency, emotions, and interactive aspects of learning in a slapdash way.
Organizational Change

For at least the last twenty years, organizational change has been a hot topic for popular psychology and more academic organizational studies. When describing the nature of change that organizations face, many of the authors focus on tempo and continuity. Drucker (1999) compared today’s changing environment to the industrial revolution, a period of rapid change. He predicted that one of the greatest tasks for leaders in the twenty-first century will be to become change agents who view change as an opportunity. At the same time, some change theorists assert that the type of change that organizations now face requires a different scientific model for understanding the world and organizations than the Newtonian cause and effect paradigm that shaped organizational change leadership at the beginning of the twentieth century. Wheatley (1999) stated that a Newtonian cause and effect model of ideas is disempowering and disabling because it focuses on parts and forces instead of relationships and processes. Walton (1999) indicated that a paradigm shift is needed and that organizations must be reinvented in order to accommodate global, competitive, and societal influences.

Fullan (2001) and Gleick (1999) used language that represents a shift in the way change is conceived, describing the change that leaders face as rapid, unpredictable, and nonlinear. Schwandt and Marquardt (2000) acknowledged the paradigm shift in the world from Newtonian to Quantum and indicate that organizational learning is critical in this environment. They stated that, “the quantum universe is composed of an environment rich in relationships; it is a world of chaos, of process, and not just of objects and things” (p. 5). In an interview about change leadership conducted by Steinberger (1995), Wheatley
clarified the difference between the Newtonian and Quantum scientific paradigms. She referred to them as the *old science* and *new science*, respectively. Wheatley stated, “The ‘old science’ was really the study of matter, materials, parts, and forces acting upon other forces. The ‘new science’ looks at processes that underlie matter, at how things happen” (p. 16). She went on to say that vestiges of the old science continue to be major barriers to how we think about organizations.

Not unlike Turner’s (2007) concern with how organizational change is often conceived, many of these organizational change theorists caution against the limits of deterministic cause and effect models of change. They draw on the social learning theory to which Turner alludes as well as theorists such as Kuhn (see chapter 6) to present either an interactional or discontinuous representation of reality, respectively. However, social-historical perspectives can continue to maintain progressive teleological assumptions and/or argue for rationality as the essential adaptive quality or nature of humans.

Depending on the problem that the various researchers seek to address, the conceptual framework that they use to investigate and describe the role of cognition and emotion may oscillate between different assumptions (Weick, 1995). Such wavering becomes useful in order to forward naturalistic evolutionary psychological theories and continue to maintain the uniquely human adaptive capacity based on rationality, logic, and language. All three of the common approaches to organizational change presented in this project include theories that make such shifts depending on the argument being forwarded. Whether the author’s oscillation is unconscious or conscious is often difficult to tell because such fluctuations are seldom acknowledged in the texts. Dewey’s approach to psychology
offers the latitude needed to adopt different beliefs and methods while addressing genuine problems. At the same time that it acknowledges the use of this problem solving tool, it also warns that different ways of breaking up reality can get in the way, especially when the classifications become fixed (see chapter 7).

Because this project seeks to create awareness of some potentially tacit assumptions within several communities of research, a unified definition of change, change agent, organizations, and organizational change is not be possible from the onset. However, working definitions can be beneficial. For the purpose of this project, change is broadly understood as, “the substitution of one thing or set of conditions for another… [an] alteration in state or quality; variety, variation; mutation” (Brown, 1993, p. 370). A change agent is then, “a specific causative factor or element or an entire process that results in change… [or] an individual who instigates or implements change within an organization or group…” (VandenBos, 2007, p. 162). An organization can be defined as, “the way in which something is organized; coordination of parts in an organic whole; systematic arrangement” (Brown, 1993, p. 2020). An organization could also be described as, “an identifiable social entity pursuing multiple objectives through the coordinated activities and relations among members and objects” (Hunt, 1972, p.4). In light of the above definitions, organizational change is defined as an alteration or substitutions of conditions by which a system or social entity is coordinated. This project, and the research on which it draws, does not focus on one type of organization (e.g., public vs. private, for-profit vs. non-profit, secular vs. religious). Nor is it intended to address one particular form of change such as restructuring, reorganizing, product modification, performance
improvement, or re-visioning. Instead, the focus is on the relationship between cognition and emotion in organizational change *writ large.*

**Statement of the Problem**

In establishing some context and background for this study, several related problems have been identified. Adult learning theory is an important aspect of the human resource profession, yet many of the philosophical assumptions that undergird theory and practice remain tacit. As a result, theorists draw on different perspectives about existence and how humans come to understand it. Using different lenses or methods to address a contemporary problem is not the concern. Instead, the concern is related to the unintended consequences of switching perspectives and the assumptions that might accompany these approaches to problems. Greater attentiveness to the philosophical traditions behind various research approaches might allow theorists and practitioners to anticipate and even question some of the ways experience is classified and studied.

One of the strands that different views of reality and teleology can influence is epistemology. Perceptions of reality continue to influence what counts as knowledge in each of the research traditions. The focus may be on objectivity or on rationality, but in either case, cognition is presented as a more trustworthy source of knowledge than emotions. Within Western thought, there is a battle about the importance of emotion as a source of knowledge (Salovey, Woolery, & Mayer, 2001).

Though optimism about human progress through rational thought was called into question during and since the social unrest of the 1960s and the potential for emotion to play a role in the acquisition of knowledge was given greater consideration, rationalism
and cognitive functions continue to reign supreme in psychological research (Bredo, 2006). While the importance of emotions as a source of knowledge has seen a resurgence in popular literature and to some extent in more academic psychological theory, these approaches continue to draw on assumptions about emotions that define it as passive, physical arousal in much the same way as it has been conceived in psychological research over the last 100 years (Solomon, 2007). According to Mathews, Zeidner, and Roberts (2004):

Uncontrollable feelings of anger, contempt, anxiety, and depression against society’s injustices could no longer be interpreted as irrational defect in human nature, but rather had to be interpreted as a consequence of, and a message about, a faulty and oppressive society. The feelings of the oppressed groups were signals of how various groups of people were, (mis)treated before society could or would correct inequalities. (p. 9)

Calling intelligence and rationality into question does not mean that these concepts stop serving a judiciary function or that they cease to be held as the uniquely adaptive characteristic of humans. Instead, redefining rationality in a more subjective way allows people to ask: “For whom something is rational?” and then, “What common or universal rational thread can be drawn out of the individually or culturally situated stories?” The emotional signal or physical reaction generated by a system out of kilter is evidence of a potentially awakening of consciousness, but in and of itself lacks this higher cognitive component that can direct change towards an ultimate rational end. Even in the theories that seek to forward a more emergent, adaptive, and contextual view of rationality without a utopian end continue to preferentially treat the highest cognitive functions as distinct and more advanced than anything classified as emotion.
The epistemic treatment of the role of cognition and emotion is similar in much of the organizational learning and change research explored in this project. Emotion is treated as an under-rationalized if not irrational psychic process in keeping with James’s theory of emotion (see chapter 3). In order for emotions to gain credibility, they needed to be linked to or justified by intelligence or rationality. One problem with the cognitive revolution that begins in the 1960s is that emotion continued to be ignored by behaviorists and more cognitive research (Bredo, 2006). Furthermore, the research that does exist within the organizational change community tends to neglect the interdependence between emotion and learning, the subtleties of individual’s reactions to change, and the construction of emotion at the organization level (Antonacopoulou & Gabriel, 2001). Compounded by the proliferation of faddish treatments of emotion and emotional intelligence in trade and self-help literature (e.g., Goleman’s numerous books and articles) the obfuscation of the concept has resulted in a general wariness to associate with emotional research by some theorists (Mathews et al., 2004).

**Purpose Statement**

The ultimate aim of this project is to describe three strands of organizational change research, explore the assumptions behind their treatment of organizational change with particular interest in the relationship between cognition and emotion, and consider an alternative conceptualization. The alternative draws on pragmatic naturalism with a specific emphasis on Dewey’s psychology-philosophy of experience, cognition, and emotion. This process is intended to contribute to the ways academics and practitioners of
organizational change might think about the relationship between emotion and cognition as part of the human experience of change.

**Rationale**

Today’s organizations are faced with rapid, even chaotic change (Schwandt & Marquardt, 2000). Organizations, change leaders, and change participants are impacted greatly by the human response to change. Interest in emotion and learning is rapidly increasing in this context. Antonacopoulou and Gabriel (2001) stated that, “In particular, periods of rapid and perplexing changes make extreme demands on individuals’ and organizations’ abilities to learn and on their emotional lives. Emotion and learning in combination are powerful sources of meaning and direction, supporting or inhibiting individuals and organizations in their attempts to re-define reality and find their place in it” (p. 435). They went on to say that most management and organizational literature addresses emotion and learning as separate phenomena. Therefore, organizational change theory stands to benefit from awareness of the assumptions leading to this separate treatment and by a different way of thinking about the relationship between cognition and emotion that might serve as a lens for future research and practice.

According to Schwandt and Marquardt (2000) organizational change happens and is studied at the individual level (psychology), macro level (sociology), cultural level (anthropology), and all of the above in the business level (organizational). The contributions of experts in each of these fields are important, and one might ask why this study does not seek to work from within one of the stated disciplines. The lack of understanding of underlying assumptions indicates the need for a study that looks at their
philosophical underpinnings. Antonacopoulou and Gabriel (2001) posited that the need to study the nature of emotion and learning’s interdependence in the context of organizational change is paramount.

In this study, there is no intention to suggest that philosophical inquiry has a corner on “truth” or that it is in some way superior to other forms of inquiry. In fact this study is in some ways a hybrid which will glean from the work that has already been done and continues within other disciplines such as psychology, anthropology, sociology, organizational studies, paleontology, and history. Instead, philosophical inquiry is employed because of its practical function. While the expert’s insight is important, at times it becomes necessary to gain another perspective. Insiders working within their respective discipline can become blind to the ideological lenses through which they see the world (Toulmin, 1961). Hence, this study seeks to provide a multi-disciplinary vantage point from which to view emotion in organizational change.

Research Questions

1) How is the relationship between cognition and emotion conceived in organizational change research? (Has cognition been treated as king?)
2) What are the philosophical and psychological foundations for these conceptions?
3) What are the strengths and weaknesses of these approaches?
4) Is there an alternative that should be considered? If so, what might a useful alternative look like?
5) What implications do the findings from the above questions have for organizational change theory?

Research Approach

Burbules and Warnick (2006) sought to foreground philosophy as a valid area for educational research and propose some families of method for speculation. They pointed out that philosophical inquiry into education, from the time of Socrates and Plato until the
early twentieth-century, has been seen as integrated into philosophy generally and is thought to be fundamentally significant. They went on to state that, “many in the field of education today neglect (even disparage) critical reflection about educational aims and their grounding in deeper, often unexamined assumptions about knowledge and value; instead they seem preoccupied with the exigencies of test scores and other narrow measures of accountability” (Burbules & Warnick, 2006, p. 489). They indicated that philosophy is an ideal target for people with instrumental mindsets who think that practitioners do not want to concern themselves with minutia, philosophy, theory, or opinions. Unfortunately, they observed that, “This attitude does reflect a widespread prejudice” (Burbules & Warnick, 2006. p. 489).

Burbules and Warnick (2006) described what they loosely called philosophical methods in order to make speculative inquiry more transparent and address those who may be skeptical about its value. They used the term method for simplicity’s sake and promptly asserted that the methods proposed were not authoritative, mechanical in application, exhaustive, or discrete. What they sought to represent was a “constellation of methods” including layers and hybrids of moves, strategies, and problem definitions (p. 490). Of the ten methods presented, two are particularly relevant to this project: 1) questioning a particular practice or policy and 2) exploring hidden assumptions of a particular view or school of thought.

This first method might be more accurately considered a kind of problem definition. The process seeks to look at the unintended consequences of such hidden premises. In this project, particular theories are considered in order to arrive at an
awareness of underlying assumptions. By looking at these theoretical writings and the practices of a community from a philosophical perspective, an observer can make some assertions about whether theories and practices are based on reliable or shaky assumptions. According to Burbules and Warnick (2006), juxtaposing different versions of the same phenomena helps to characterize ways of conceiving of the problem, without identifying the right one. Instead, this process seeks to establish the complexity of the situation and the unique contributions of each point of view. The second method, exploring hidden assumptions, looks at an entire theory or discursive system. These critiques look at distortions and limitations of particular ideas and systems of thought. The value of this approach is that, “If you are committed to A, and A entails (or assumes) B, then you are committed to B whether you realize it or not. Evaluating the truth or value of A, therefore, requires evaluating the truth and value of B as well” (Burbules & Warnick, 2006, p. 494).

Philosophers are encouraged to find similar projects which help to develop an appropriate process of inquiry. Certain tendencies do exist within types of philosophical inquiry (e.g., historical vs. contemporary, epistemological vs. moral). It is, therefore, important to look at comparable projects. The problem that this project addresses is epistemological and teleological and has important historical and contemporary contexts to consider. Stemhagen (2004), whose dissertation sought to present an alternative to the untenable dualism of absolutist vs. constructivist conceptions of math, also identified an epistemological problem with historical and contemporary facets. He identified the following approach: 1) identify a current problem; 2) evaluate the principal ways of
thinking about the issue (historical and contemporary philosophies); and 3) provide an alternative conception that has promise to alleviate the original problem.

Philosophical research design is emergent, much like some qualitative studies. The initial structure and hypotheses for this mode of inquiry are necessarily tentative and the final document does not fully reflect the iterative process by which it is arrived. Instead the philosophical text represents reorganization of previous struggles with an ongoing project, addressing some problem, in a way that seems to make sense for the project as it stands in order to communicate it to a reader. While this type of project necessitates a high level of intellectual flexibility, a certain amount of structure is needed to guide the process. Burbules and Warnick’s (2006) constellations of method help to provide some transparency to the multilayered moves, strategies, and problem definitions that characterize philosophical inquiry. Their treatment helps to point out that while flexible, the process is also grounded and concrete.

This study is presented in several stages related to the identified problems: 1) Chapter 1 identifies and delimits a live problem acknowledged in extant literature and provides a historical and contemporary context within a specific theoretical community; 2) Chapters 2-3 present some of the philosophical and scientific-psychological underpinnings for the predominant ways of conceiving of the relationship between cognition and emotion in change and learning theory; 3) Chapters 4-6 explore and describe the treatment of cognition and emotion within the material behaviorism, individual developmental, and social developmental psychological research families - this treatment involves critiques that exist within and between the theoretical groups which reveal perceived strengths and
weaknesses of the various approaches; 4) The first half of chapter 7 presents some theories that move towards a natural pragmatic conception. In the second half, Dewey’s philosophical-psychological critique of, and alternative to, rigid classifications of emotion and cognition as distinct parts of experience is explored; and 5) Chapter 8 brings the various elements of the project back together in order to leave the reader with an organizational fable intended to situate the theory in a hypothetical case that can be used to see how the different approaches might influence organizational life. These stages are not intended to be presented as though the project proceeded in a linear progression, but instead with the understanding that philosophical research is an iterative process.

Significance and Limitations of the Study

Philosophers are almost always faced with reluctant audiences who try to ignore or trivialize it as irrelevant (Burbules & Warnick, 2006). Despite limitations related to what is commonly conceived of as meaningful research, the design and level of intellectual range of motion in speculative inquiry could be considered strength. Flexibility is needed to evaluate epistemological and teleological assumptions within organizational change and learning theory. This level of awareness of psychological approaches is necessary in order to promote honest and informed dialogue in a field for which philosophical underpinnings are largely tacit. This kind of study has a high degree of utility because, if underlying assumptions are not questioned, they can continue to dictate which theories and practices are admissible within the organizational change community without consideration of the impact on people, organizations, and the field itself. Toulmin (1961) presented a convincing argument for philosophical speculation:
…the men [sic] who discuss speculative questions of these kinds play an essential part of science… Indeed the long-term rewards of successful speculation are greater than those for experiment. The greatest fame is reserved for those who conceive new frameworks for fundamental ideas, and so integrate apparently disconnected branches of science. Isaac Newton, Clerk Maxwell, and Charles Darwin are best remembered, not as great experimenters or observers, but as critical and imaginative creators of new intellectual systems. (p. 108-109)

While this project is unlikely to have such a long-term impact, there is still a place and need for speculative questions, critical thinking, and creative projects. Given the limitations and strengths noted above, this project is important because it may help to promote dialogue and awareness of premises on which current practices and theories of organizational change are based and the unintended consequences that might follow acting according to such assumptions.

According to Rorty (1999), theory is already practice because it seeks to make the world better by bringing means and ends into focus and building consensus for human activity:

The purpose of inquiry is to achieve agreement among human beings about what to do, to bring about consensus on the ends to be achieved and the means to be used to achieve those ends. Inquiry that does not achieve coordination of behavior is not inquiry but simply wordplay… There is no deep split between theory and practice, because on a pragmatist view all so-called ‘theory’ which is not wordplay is always already practice. (p. xxv)

If it is right to assert that cognition has reigned supreme and that human emotion has been neglected to the detriment of accurate understanding and practical usefulness, there is nothing more practical than stepping back from narrowly focused research and consider a wider view that takes into account the ways of thinking which are contributing to the problem. The organizational change and adult learning fields are still emerging, and focus
heavily on practice and theory derived from these techniques and experiences (Gilley, Dean, & Bierema, 2001). This study is significant because it identifies and describes an alternative way to conceive the relationship between emotion and cognition in organizational change; one that can help overcome unproductive dualisms of mind and body.

Toulmin (1961) stated: “There is only one way of seeing one’s own spectacles clearly; that is, to take them off. It is impossible to focus both on them and through them at the same time” (p. 101). Toulmin, whose project was inquiry into the aims of science, further asserted that our very commitment to the lenses we use can make us blind to other possibilities and that proper growth of our ideas can only come when these assumptions are questioned (i.e., when we unthink them). The philosopher’s role is important because it can help to bring the wider context into focus.

This project is significant because it will adjust the gaze from the imbedded view of organizational change theorists and practitioners from various research approaches to that of an interested outsider who can see both the lenses and the activity. Though I have found myself in the role of organizational change leader, participant, and student, I do not position myself as an expert on organizational change. My hope is, that as an outsider, I will be able to provide a unique perspective that will help to increase understanding in an area that is currently seen as a conceptual and practical mess. This project might also serve as an example of the contribution that philosophical inquiry can make to educational and organizational studies. In a time when philosophical inquiry is often viewed as an extravagance (Burbules & Warnick, 2001), this study might help illuminate that need for
curriculum that promote critical reflection about the aims and assumptions psychological research, adult learning, and organizational change.

Perhaps the greatest limitation of the study is best stated in its strength. Toulmin is previously quoted as saying, “There is only one way of seeing one’s own spectacles clearly; that is, to take them off. It is impossible to focus both on them and through them at the same time” (1961, p. 101). Ironically, even in taking off and focusing on our spectacles, some lens is used to for the inquiry. Philosophical inquiry is not exempt. The method of inquiry used in this project and the pragmatic lens that it employs is necessarily limited by its tradition, assumptions, and biases. It is one tool amongst many; one which will leave its own mark on the process of inquiry, its findings, and practice that may follow.
Chapter 2: Philosophical Underpinnings

Introduction

The second research question in this study is “What are some of the philosophical and psychological underpinnings of [the major research approaches related to organizational learning and change]?” This chapter addresses the first part of this question by describing some of the seminal philosophical contributions to current approaches to organizational change and the role of emotion and cognition in the change process. The next chapter presents some of the psychological treatments of cognition and emotion that undergird all of the research in chapters 4-6 and help to provide a target for Dewey’s pragmatic critique of the treatment of the relationship between cognition and emotion in psychology. In the first chapter, the need for more attention to be given to the philosophies that underlie theory and practice in adult learning and in the three fields of human resources is presented as a problem identified in the literature (Elias & Merriam, 1995; Gilley, Dean, & Bierema, 2001).

It is difficult to conceive of a way to talk about the human response to change without some consideration of what it means to be human or the nature of change itself. Ontology and metaphysics both focus on existence itself. According to VandenBos (2007), within psychology both of these branches of philosophy are important to questions related to “What it means to be a human being?”: “From some philosophical perspectives, ontology is synonymous with metaphysics, in that both ask fundamental questions about
what reality is. However, from the perspective of contemporary existentialism and hermeneutics, ontology implies a concern with the meaning of existence that is largely lacking in traditional metaphysics” (p. 645). Hermeneutics, the study of texts, is further defined in the Social Interactional Relations heading later in the chapter. Ontology becomes a point of interest in this study when “What it means to be human?” is wrapped up with cognitive and emotional functions in the species. Traditional metaphysics is concerned with the ultimate foundations of reality, the stable aspects that can be known; since Descartes, the emphasis on metaphysics shifted to an epistemological concern with the nature and limits of knowledge (VandenBos, 2007). Within this context, teleology becomes important as either original cause or ultimate ends or purposes provide a foundation for what and how one comes to know.

These philosophical concerns are difficult to disentangle from the psychological foundation of primary interest to this study, epistemology. Psychology is particularly interested in epistemology because it:

has long had interest in the processes of knowledge acquisition and learning of all sorts… as a science, psychology has an interest in the justification of its knowledge claims… In general, the guiding epistemology of psychology has been empiricism, although some approaches to the subject… are heavily influenced by rationalism. (VandenBos, 2007, p. 337)

This chapter seeks to focus on epistemological foundations, but necessarily brings in some of the other aforementioned philosophical concerns in instances where they seem to inform epistemology. To that end, the first part of this chapter seeks to provide some philosophical underpinnings rooted in ancient Greek thought. Brief descriptions of how the Atomists, Plato, and Aristotle tackle some of these philosophical topics will help to lay
the groundwork for understanding clusters of epistemological belief that emerged from Greek philosophy in the subsequent centuries. Establishing such a foundation for the project in the assumptions of thinkers like Plato is important because, according to Whitehead (1979), “The safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato” (p. 39).

The second half of the chapter focuses more directly on how epistemology provides a foundation for treatments of knowledge acquisition and learning in psychology. It provides additional foundational philosophical assumptions for the relationship between mind and body; cognition and emotion. This section both draws on and heavily modifies Bredo’s (2006) depiction of epistemological lines that provide a foundation for various families of psychological research (see appendix A for Bredo’s model). The depiction in this project is not intended to provide sharp lines of continuity from single ancient Greek thinkers, through more recent epistemologists, and ultimately to individual psychological theories that will be dealt with in the coming chapters. Instead clusters or families of epistemological orientation are offered which are connected to each other and to ancient Greek philosophy in different ways (see appendix B). In other words, this depiction is intended to be a little more dynamic than a singular historical line of best fit from existing psychological research to an original progenitor by acknowledging interactions between these traditions along the way. In addition to these models, a table with the life-spans of many important contributors to this project is provided in appendix D to help the reader place different thinkers in a historical frame.
The treatment of underlying philosophical beliefs in this chapter is informed by Quine’s (1951) use of a web of beliefs to describe the emergence of scientific thought. While helpful, the web metaphor has its limits. The spider’s web is generally depicted as having a singular center and basically fixed points of intersection. The cluster model in this project assumes that multiple areas of more dense associations of beliefs is possible and that the lines, spaces, and points of intersection can adjust in a more dynamic way than in a spiders web. By conceptualizing the philosophical contributions below as part of a larger system instead of distinct historical lines, it is easier to be open to the ways that seemingly dissimilar classification of psychological research share certain assumptions about knowledge.

*Ontology and Metaphysics in Ancient Greece*

*The Atomists*

In response to other metaphysical philosophies from the 5\textsuperscript{th} century BCE, atomists proposed that everything is composed of atoms which are physically indivisible and indestructible. Though they gave no explanation for the origin of these basic units, they believed that since the material reality came into being it has been governed by natural laws and has developed according to unalterable, fixed, mechanical principles (Russell, 1945). The atomists, founded by Leucippus and Democraticus, were strict material determinists. Even the soul was made up of primary and indivisible particles. This view of the world was largely unpalatable to the Ancient Greeks because it left change up to chance, or one might say up to probability.
The atomists' preference for mind over sensual experience was not as controversial in Ancient Greek philosophy. Their approach to metaphysics was still rationalist. They differentiated between two forms of perception: understanding and belief. Understanding was related to the essential, primary quality of an object belief-opinion was rooted in a sensual, secondary quality which could be deceptive (Russell, 1945). The atomists’ conception of knowledge as rooted in material existence did not find purchase until almost 2000 years later when the empiricists began to forward a view of science that defines what can be known according to a material cause. To understand that which exists, one must look to a metaphysics of the past or a teleology interested in original causes reduced to basic units instead of ultimate purposes.

In contemporary psychology, atomism is defined as the “view that psychological phenomena can best be understood by analyzing them into elementary units, such as sensations or conditioned responses, and by showing how these units combine to form thoughts, images, perceptions and behavior” (VandenBos, 2007, p. 81). Understanding the origins of the change, its material objects and the laws that governed their movement or interaction, is the key to unlocking the mystery of the world and predicting what is probably going to happen next within this purview. Materialist and behaviorist can be seen as having a teleology primarily oriented toward the past, i.e., to original causes (Lewin, 1951b). However, all social sciences are influenced by materialism through the influence of empiricism, which is discussed in the second part of this chapter. The influence of materialism on the social developmental paradigms is more pronounced than in the individual developmental paradigm. The social developmental paradigm takes on a more
physics-like language as it attempts mediate between what the metaphysics of materialism-behaviorism and individualism by focusing on immediate forces as part of an emerging holism, particularly a third force – social structures (Lewin, 1951b).

*Plato*

Plato’s metaphysics is important because his depiction of reality characterizes change as negative; the evidence of a corruptible material state. It presents knowledge as the key to the good life – escaping or overcoming instability, change, and material existence through supernatural insight. It also describes different forms of people who have innate abilities according to their form or type. No matter what type of person one is, the individuals have an ethical obligation to develop their potential, particularly the ability for higher mental development. Finally, better organizational forms make sure that people with high mental capacity for reason are at the top of the hierarchical structure so that common good can be obtained and maintained. In Plato, a normative epistemology paves the way for pursuit of the common good. His Utopian vision for society is rooted in individual idealism and social structures that promotes rationalism. These components give him a sense of balance in the face of the winds of change.

According to Press (1999), Plato presented two levels of reality, a set of pairs which are unequal opposites. These two levels of reality were: the imperfect, material, changing world and the perfect, unchanging realm of ideas or forms. Plato’s dualism was influenced by Parmenides’ belief that reality is eternal and change is illusory and Heraclitus’s negative doctrine that the sensible world is not permanent (Russell, 1945). In this worldview, change was something to be avoided by connecting with something that
was stable and unchanging. The material world was an illusion that prevented the mind from a psychic connection with that which is the ultimate Reality, which Plato also calls the Good or the Beautiful. Reality was a world of ideal forms. The mental-physical dualism predicated the general Platonist dream of stripping away all that was inside the material experience in order to obtain perfect knowledge by opening the mind to what was outside of experience - Reality (Rorty, 1999).

Every person was responsible for pursuing knowledge of the Good or Beautiful. Plato’s (1981) metaphysics combined with his progressive teleology to produce an ethical outlook based on the pursuit of knowledge. Plato presented much of his philosophy by writing about Socrates. Socrates’ mission was to encourage the pursuit of knowledge because he believed that people acted wrongly because they did not know better. The soul and mind was elevated over body in Socrates’ epistemology. In *Meno*, Socrates explained that what people called learning was actually discovering what the soul already knew (Plato, 1981). The origin of this knowledge was reminiscence, recalling things known in a previous existence. In *Phaedo*, Socrates addressed Simmias: “our souls also existed apart from the body before they took on human form, and they had intelligence” (p. 115). This knowledge was what Plato identified as, “separately existing external Forms,” *eidos* (Grube, 1981, p. 61).

The soul, which was associated with the mind, did not make use of the body to investigate things through the senses or passions. (Passions can generally be seen as a subjective, individual drive or an emotional response to the material world that is undirected by thought.) Instead, the body dragged down and confused the soul. The soul
investigated on its own by passing through the realm of what is pure, existing, and unchanging. The soul, which was more like the divine, naturally ruled the mortal body. One could touch, feel, see, and perceive what was particular, changing, and therefore unreliable with the senses, but the Good and Beautiful could “only be grasped by the reasoning power of the mind” (Plato, 1981, p. 116). It was the responsibility of all good citizens to pursue this reasoning power of the mind over the body and passions, but particularly those who lead.

Plato indicated that Socrates was always trying to get the right people into positions of power. These higher people were the ones that could control passions and focus the mind on higher things like abstract ideals and directing the behaviors of others. Socrates asked, “If I wanted a shoe mended, whom should I employ?” He asked the same question in relationship to other occupations including carpenters until he arrives at governance: “Who should mend the Ship of the State?” In each case, Socrates’ pupil stated, “a shoemaker” or “a carpenter” and ultimately, the statesman who is properly educated should lead the Ship of the State (Plato, 1981). The individual development of potential and getting the right people into the right type of occupation was essential to improving social organizations. Plato envisioned a society in which leaders with highly developed abstract reasoning and control of their emotions (the guardians) were set above working people who were controlled by passions (soldiers and other workers) (Plato, 1928).

What might be of equal importance to this study is what is missing when one looks around in Plato’s Utopia and corresponding educational system. According to Mumford (1956):
What Plato has left out are the poets, dramatists, and painters. Literature and music, in order to contribute to the noble education of the Guardians, are both severely restricted in theme and in treatment. Plato has his limitations; and here is the principal one: Plato distrusted the emotional life, and whilst he was prepared to do full homage to man’s obvious sensualities, he feared the emotions as a tight-rope walker fears the wind; for they threatened his balance. (p. 54)

Plato’s utopian societal vision is perhaps his most crucial contribution to the next two-thousand years of philosophy, having particular impact on Christian theology and philosophy up to the thirteenth century and to Aristotle whose influence increased thereafter (Russell, 1945). In as much as Plato’s philosophy can be seen as the foundation for European philosophy *writ large* (Whitehead, 1979) and a major influence on Christian thought (Russell, 1945), it is not surprising that his dualistic conception of mind and body strongly influenced the distinct classification of cognition and emotion in philosophy, psychology, and common social interactions (Dewey, 1971b).

At the center of this philosopher’s system is a dualism that placed mind over body because of the body’s corruptibility and purported propensity towards passions and emotional distractions. Echoes of Plato’s distrust of emotions as a source of knowledge can be heard in all three of the major psychological approaches to organizational change and learning. Each of the three research clusters also emphasizes the importance of the development of rational capacity as a uniquely important adaptation that allows humans to overcome change and instability in order to bring about a better state of equilibrium. Plato’s metaphysics, in which improvement is dependent on individual development (especially intellectual growth), can be seen as a particularly important contributor to the epistemology of the individual developmental strand.
Aristotle

Aristotle’s philosophy is important to understanding how change and learning are conceived in psychological research. It can be seen as trying to synthesize a material explanation for knowledge with rational classifications. Aristotle’s metaphysics included a critique of Plato’s ideal forms. The most famous argument against Plato’s ideal was his third man argument (Russell, 1945). Aristotle maintained that if a man was a man because he resembled an ideal man, there must also be a third man to whom both the man and the ideal man were similar. Anything that could be identified as this thing is bound by substance, i.e. matter. In contrast, universals were not particular things, but the sort or such which did not exist independent of particular things. For example, qualities such as sphericity did not exist independent of some substance that could be described by that quality.

Aristotle’s metaphysics is of particular importance to understanding how one comes to know. This approach is more concerned with a linguistic classification than with reducing knowledge to a basic material unit. At the same time, Aristotle indicates that an object can only exist if it has some essential quality. Ideal forms and structures, therefore, cannot be completely disentangled both matter and universal distinctions. By reconnecting the universal forms with the particular essence of the object, Aristotle allows for an explanation of how different objects or parts of experience can be grouped together. The stage is also set to explore what quality an object has in order to exist as this or that. This basic quality is the object’s essence. An individual’s or species’ essence is the very nature of that object. Without this essence, the substance would cease to be X. Such a brief
treatment of Aristotle’s conceptions of universals and essence hardly do it justice, but it provides some foundation for understanding its impact on the different psychological traditions. In material determinism, this essential quality is seen as striking the passive knower. In the individual developmental strand, the essential structure cannot be changed. In the social developmental strand, the essence goes beyond the individual’s material history and construction of knowledge to consider a larger socio-historical development of knowledge with a greater emphasis on the role of the material in the interaction. To understand how the developmental aspects of the last two interpretations can be connected back to Aristotle’s metaphysics, a little more may need to be said about his progressive teleology.

Aristotle, like Plato, developed a strong dualism of unequal pairs (Russell, 1945). A distinction was made between form and matter; mind and soul. Aristotle’s conceptualization of soul was different than that of Plato’s Socrates. In, On the Soul, Aristotle (1963) addressed the mind-soul dualism. The soul was the form of the body; it provided unity to the many parts. The form of a substance was its nature or essence, not matter. If something operated according to its nature, it was moving towards its potential or ideal end, a change that could be continuous or in steps and stages.

In this purview, an acorn is a potential oak tree, and an immature person is one that has not actualized or reached some natural level of completion (Stephens & Heil, 1998). At the same time, the physical body cannot exceed its material nature. Mind, however, is not bound by the same physical limitation and has the potential for immortality because it is more godlike (Russell, 1945). Aristotle’s metaphysical comments about material
limitations can be seen as influencing the individual difference tradition within the behavioral materialism psychological cluster because of the emphasis on individual differences in innate aptitude, particularly related to intelligence and physical, behavioral control. It can also be seen in individual developmental clusters including individual learning theory and humanism because of the emphasis on stages of development towards a future, ideal cognitive equilibrium.

Aristotle’s metaphysics also leaves room for a broader perspective of evolutionary change as a whole moving towards an ideal. This aspect of Aristotle’s metaphysics can be seen as a mooring point for the social developmental paradigm. Russell (1945) expressed the progressive, evolutionary ramifications of Aristotle’s metaphysical treatment of form and matter:

The doctrine of matter and form in Aristotle is connected with the distinction of potentiality and actuality. Bare matter is conceived as a potentiality of form; all change is what we should call “evolution,” in the sense that after the change the thing in question has more form than before. That which has more form is considered to be more “actual.” God is pure form and pure actuality. In Him, therefore, there can be no change. It will be seen that this doctrine is optimistic and teleological: the universe and everything in it is developing towards something continually better than what went before. (p. 167)

Depending on the unit of analysis, the individual, group, organization, societies-cultures, or the world as a whole can be seen as moving towards a better or more advanced form, characterized by less change and a more lasting state of equilibrium.

Implications for Epistemological Clusters

Philosophy and psychology are often at odds over the questions: What can be known with certainty? and How does one come to have universal or common knowledge?,

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as many philosophers focus on what can be known and see psychology as something to be overcome or ignored because of its focus on how one comes to know via mental processes (Bredo, 2006). However, the very idea of scientific research seems to presuppose a fundamental metaphysical explanation for how people seem to be able to share what seems to be accurate, true, or at least stable representations of the world. At some point, almost all of the psychological theories in this study draw on a physical or biological model of evolutions as emerging based on original natural laws in keeping with an atomistic purview. Atomism gives a higher place for human understanding, which comes from cognitive capacity to analyze and identify elementary units, objects, or qualities. Many of them also draw, in differing degrees, on a Platonic or Aristotelian view of reality that describes reality in terms of ideal forms or essential, natural forms moving towards a future ideal. Idealist tendencies are particularly apparent in relationship to the preferential treatment of reason, rationality, intelligence, high cognition, high arts, and the justification of claims to knowledge within the individual and social developmental psychological research clusters.

Many theorists jump back and forth between evolutionary models, using continuous material emergence to account for some aspects of human experience such as emotions and then reposition their theories and research approaches using a more discontinuous and future oriented idealist model to account for issue such as language, rationality, and intelligence. In other words, many psychological theories oscillate ontologically or metaphysically depending on the phenomena that they are trying to understand (Weick, 1979).
The problem is not in taking on different perspectives in order to solve problems, it is in what comes along when adopting these philosophical orientations. The concern is that two scientific dogmas can slip into the theory which can be seen as two sides of the same coin: one that seeks a radical reduction of material objects and experiences to a primary quality or sense datum and the other seeks to develop a logical argument or linguistic classification-structure that can prove stable for all times (Quine, 1951). The way that organizational change and learning research draws on materialism and idealism seems to continue the quest for certainty and/or stability through rationality, reason, and/or more accurate representation of truth. Even in less absolute approaches human understanding, rationality and the high cognitive functions related to analyzing, judging, and dividing experience are classified as distinct from and more reliable sources of information than what is deemed emotional or sensual.

Correspondence theories of knowledge present a criterion for testing truth that looks to see if the proposition or idea corresponds to external reality. Mead (1964) stated, “If experience must accord with a reality beyond itself, the test of truth will be a correspondence of its structure with the structure of external reality” (pp. 341-342). Correspondence theorists tend to think of truth as a timeless relationship between an ultimate reality or fact and an idea or proposition. This relationship can be seen as related to external yet material facts, as super-natural ideal forms, or a material-essential form. According to Kamber (2007), correspondence theories hold that truth is the agreement between belief and fact, “or, to put it a little differently, between what we think or say is the case and what really is the case” (p. 70). Much of classic Platonic philosophies divide
existence into two realms, the imperfect-perishing world and the absolute reality. When talking about this division between ultimate reality and experience, Dewey (1967) said, “Philosophy has arrogated to itself the office of demonstrating the existence of a transcendent, absolute or inner reality and of revealing to man the nature and features of this ultimate and higher reality” (p. 23). Aristotelian thought continues to influence, not only a quest for essential forms, but also for an essential human nature based on the mind that is discontinuous with the changing world.

Coherence theory refers to the internal consistency of an idea (Stemhagen, 2004). Kamber (2007) broadens this definition to include a coherence or consistency between an idea and other ideas and experiences. In this linguistic or logical approach to epistemology, knowledge can become certain as the linguistic or logical argument becomes a tighter, more coherent system that will hold for all time and in all situations. Kamber (2007) offered the natural sciences as a good example of how coherence theory works: “Scientists judge the likelihood that a new hypothesis is true by its fit within relevant observation and established theories, and then seek new data against which to test its fit” (p. 70). A more coherent theory must address data from material experience and a rational expression. Mead (1964) said that, “coherence theories of truth have in view… the coherence of the structure of the judgment, assuming that as a thought structure it must be consonant with a thought constructed universe, if only it be correctly thought. That is, coherence refers to the formation of a hypothesis rather than to its agreement with the given conditions of further conduct” (p. 338). Behavioral, individual, and social
psychology have all been influenced by both correspondence and coherence approaches to truth.

**Epistemological Clusters**

Godfrey-Smith (1996) addressed the biological and philosophical conceptions of mind, identifying two main approaches to knowing: *externalist* and *internalist*. He also identified a third possibility: *interactionalism*. Bredo (2006) later elaborated on each of these approaches to mind and knowing by describing the historical-philosophical line of each family of thought in relationship to psychological, educational research (see appendix A). In light of the way that the various research families in this study seem to draw on multiple epistemic influences, Bredo’s (2006) model is adapted to a less linear model to emphasize the multiple interactions and common connections between the various psychological approaches to knowledge. I provide an alternative epistemological model that can be helpful for understanding the assumptions that seem to be influencing the emblematic psychological research synthesized and analyzed in this project (see appendix B). For this study, it might be helpful to think about the epistemological research families as sharing clusters of belief that are drawn on frequently and provide some characteristic ways of problem solving. By using a cluster approach, it is easier to see how the psychological research families are able draw on different metaphysical and normative epistemological approaches, though they may emphasize some beliefs over others.

**External Relations**

According to Bredo (2006), the external relations tradition is the dominant tradition for educational and social science research. It includes the following philosophies:
empiricism, classic positivism, and logical positivism. In the external relations family, knowledge comes from the correspondence of a perception with a material fact or formal quality that exists outside of the individual. It generally holds that knowledge is the result of the impression of some essential quality in objects or events. A strong externalist approach to knowledge makes the knower a passive recipient of both secondary and primary information. According to this belief, one’s experience, behavior, and perceptions are determined by external objects, people, circumstances, and probable interactions – resulting in an external locus of control (VandenBos, 2007).

*Empiricism.*

Locke found common ground with the atomists’ belief in the importance of the material world and natural laws as the source of human understanding and in so doing contributes greatly to modern science (Russell, 1945). Locke, commonly regarded as the founder of empiricism, forwarded a kind of *foundationalist* epistemology (Bredo, 2006). Here the foundation or source of the dogmatism is rooted in an attempt to reduce knowledge to an original sense datum or quality of an object that corresponds to an external, material fact. According to VandenBos (2007), empiricism is an:

approach to epistemology holding that all knowledge of matters of fact either arise from experience or requires experience for its validation. In particular, empiricism denies the possibility of innate ideas, arguing that the mind at birth is like a blank sheet of paper….During the 17th and 18th centuries, empiricism was developed as a systematic approach to philosophy in the work of British philosophers [who] … developed theories of associationism to explain how even the most complex mental concepts can be derived from simple sense experiences. (p. 328)

It is an application of the correspondence theory of knowledge or truth, but it focuses on a passive mental impression made by the material world instead of insight into a reality
above or existing outside of physical experience. Locke (1996) believed that “when our senses do actually convey into our understandings any idea, we cannot but be satisfied, that there does something at the time really exist without us, which does affect our senses, and by them give notice of itself to our apprehensive faculties, and actually produce that idea, which we then perceive” (p. 289). Therefore, all knowledge comes from the direct, passive mental experience of objects or events.

According to Locke (1996), all knowledge should be able to be reduced to a foundational, basic, or primary quality of the object or event. These factual observations are in contrast with other matters of individual belief or faith which constituted a secondary quality which could be perceived differently by different people. In this point, Locke shares a view of knowledge with the atomist, Democritus. Both believed that, “Perception and thought are physical processes. Perception is of two sorts, one the senses, one of the understanding. Perceptions of the latter sort depend only on the things perceived, while those of the former sort depend also on our senses, and are therefore apt to be deceptive” (Russell, 1945, p. 72). Beliefs and emotions, which are characterized as sensual and subjective, are suspect because they actively interfere with the passive impression of basic, primary qualities on the mind by introducing subjectivity. Knowledge comes from experience, but it is passively acquired when the basic quality of the material world affects the mind (Locke, 1996). Beliefs and emotions are seen as disrupting and distorting these basic, foundational, or objective facts.
Classical positivism.

Comte (1896) argued that knowledge evolves through stages: 1) theological-fictitious; 2) metaphysical-abstract; 3) and ultimately, scientific-positive. Scientific facts were believed to be able to be free from personal faith, biases, and opinions rooted in secondary qualities. Classical positivism narrowed the conception of what can be positively or certainly known – arguing against the veracity of beliefs about processes and forces that could not be easily observed. Comte believed that this approach should be applied to the society as well as natural sciences.

Logical positivism.

Logical Positivism emerged in response to hermeneutics, which is discussed in greater detail later in the section on Social Internal Relations. According to VandenBos (2007), its proponents sought to:

- establish the essential unity of logic, philosophy, and science and to distinguish these disciplines from such others as metaphysics, ethics, and religion, which were dismissed for their speculative character. The positive view of science was influential during the period in which psychology emerged as a science and has had a recognizable influence on the discipline. This is most pronounced in behaviorism… (p. 542)

It more narrowly asserted what can be known, and what should count as knowledge. It emphasized the importance of formal logical language and sought to recast both philosophical and scientific inquiry including psychology in terms of logic and mathematics, which are often thought of as fixed and unchanging absolutes. This concern regarding the coherence and rationality of scientific hypotheses and arguments introduced a second form of fundamentalism (Quine, 1951). Because logical arguments, theories, and
hypothesis are connected to mind, cognition, and language, they are seen as less susceptible to what Carnap (1935) called emotional attitudes.

The commitment to an empirical scientific method and verifiable, objective facts makes attitudinal research, which explores general underlying beliefs and attitude systems which look at the relative strength of beliefs or patterns of associations seem like a less stable source of understanding because these feelings, opinions, and beliefs can be distorted (VandenBos, 2007). Some behavioral psychology would still make room for such lines of inquiry because it provides a baseline for attitude therapy - a form of reeducation, training or treatment of such distorted perceptions by reorienting the individual, employee, or client to the primary or desired original object so that more positive associations can replace subjective attitudes and emotional reactions.

Behaviorism, which is the psychological approach explored in chapter 4, is, “based on the study of objective, observable facts rather than subjective, qualitative processes, such as feelings, motives, and consciousness…” (VandenBos, 2007, p. 110). Even though both intelligence and feelings are both presented as behavioral associations instead of non material processes, intelligence is associated with understanding the basic or primary sense datum while affective, attitudinal, or emotional behaviors are connected to the subjective portions of experience.

Internal Relations

The Internal Relations cluster exists in a tension between empiricism and rationalism which emphasizes internal coherence of rational or logical structures. Rationalism is used to refer to:
Any philosophical position holding that (a) it is possible to obtain knowledge of reality by reason alone, unsupported by experience, and (b) all human knowledge can be brought within a single deductive system. This confidence in reason is central to classical Greek philosophy, notably in its mistrust of sensory experience as a source of truth and the preeminent role it gives to reason in epistemology… the term “rationalist: is chiefly applied to… the…tradition initiated by…Descartes… In psychology… humanistic psychology, and some strands of cognitive theory are heavily influenced by rationalism. (VandenBos, 2007, p. 770)

Internal Relations is a family of research that could be divided into two clusters. Doing so in this project is a divergence from Bredo’s (2006) model for grouping psychological research according to epistemological families (see appendixes A & B). The following grouping also diverges by including theorists who are included in Bredo’s interactional family because of a greater emphasis on the impact of metaphysical assumptions within both individual and social developmental psychology. In order to describe the approaches of these two subgroups and the way that they balance empiricism and rationalism, a little more information about rationalism than the definition above follows.

**Rationalism.**

Descartes (1970a) was unwilling to accept a metaphysics based on pure material determinism. The mind is the key to understanding, will, and human self-determination. Descartes’ (1970b) rationalism held that the subjective, individual mind actively judges, evaluates, and directs the body towards a more perfect nature; the power of the reasoning mind is in its ability to:

see manifestly that there is more reality in the infinite substance than in the finite, and hence that I have in me in some way the notion of the infinite, before that of the finite, that is to say the notion of God, before that of myself. For how would it be possible for me to know that I doubt and desire, that is to say that I lack something and am not all perfect, if I did not have in me any idea of a more perfect
being than myself, by comparison with which I know the deficiency of my nature. (p. 124)

Thus, the mind is imbued with innate knowledge of perfection and is the source of one’s perfectibility.

Descartes (1970a) asserted that the bodies of men and animals operate as machines, purely automata in animals. All bodily knowledge is suspect and based on them the only possible truth is that “there is nothing certain in the world” (Descartes, 1970b). Here, Descartes is speaking of the material world and bodily knowledge in contrast to the more certain knowledge of the individual mind as seen in the quotation above. Descartes (1970a) stated that, “when one knows how much [animals and humans] differ, one can understand much better the reasons which prove that our soul is of a nature entirely independent of the body” (p. 76).

In rationalism, the individual mind is throne of the self or soul, which allows for the possibility of an internal locus of control through healthier or more mature mental activity (VandenBos, 2007). The rational soul-mind is therefore considered to be the essential or natural form of the human – having the potential to evolve or develop towards its ideal form. Descartes (1970a) concluded that his “whole essence or nature consists in thinking, and which in order to exist, needs no place and depends on no material thing; so that this ‘I’, that is to say, the mind, by which I am what I am, is entirely distinct from the body, and even that it is easier to know than the body, and moreover, that even if the body were not, it would not cease to be all that it is” (p. 54). This metaphysical classification of what it is
to be human, qua human, is summed up by Descartes’ (1970a) famous epigram: “I think, therefore I am” (p. 54).

For Descartes, the soul is purely mental and disconnected from the body. To express how Cartesian rationalism works, Phillips (2000) referred to the statue called The Thinker: “…the Thinker is a solitary figure, deeply engrossed in cogitating about the world’s problems, using nothing but the power of his rational intellect” (p. vii). Russell (1945) asserted that the association of knowledge with the rational mind had a significant influence on early liberalism, which is individualistic and not emotionally self-assertive. Implicit in Russell’s observation is that early liberalism adopts a view of the mind as active and body, including emotions as passive and therefore unreliable sources of knowledge.

The distinction between active and passive categories of experience is evident in early psychological treatments of the mind-body and mind-emotion dualism by early psychologists such as James, whose theory of emotions becomes a basis for the treatment of emotion in psychological research for the 20th century (Solomon, 2007). When Dewey (1971b) criticized James’s theory of emotions, as is described in chapter 7, it was this sharp distinction between active psychological processes associated with cognitive mind and passive, emotional processes that he was principally addressing.

Subjective idealism.

Both Internal Relations clusters draw on Kant’s attempt to balance Locke’s empiricism with Descartes’ rationalism. In Critique of Pure Reason, Kant criticized empiricists like Locke and rationalists like Descartes (Bredo, 2006). He asserted that the rationalist view of mind is too strong, leaving inadequate room for the role of the senses.
His corrective response was that, “in the order of time, we have no knowledge antecedent to experience, and with experience all of our knowledge begins” (Kant, 1966, p. 24). Kant did not, however, support purely empirical position. He believed empiricism was also faulty because it gives no account for how knowledge of universal laws is possible. Kant offered a correction to both approaches. He believed that the external world only influences matters of sensation, but that the mind orders this matter using space and time to give the matter meaning (Russell, 1945). The senses provide content and the mind actively gives this content form (Bredo, 2006). In other words, the mind provides insight into the universal structures and laws which allows the individual to classify and order sensual experience.

Kant synthesized Lockean empiricism and Cartesian rationalism. The result is an Individual Subjective Idealism in which common, certain knowledge comes from the personal experience of the material world and \textit{a priori} structures or basic distinctions such as time, space, and causality which exist in the mind. Here, the material world is viewed as uncertain, fallible and experienced through sensations, but rational mind is able to actively make more accurate belief structures in keeping with \textit{a priori} structures that exist outside of the fallible, sensual experience of the material world. For Kant, these structures are essential to rational, goal-directed beings (Bredo, 2006). They allow individuals to act on and shape the world instead passively waiting for the probable impression of more accurate or useful ways of understanding the world.

Kant’s subjective idealism can be linked to the development of structuralism as a philosophical and psychological approach to knowledge because of the metaphysical
position that the mind constructs part or all of the external world. *Structuralism* is defined in two ways: 1) it is the psychological “study of mental experience and [seeks] to investigate the structure of such experience through a systematic program of experiments based on trained introspection” and 2) “a movement in various disciplines that study human behavior and culture…that took its impetus from the radically new approach to linguistic analysis… [wherein] language is a closed system that must be approached through the detail of its internal structure” (VandenBos, p. 900). The first definition describes an individual historical and internal mental construction of knowledge. It can be linked to a Kantian and Cartesian emphasis on the individual mind and a Platonic emphasis on the individual’s responsibility to seek knowledge and personal development in order to bring about an ideal, utopian society. The second definition introduces a socio-historical approach to knowledge that emphasizes the logic within a text, culture, or the potential linguistic interaction of humanity as a whole. The metaphysical approach in this form of structuralism can be seen as more closely related to an Aristotelian holism in which all of material existence is moving towards a more rational ideal Whole. In contrast to the Cartesian depiction of the individual mind as more certain than the mind of others, the reasoning power of a social group or humanity as a whole is emphasized as the source of progress. This approach is also linked to Kantian idealism, but through Kant’s influence on Hegel. In this study I make a distinction between Individual and Social Internal Relations, as well as between Individual and Social Structuralism in order to acknowledge the common and divergent beliefs that influence the individual and social psychological approaches to organizational learning and change (see appendix B).
Individual Internal Relations

Theorists within the first sub-group of the Internal Relations epistemological family remain primarily interested in the mental structures of the individual. Individual learning theory draws heavily on Piaget, who considered himself a neo-Kantian. The role of internal logic figures prominently for Individual Structuralists because they are interested in the individual construction of more rational beliefs about the material world. They consider how an individual’s life history is actively ordered by the mind through a dialectic of ideas such that it becomes increasingly more coherent and rational. Here the focus of the interaction is on mental structuring of experience into more accurate, stable, and rational mental systems. Humanism is a perspective on the nature of humans that seeks to avoid singular and negative views of human nature (VandenBos, 2007). Humanists are also interested in the development of individuals and their movement stages of cognitive development, but these theorists seek to portray material or physical aspects of human experience as dignified or valuable even if they are more primitive aspects of development (e.g., Maslow). Maslow’s approach (see chapter 5) specifically gives greater treatment to the role of emotion as a motivational and creative psychological force and the importance of an individual’s vocation or work-calling as an essential individual form instead of just looking at the rational mind as the essential form of humanity as a whole. In both Individual Structuralism and Humanism, the individual develops based on individual history with the material world and increasingly rational cognitive structures. The distinction between these two approaches can be seen as a more narrow focus on cognitive
psychology in individual structuralism and a mixing of cognitive and personality psychology in humanism (see chapter 5).

Social Internal Relations

The study of language is important in understanding how an individual internal logic comes to be applied to a socio-historical or socio-cultural understanding of knowledge creation. It also influenced epistemological considerations from the external relations family (see the sub-section on logical positivism in the external relations section above). Hermeneutics “is concerned with the way in which humans derive meaning from language or other symbolic expression” (VandenBos, 2007, p. 437). Originally it focused on the rational structures inside religious texts instead of on \textit{a priori} structures of time, space, and causality within an individual’s mind. Schliermacher intended to provide a definitive, certain answer to theological questions about religious texts by systematically identifying their internal logic or rational structure (Bredo, 2006), but he also applied it to the interpretation of texts more generally. Religious and other texts provided a historical conversation that can be read as though it was a \textit{dialectic} or logical argument moving towards certain knowledge. The hermeneutic approach broadened further when another German philosopher, Dilthey, applied the approach to artwork, institutions, and other cultural and historical events (VandenBos, 2007).

Historicism and the Incarnate Logos.

The application of hermeneutics to socio-historical studies in order to identify universal laws that govern historical events can be called Historicism. It also has theological roots – namely the idea of Incarnate Logos. This scriptural interpretation
connects the creation accounts in Genesis with the first chapter in John, also known as the Gnostic-knowledge gospel, which is strongly influenced by Greek thought (Ackroyd & Evans, 1970). In the book of Genesis, the spoken word of God is the force that creates or shapes the material world and Man is created in God’s image from the material world. In the gospel of John, the Logos (Greek for word) is with God and is God from the beginning of time. The Incarnate Logos (Embodied Word) or emerging creative word of God is continually drawing creation back into its intended, original-final, harmonious equilibrium (Gutierrez, 1996a). This theological perspective holds that, “there is only one human destiny, irreversibly assumed by Christ, the Lord of history. His redemptive work embraces all the dimensions of existence and brings them to their fullness” (Gutierrez, 1996b, p. 79). Application of the hermeneutic principle to the Incarnate Logos has been used by Liberation theologians like Gutierrez to give evidence to the preferential option for the poor and by progressives to show that rational and industrious people are helping to pull both humans and material existence back into harmony with the ideal harmony.

The theological treatment of the Incarnate Logos provides some additional insights into later socio-historical writings. Historical criticism of the Bible revealed two ways that knowledge about the divine plan or design comes about. The Incarnate Logos can reveal itself in two forms. One is the continuous creative work of God in *chronos* (normal time) and the other is an abrupt punctuated time when God intervenes in the world through mysterious or miraculous acts of God. This second type of time is called *kairos* in Greek. God can literally be seen as shaking the foundations of the natural world (earthquake), washing over humanity to clean up mistakes (flood), or confusing the language of
humanity (to keep them from obtaining knowledge and becoming gods unto themselves). Herein lies the conservative aspect of the Incarnate Logos. According to conceptions of the Incarnate Logic, humanity cannot skip steps or move faster than the dialectic through embodied humans, the material world, or God’s miraculous in-breaking (Hegel, 1953). Particularly in the confounding of language, God is commonly seen as punishing humanity; to this dominant conception Dante raises the possibility that the common vernacular may also have a happy fault because it enables the expression of feelings and poetry (Gutierrez, 1996a). Again the distinction can be seen as being drawn between a cognitive, divine language based on certain truth and the sensual, common languages which may be a happy distraction at times.

Within the more conservative traditions, Luther’s conception of individual calling or vocation and Calvin’s conception of predestination led to a moral justification for rational, industrious, systematic, and self controlled asceticism (Carroll, 2007). If all people are part of a divine dialectic or prescriptive drama, how does one know where they stand in that system? Because the ultimate end is assumed to be similar to the divine origin, human dominion over creation through classification, cultivation, and domestication of the natural-material world is seen as the continued creative work of god through humanity. Material prosperity was viewed by some as an indication that one was closer to this ideal. Industrious ordering of the world is, therefore, evidence that humans are in the divine will of God. This protestant work ethic moved the aesthetic life from the monastery to the workplace. As translated and quoted by Carroll (2007), Weber explained that:
this ascetic conduct meant a rational organization of the whole of one’s life…. And this asceticism was no longer an opus supererogationis, but something which could be required of everyone who would be certain of salvation. The religious life of the saints, as distinguished from the natural life… no longer lived outside the world in monastic communities, but within the world and its institutions. (p.85)

Within this tradition, creative activity and the ability to produce excess so that one can rest, have leisure, and reflect, as God did on the seventh day is essential to becoming learned, cultivated, and closer to the divine order. According to Carroll (2007) Weber points out that this protestant work ethic gave rise to the spirit of capitalism, which maintained the asceticism but left out the overt religious basis. The internal, rational structuralism of this form of Christian thought can be seen as closely related to the internal, rational structuring of socio-historical organizations, particularly the western, capitalist workplace which it influenced. Carroll (2007) points this out in both Weber’s secularized rational structures as well as in contemporary socio-historical dualisms that persist today through sharp distinctions between common vocations and special vocations, charisma and institutional authority, action and contemplation, etc. While emotion and cognition do not make the list, he describes a contemporary context wherein these dualisms continue to shape organizational life.

Absolute idealism.

Hegel also provides a clear link between the theological conception of the Incarnate Logos and the social internal epistemological cluster. Hegel (1953) can be seen as employing historicism or hermeneutic principles to look at social-systemic development. Hegel was influenced by the theological belief in the Incarnate Logos. He sought to find an internal logic in the emergence of ideas at the social level. Moving beyond a Kantian
internal logic, Hegel asserted an Absolute Idea, Spirit, or Reason brought on by a dialectic of social ideas. Instead of an interaction within and individual, the dialectic of ideas is between people or peoples. This can be seen as a social or holistic structuralism consistent with the second definition of structuralism (see the above section introducing the Internal Relations epistemological clusters). This epistemological approach looks at the structure of meta-narratives through linguistic and other symbolic interactions in order to identify general laws that can predict future developments.

The German philosophical movement, which started with Kant’ subjective idealism, is said to have culminated in Hegelian Absolute Idealism (Russell, 1945). In much the same way that Kant seeks to synthesize aspects of Locke’s empiricism and Descartes’ rationalism, Hegel seeks to synthesize aspects of Kantian Enlightenment rationalism with post-Enlightenment Romantics such as Herder, who identified historical epochs in which social groups had unique ways of thinking and feeling (Bredo, 2006). Interestingly, Bredo’s reference to Herder includes historical developments related to thinking and feeling; however, Hegel’s system clearly maintains the predilection for rational thought. Herder’s belief that cognition should not only shape, but should be shaped by volition-affect does not seem to be an emphasis in Hegel’s dialectic (Markworth, 2007). Hegel does, however continue to forward a Lamarckian evolutionary view that is held by Herder who writes about a progressive cosmic development of matter, lower organisms, and humans alike (Toulmin, 1972).
Hegel’s (1953) dialectic involves thesis, antithesis, and synthesis. The logical process is intended to widen the inclusiveness of the synthesis, or predicate, until it reveals Reality as a Whole, a conclusion called the Absolute Idea. According to Russell (1945): “The Absolute Idea is pure thought thinking about pure thought” (p. 735); it is the end goal of Hegel’s teleology. In Hegel’s (1953) ontology, the rational is real and the real is rational. Perceived separate units are unreal and irrational. Reality is, therefore, only present in the complex, rational system as a whole. His future oriented teleology requires a more global progress instead of an individually determined development. At the same time, this ideal dialectic requires a retrospective analysis of symbolic interactions to determine where the system seems to be going next as it seeks equilibrium.

Hegel (1953) presented his understanding of the complex systemic movement in Reason in History. History is described as moving from an inferior to superior state, a progression from imperfection to pure thought. Pure thought is possible through interaction with the world:

To think is one of those things we [humans] cannot help doing; in this we differ from the animals. In our sensation, cognition, and intellection in our instincts and volitions, in as far as they are human, there is an element of thinking. But reference to thinking may here appear inadequate. In history, thinking is subordinate to the data of reality, which latter serve as guide and basis for historians. (p. 10)

Thus, Hegel’s teleology depends on material context and actively thinking to bring world into a more perfect equilibrium. Hegel also makes an interesting distinction between sensations, cognitions, intellection, instincts, and volitions which are distinctly human and the possibility that others might be shared with other animals. Later, Darwin will be
positioned as giving a psychological account of this continuity and a material explanation of naturally developed differences between humans and lower animals (see chapter 3).

The Idea is the conductor who directs the events of world history towards Reason. Logical arguments, and the cultures in which they developed, are seen as part of a universal story moving towards an ultimate end. Thus, Descartes’ rationalism, Locke’s empiricism, and Kant’s subjective idealism can be viewed as stages of development leading towards Hegel’s own Absolute Idealism (Bredo, 2006). According to Hegel (1953), “The resolution of existence through thought is... necessarily the arising of a new principle. Thought as universal is resolving, but this resolution actually contains the preceding principle within it, though no longer in its original form but transfigured through universality” [Italics original] (p. 93).

Here, Hegel’s depiction of original forms moving towards the universal ideal form can be seen as similar to Aristotelian metaphysics. The idea that a more advanced philosophical system necessarily contains the more primitive arguments in a transfigured form can be seen as similar to conceptions of evolutionary development of biological organisms through recapitulation (see the section on Darwin in chapter 3).

*Social structuralism and dialectic materialism.*

Marx, another German thinker, developed his philosophy in part as a reaction to the idealism of Hegel (Coser, 1977). According to Russell (1945), where:

Hegel thought of nations as the vehicles of dialectic movement; Marx substituted classes…. He might have said that he did not advocate Socialism, but only prophesied it…. [Yet] He undoubtedly believed every dialectical movement to be, in some impersonal sense, a progress, and he certainly held that Socialism, once established, would minister to human happiness… (p. 788)
Despite some critique, Hegelian idealism endured in Marx’s (1977) philosophical system. According to Toulmin (1972), Marx also obtained an emphasis on Rationality in the Historical Process from Hegel and a Lamarkian evolutionary model from Hegel and Lamarck jointly. He went on to say that this need not have been a problem had he used an adaptive or ecological model for rationality instead of a teleological dialectic with logical-developmental implications.

Marx maintained a dialectical outlook, but the driving force behind this progression was humanity’s interaction with the material world instead of an Absolute or Spirit. His Dialectic Materialism gave a greater emphasis on the material aspects of history. This approach gave an economic-political spin on Hegel’s dialectic of reason. He saw an inevitable movement from feudalism to capitalism to socialism. The socio-economic class is portrayed as shaping the worldview of the individual and what might be perceived as a self-evident truth is really the result of the social group (Coser, 1977).

Marx (1977) was particularly concerned with the exploitation of social relationships, which he observes in the industrialization of Europe. Industrialization was spreading across Europe, and the new social paradigm was believed to be shaking society as a whole out of a relative state of equilibrium. Marx was intrigued by the history of social stability and change. His rejection of individual rational idealism represented the end of a period of his life and a journey to shape change in a new direction (McLellan, 1977). He believed that people could not reach their full potential as human beings because the relationships in which they were enmeshed prevent them from truly knowing
themselves or others. Marx (1977) was specifically concerned with the dominant/subordinate relationship, as expressed in economic relationships. He thought that the result is an alienation from one’s labor, one’s self, and others. Ultimately, he felt that the proletariat would develop a true consciousness of their material deprivation which would result in a class struggle and an inevitable revolution.

While Marx was concerned with the individual’s ability to reach his/her full potential through increasingly rational structures, his philosophical system focuses on how change is brought about by disequilibrium, social consciousness of the problem or tension, and a more rational resolution at the system level. This can be contrasted with individual theories from the individual developmental paradigm that emphasized individual progress as a precursor to social progress. Whether the emphasis is placed on learning and language as in Vygotsky’s theory or broadens the unit of analysis is broadened to include more material and socio-political forces as in Marx’s theory, developmental social psychology emphasizes the role and function of organizations and social structures in improving and maintaining more rational knowledge of the world (see chapter 6). According to Toulmin (1972), Hegel’s and Marx’s wedding of rationality with a Lamarckian evolutionary model is harmful because it focuses on an overall direction or teleology of rationality instead of an immediate situation. He further asserts that internalist approaches to science based on a historical, linguistic criticism often confuse biological and socio-historical evolutionary models. Toulmin, however, does not seem to acknowledge the extent to which progressive biological and socio-historical models appear in Darwin’s naturalism or Marx’s
appreciation for Darwin’s (see chapter 3) treatment of rational and social development towards an ideal as part of a material dialectic (Carroll, 2003).

*Sociology of knowledge.*

Durkheim, influenced by Marx, sought to make sociology into a recognized academic discipline. His basic inquiry was into the social origins of religious thought, but his work also extended into other areas. According to Hughes, Martin, and Sharrock (1995), Durkheim asserted that the basic elements of religious thought and scientific thought were both derived from social structures. They contrasted Durkheim’s basic elements with Kant’s *a priori* categories of time and space. For Durkheim, even these basic structures were constructed socially and therefore lacked certainty. In Durkheim’s epistemology, the social origin of knowledge was evidence that it was fallible or non-absolute (Cosner, 1977). Durkheim’s *sociology of knowledge* (Coser, 1977) even presented logic as a social development (Durkheim & Mauss, 1963). Whether the labels sociology of knowledge or social constructivism are accurate or anachronistic, one thing that is not questioned is that Durkheim’s work is commonly identified as a foundation for the development of sociology, social-psychology, and social constructivism (Hughes, Martin, & Sharrock, 1995).

Bredo’s (2006) framing of an *Interactional-Dialectic Relations* family of epistemology seems to carve out a historical epistemological line that is intended to leave room for the influence of interests and actions in creating a more interactive, emergent, present, and situational approach to social improvement that is based on contemporary problems. Bredo’s (2006) aim is to present a third family that includes epistemological
approaches that consider the practical consequences of inquiry including critical theory, some socio-historical perspectives, and neo-pragmatism. He roots these traditions in Hegel’s Absolute Idealism and Marx’s Materialism (see appendix A). In the same model, he places post-positivism at the end of the Externalist Relations family and Poststructuralism/Postmodernism at the end of the Internal Relations line, which includes individual and social structuralism without including Hegel and Marx in that line. Bredo (2006) claims that, “all three families of thought seem to be, at least in my view, tending toward a more pragmatic attitude or approach” (p. 26). This project departs from Bredo’s model in several important ways: 1) Bredo’s more linear depiction of epistemological families is treated here as clusters of beliefs held in tension; 2) Socio-historical development and social structuralism are placed in a subgroup within the internal relations approach; 3) The influence of metaphysics and teleology is emphasized as an important influence on conceptions of knowledge; and 4) There is no intention to indicate that the epistemological clusters are emerging or point towards pragmatism writ large.

Some socio-historical theories, influenced by the sociology of knowledge and pragmatism are included at the end of the chapter 6. They include social-psychological approaches to learning and change that seek to bring material and individual internal psychological forces into balance and introduce social forces in order to achieve this balance. While they draw on more situated and problem oriented views of knowledge, they ultimately oscillate ontologically, moving between evolutionary models in order to maintain a high place for rationality. Even within some of the theory that might be labeled as post-positive, post-structural, post-modern, or neo-pragmatic (see the beginning of
chapter 7), the more situated or contextual depiction of knowledge can still preferentially place linguistically related cognitive capacities above other forms of understanding.

Rationality, cognition, and/or intelligence is bracketed out of experience as a distinct part of the process and is forwarded as the source of will, volition, and goal-directed behavior. The role of emotion continues to reflect a Darwinian and Jamesian model of emotions based on passive motor-sensory apparatus (see chapter 3). Dewey’s critique of the limited application of the reflex arc concept in psychology and of James’s theory of emotion is presented in chapter 7 along with his alternative view of the human experience of change.

In this chapter, some important philosophical contributions to the current psychological approach to epistemology have been synthesized. In the process, a new model for considering the relationship between epistemological contributions has been constructed and used to provide a tool for looking at the influence of philosophy on psychological theory related to change and learning. In the process, specific attention has been given to the persistent dualism between mind and body. This and related dualisms provide an essential background for understanding the persistence of distinct classifications of cognition and emotion in future chapters. In the next chapter, the focus turns to Darwin and James’s psychological treatment of mental and emotional adaptations as natural, evolutionary developments. In these treatments, mental developments continue to be preferentially placed above emotional expressions which are depicted as more primitive evolutionary adaptations.
Chapter 3: Scientific - Psychological Underpinnings

Introduction

The previous chapter presented some of the philosophical underpinnings for the psychological research traditions presented in the next three chapters. This chapter addresses the second half of the second research question in this study, concerning the psychological underpinnings of these clusters of research. It explores the way the relationship between cognition and emotion is treated in Darwin’s application of naturalism to human psychology and in James’s psychology – particularly his theory of emotions. The reading of both of these psychological approaches to cognition and emotion may be aided by looking at appendix C. Lower, more primitive evolutionary psychological adaptations would be towards the bottom and the emerging, higher psychological processes would be towards the top of the diagram. The most highly developed mental processes are at the top of the scale, consciously directed processes are in the middle, and primitive, instinctual passions are at the bottom. The lines between the cells that the overlapping circles create should be seen as permeable or blurred. The area in each cell might be seen as changing according to individual theorists in the project.

Going into the project, I thought that Darwin’s explanation of human evolution by natural selection might yield an alternative view of emotions that did not perpetuate dualistic distinctions of mind and body as seen in the philosophical perspectives in chapter
2. Influenced by a neo-Darwinian understanding of natural selection, I also anticipated that Darwin’s naturalism would provide an emerging, non-teleological perspective. (A non-teleological approach to change would not use a philosophical, dialectical model in which evolution is depicted as a progressive, universal movement towards an ultimate ideal.) According to some readings, such as Dewey’s (1965a), it does provide a point of departure (see also chapter 7). However, other individuals such as James (see below) interpreted Darwin in a way that continued to allow for a hierarchical classification of cognition and emotion and others read Darwin as Hegelian (see chapter 2). My understanding of Darwinism going into this project was shaped by undergraduate studies as a biology major. This project is not intended to challenge contemporary interpretations of Darwinism or to forward a different reading as correct. Instead, a treatment of Darwin is provided to identify an interpretation that was prevalent and influential around 1900.

The treatment of Darwin in this project might seem to be somewhat disproportionate in light of the emphasis placed on the interaction between Dewey and James’s psychologies. There are two reasons that Darwin is given such a considerable place in this project. First, both James and Dewey see themselves as building on Darwin’s naturalized psychology. Both James and Dewey’s psychology of emotions are presented in articles, short essays, and comments throughout their philosophical writings. Such brief additions or revisions of Darwin’s theory can only be understood well when seen as closely following after Darwin’s more thorough if not systematic treatment of the subject. Darwin’s (2005a; 2005b; 2005c; 2005d) depiction of the origin of humans and various aspects of human psychology is presented over several books. A considerable amount of
background from Darwin is needed in order to understand the conventional treatment of
cognition and emotion in the Jamesian family of psychological research and in Dewey’s
alternative provided in chapter 7. The second reason for the amount of material on Darwin
is that it explains why diverse theories in this project claim to forward Darwinian
evolutionary psychologies.

It might be helpful to note that when Dewey critiques James’s psychology, he is
critiquing James’s use of Darwin’s theory of the origin of emotions not Darwin. Dewey
(1971) might even be seen as arguing that James did not go far enough in applying
Darwinism to break down existing classifications. Dewey (1965a), particularly in *The
Influence of Darwin on Philosophy*, clearly read Darwin as presenting an emergent, non-
teleological approach to human experience that broke down the rigidity of many
classifications. Given the progressive era in which Dewey wrote, the extent to which he
forwarded an emerging, non-teleological reading of Darwin is all the more poignant. In
order to try to keep the treatment of Darwin as short as possible, I limit my treatment to the
aspects that seem to be necessary in understanding James and the evolutionary
psychological theories in the following chapters.

It was not until I began to explore multiple writings by Darwin that I discovered
that he was somewhat confounded in his metaphysics, teleology, and the role humans
might play in an emerging world history. It might be important to note that Darwin
(2005e) was not a philosopher and did not claim to have the equipment to tackle topics
beyond the pale of his area of science. Darwin’s materialism clearly places humans as part
of a line of continuity with previous species, all of which emerged from probable
interactions with the natural, material environment. However, progressive and idealist
language occasionally breaks-in, opening the door for teleological readings. Higher social
developments support the development of higher reasoning capacity and create an
opportunity for these forms of association to be maintained until they become habitual and
passed on to future generations through use and disuse. Emotions or passions provide an
energizing force, are more passive than mental development, and can be ranked according
to their rationality.

This reading of Darwin was somewhat surprising to me and may be to readers of
this project whose conception of Darwinism is strongly influenced by developments in
naturalism since Darwin, changes in epistemological assumptions since the mid-1800s, and
changes in assumptions about the unlimited potential of humans since the social unrest of
the 1960s (Bredo, 2006). However, as I looked at some secondary sources from around
1900 it became apparent that reading Darwin as giving a material explanation for logical
progression would not have been as strange to some academics 100 years ago (e.g.,
Baldwin 1909a; 1909b). Some of Baldwin and Creighton’s scholarly dialogue about
Darwin and logic is presented below prior to the presentation of Darwin’s natural
psychology. Again, this is not intended to assert that these readings of Darwin are right. It
is plausible that they were trying to hold onto their intellectual lineage and philosophical
assumptions by using Darwin to support their positions.

Not unlike my expectation for Darwin, I anticipated that James might forward a
theory of emotions drawing on a pragmatic evolutionary perspective which could be used
to help frame an alternative conception. It quickly became apparent that psychology writ
James seeks to build on Darwin’s theory of emotions, presenting a hierarchical psychology that questions the classification of specific emotions but continues to leave room for distinct differences between cognitive and emotional processes. Though his theory calls into question the descriptive classification of individual emotions, his hierarchical psychological explanation of cognition and emotion appears to perpetuate the mind-body classifications instead of providing an alternative. Therefore his treatment of the relationship between cognition and emotion is presented in this chapter to aid in the understanding of later psychological developments in the main research clusters related to organizational change and learning. As in Baldwin’s philosophical conception of the implications of Darwinism, James’s psychology depicts the psychic mind and its active mental processes as the source of human agency. The psychic mind allows humans to direct more passive, bodily emotional reactions to the external world. Dewey’s (1971) critique of James’s use of discharge theory to build upon or reinterpret Darwin’s treatment of emotions becomes the basis for an alternative perspective that is not often utilized. Dewey’s pragmatic naturalism is presented in chapter 7.

*Darwin’s Naturalism*

This year is both Darwin’s 200th birthday and the 150th anniversary of his *Origin of Species*. Darwin’s theory is commonly conceived of as a profound conceptual change from previous theories of nature. The revolutionary component of Darwin’s theory is not the presentation of evolution as the mechanism of change. A progressive view of evolution already receives a great deal of appreciation in both scientific, sociological, and
some theological communities at that time (see chapter 2). Darwin’s (2005b) radical assertion is that all aspects of human development are in continuity with other animals.

In *Descent of Man (Descent)*, he focuses primarily on the development of mental faculty and social instinct in humans and other animals (Darwin, 2005b). These two qualities were often considered to be essential to humanity’s unique nature. Higher emotional forms or expressions, often associated with higher cognition and higher social instincts, were also used to distinguish between different races of humans as well as between humans and lower animals. In both *Descent and Expressions of Emotion in Humans and Animals*, Darwin (2005b; 2005d), sought to abolish views of some races as subhuman by giving evidence that all human varieties exist in continuity with other animals. He essentially knocks all humans down to a common notch, but at the same time, he points out the highly developed adaptations that they all shared.

Darwin’s contribution to science is sometimes presented as a revolutionary break with other models of evolution (Gould, 1977). In this reading of Darwin, the natural world as a whole, and humanity therein, are not moving upward, forward, or toward any ideal form. Where Copernicus’s cosmology removes the earth from the center of creation, Darwin’s theory of natural selection is seen as effectively removed Humanity from the center (Gould, 1977). However, there are also ways to read Darwin (see *Darwin and Logic* below).

Toulmin (1972) cautioned against models of scientific or philosophical revolution as clean breaks where a new, coherent system breaks the hold of existing paradigms. In describing the problem of conceptual change, his language represents Darwin’s own
emphasis on continuity. Toulmin pointed to the continuity of Darwin’s philosophy with developments in cosmology, geology, and paleontological evidence related to natural history. It can also be observed that his theory of natural selection also exists in continuity and tension with various philosophical considerations including metaphysics, teleology, and epistemology. This is another reason that the philosophical assumptions presented in chapter 2 are essential to this project. Without some appreciation for the philosophical assumptions that surround and are interwoven with Darwin’s psychology, it is easy to read Darwin through an anachronistic lens. This historical philosophical context, along with recognition that Darwin’s remarkable association of ideas were developed prior to Mendel’s genetics, makes it easier to consider a somewhat uncommon reading of Darwin.

Toulmin (1972) described the historical context:

the eighteenth century placed its ultimate reliance on Reason or Nature, the nineteenth found its intellectual confidence in the providential workings of History, and the twentieth century has been plagued by the unsolved problems of Relativity. Over the last seventy years, men have finally become aware that the relativity of human judgments affects not merely morals, religion and personal relations, but all other types of concepts—including even our most fundamental scientific ideas as well. (p. 49)

Positioned in the middle of this historical movement, it is easier to consider Darwin’s thoughts and the interpretation of them as influenced by prevailing ideas of the time.

Darwin and Logic

Before looking at some secondary sources, I doubted some of my own readings of Darwin’s psychology. They differed too much from the Darwinism that I had encountered within biological studies. I would not expect the readers of this project who approached with a similar understanding of Darwinism to do anything but the same. Therefore, I begin
by presenting some of Baldwin’s interpretation of the implications of Darwin’s writings on philosophy and psychology from the turn of the twentieth century. Baldwin was an influential thinker at that time, who James interacted with through scholarly publications.

Baldwin (1909b) considered the biological conception of human experience as an emerging, “immanent self-integrating movement” (p. 431) to be inconsistent with the logical or teleological internal organization and movement of a universal system. He intended to show how the highly developed mind becomes conscious of real logic (1908). Baldwin (1909a) defended an *a priori* test of truth and vehemently defended evolutionary and experimental scientific classification as “strictly Darwinian” (p. 208). The classification that Baldwin defends most aggressively as supported by Darwin’s theory is the dualism between highly developed mind and body. In the following quote from Baldwin (1909b), the dualisms of both external and internal epistemological positions from chapter 2 can be seen as brought together in a reading of Darwin’s psychology:

> In the more refined operations of thought upon ideas, the ideas are symbols of the things into which they are at any time convertible. The sciences of observation go directly to the things, to perceptions and sensations; but in both cases the control of the context, whether it be one of ideas or of things, is the same – that of a sphere *taken by the process to be foreign to itself*... So far then from finding a contradiction between the point of view of evolution – dualistic as it is – and that of a truly psychic account of the genesis of knowledge, I find that *the latter issues in the justifies the former*... reflection sublimates this dualism by erecting a mediating context of ideas; but all validities in the context and all truthful references beyond it, rest upon the fact that this mediation is dual. [italics original] (p. 433)

Baldwin went on to point out that the higher development of knowledge is essential to the dominance of the external material world and the control of the internal processes.
In this view, higher psychological functions allow humans to control-dominate the external environment. Baldwin (1909a) indicated that Darwin made philosophers and scientists:

recognize the two great conquests of instrumental or experimental logic. It holds that *all truth is confirmed hypothesis*, and that *all reason is truth woven into mental structure*. These two great formulations are handed over to philosophy. Both are Darwinian. The first cites the selection of ideas for their utility in the individual’s development; the second cites the ‘coincident’… selection that fixes them in the constitution of the mind. [italics original] (p. 209)

The basic ideas of logical positivism can be seen as attributed to Darwin’s psychology in this quotation. This reading of Darwin can be seen as a strong influence on early behavioral psychology (see chapter 4). Empiricism and even forms of positivism influenced the humanities and social sciences (see chapter 2) – thus shaping theory in chapters 5 and 6 as well.

Darwin (2005e) tried to avoid discussing any spiritual or providential implications of his theories leaving religion to the affairs of others. However, confidence in the unlimited potential for human progress through rational structuring of the world need not have an original design or purpose (Carol, 2007). In Darwin’s (2005a) view:

> As species are produced and exterminated by slowly acting and still existing causes, and not by miraculous acts of creation and by catastrophes… The whole history of the world… will hereafter be recognized as a mere fragment of time, compared with the ages which have elapsed since the first creature… was created… There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one. (pp. 708-710)

Without some of the work done in the previous chapter it could be easy to overlook the imagery that Darwin used in the closing words of *Origin*. In keeping with atomism, once set in motion there is no in-breaking of supernatural forces to alter the fundamental
emergence of world history according to fixed natural material and laws. Yet, the image might still be interpreted as the natural inbreathing of a rational or logical capacity.

The imagery of powers being breathed into the human form is taken directly from Genesis, where the first man is formed from the dust and breathed into by the creator. However, unlike Darwin’s depiction, God only breathes directly into the first man, Adam, in Genesis. All other creations, including women, are formed from the material of the earth or the body of man. At the time of Darwin’s writing, this breath or word of God was commonly conceived of in the theological concept of the Incarnate Logos. An astute reader of *Origin* at the time of its publication would have known this and recognized the implications. Logical capacity based on the development of some measure of reason and rationality can be seen as breathed into forms of life other than humans or into one progenitor of both humans and other animals. However the interpretation may have led to a greater breaking down of dualisms between types of people or supporting a dualism related to logical-rational capacity and the lowest, bodily psychological forms.

According to this second interpretation, Darwin’s revolution might be presented as the naturalizing of the inner logic of humans and humanity. It is natural material-dialectical aspects of Darwin’s purview that would have been applauded by Marx (Carroll, 2003). There is clear evidence that Darwin (2005b) placed considerable hope in the sciences: “…ignorance more frequently begets confidence than does knowledge; it is those who know little, and not those who know much, who so positively assert that this or that problem will never be solved by science” (2005b, p. 732). In the conclusion of *Origin*, Darwin (2005a) speaks to the type of problems that science might address, “In the
distant future I see open fields for far more important researchers. Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation. Light will be thrown on the origin of man and his history” (p. 709). Here, different forms and grades of mental powers seem to be assumed.

Darwin can be seen as foreshadowing the psychological classification of cognition and emotion even though his depiction included both elements of emergent continuity and distinct psychological powers by gradation. Together with the use of language that leaves room for the interpretation of his developmental psychology as part of a material-historical dialectic, Darwin’s treatment of mind and body is particularly interesting to this project. Perhaps in one of his more progressive, if not teleological, statements, Darwin (2005a) claimed: “Hence we may look with some confidence to a secure future of equally inappreciable length. And as natural selection works solely by and for the good of each being, all corporeal and mental endowments will tend to progress towards perfection” (p. 709). This materialistic, empirical, and positive view of the world seasoned with a hint of rationalism leaves considerable room for dialectical interpretations of his psychology at the turn of the twentieth century.

**Logic as a Tool**

Sometimes the revolutionary aspect of Darwin’s theory is depicted as its break with a philosophical conception of logic as approaching Truth. This depiction of Darwinism as introducing a new form of holism to philosophy and psychology may be slightly more comfortable to some readers; however, it does not require any retreat from the dualistic depiction of mind and body in Darwin’s psychology. In this approach,
Darwin’s psychology might be seen as the naturalizing of reason (high mental power) and high social instincts with a continued positive-progressive conception of both. Creighton (1909) argued against Baldwin’s reading of Darwin which wedded higher intellectual capacities with a priori structuralism. He claimed that Darwin’s biological explanation of the “stages and working principles of the movement” of the universal provided an analogous explanation of a range of human experience to Hegel’s dialectic (Creighton, 1909, pp. 172). He went on to assert that Darwin’s progressive, developmental evolutionary model was more influential to science and psychology than Hegel’s model:

This was due partially to the artificial form which [Hegel] gave to his exposition, and partly to his inability, through lack of material, to base his results upon the facts of the physical sciences and of psychology. [Hegel’s] conclusions were indeed derived from a wide survey of facts, but these facts belonged to the inner life of man and society; and thus, as not directly given to sense perception, they were too remote from ordinary experience to appear concrete and impressive. (p. 173)

Creighton argued that, Darwin broke down the wall between natural sciences like biology and the individual and social humanistic sciences. Thus, Darwin had a major influence on all areas of psychology by employing a neo-Hegelian modification of logical evolution that gives a biological, material modus operandi for the developmental progression.

Creighton (1909) claimed that: “Darwin’s treatment of the instincts and emotions opened the way to… a functional view of psychology, which regards mind as an organic function whose origins and modifications are to be explained in biological terms” (p. 175). He pointed out that Darwin asserted that it was not within his equipment to extend the application of his principles to a systematic explanation of psychology, ethics, or logic, but that nevertheless Darwin did point to material origins for even these developments within
his evolutionary tree. Dennett (1995) later placed many socio-historical developments on his evolutionary tree of life, but he was hesitant to include mathematics and logic. Creighton (1909) even argued for placing logic on the proverbial tree of life: “philosophy cannot afford to ignore any genuine aspect of experience, and that what we may choose to call merely ‘external relations’ cannot be devoid of philosophical significance” (p. 176). Creighton (1909) claimed that, “It is a common mistake to suppose that to employ teleology is to abandon analysis and resign oneself to a merely formal explanation… But philosophy has surely advanced far enough beyond Kant to recognize the necessity of teleology not only as a ‘regulative,’ but also as a ‘constitutive’ principle” (p. 181).

Creighton’s reading of Darwin is much closer to James’s contingent, contextual depiction of human understanding. While innate knowledge is called into question, it does not challenge the common empirical view of different levels of psychological perception. In Creighton’s (1909) view, this can be readily seen because of “Darwin’s own employment of the principle to explain, not only the instincts and emotions of living organisms, but also to some extent the intellectual and moral endowments of the most highly evolved animals” (p. 170). This quote demonstrates the way in a dualistic conception of emotions- instincts are treated as a lower psychological class. A distinction between higher and lower organisms and higher and lower psychological functions may seem like a problematic reading of Darwin today, but it would not have been to individuals such as Creighton and Baldwin 100 years ago.

A similar view of Darwin as concerned with higher mental developments, higher arts, and highly developed humans who demonstrate these highly adaptive qualities is not
Carroll (2003), in writing an introduction for a recent publication of *Origin*, identified the need for a more systematic integration of higher forms in Darwin’s theory. *Descent* is said to lack some of the logical rigor of *Origin* and is criticized because, “The array of motives, emotions, and cognitive dispositions analyzed in the book have no tight, necessary relation to one another within a total system of motivational structures that are rooted in the elementary principles of natural selection” (Carroll, 2003, p. 53). Carroll called for the synthesis of evolutionary psychology and social biology in order to complete the Darwinian revolution in the social sciences:

In order to extend this synthesis from the social sciences to the humanities, we shall also have to be able to take account of the adaptive functions of the arts and to understand the formal organization of the arts as prosthetic extensions of evolved cognitive aptitudes. What is missing, up to this point, is the complete causal integration of elementary biological principles with complex psychological structures, complex forms of social organization, and complex forms of cognitive activity. (p.54)

Carroll seems to desire a logical synthesis of motivation and emotion with higher arts, higher social forms and higher cognition, not to see the dualistic classifications questioned.

As will become clear later in this chapter, one of Darwin’s struggles was to explain the instrumental function of higher arts and emotions. He, like Plato (see chapter 2), distrusted the emotions and common arts; yet, he saw some rationally directed quite emotional expressions and forms of higher art as essential to the motivation of higher mental and social developments (Darwin, 2005e). James (1997) expressed a very similar position. While such hierarchical classifications in Darwin’s were unanticipated, it is important to this project because it lends some explanation to how diverse psychological
theories in the next three and a half chapters can claim a Darwinian evolutionary model while maintaining a hierarchy of psychological powers. Based on this reading of Darwin and James’s interpretation, one might conclude that more than philosophy exists as a footnote to Plato (Whitehead, 1979) - western psychology might as well.

Higher and Lower

According to Gould (1977), “In a famous epigram, Darwin reminded himself never to say “higher” or “lower” in describing the structure of organisms—for if an amoeba is as well adapted to its environment as we are to ours, who is to say that we are higher creatures?” (p. 36). Over all, Darwin did a pretty good job of living up to this saying. In Origins, Darwin (2005e) hardly ever used the terms and explicitly addressed his choice to avoid them:

There has been much discussion whether recent forms are more highly developed than ancient. I will not here enter on this subject, for naturalists have not as yet defined to each other’s satisfaction what is meant by high and low forms. But in one particular sense the more recent forms must, on my theory, be higher than the more ancient for each new species is formed by having had some advantage in the struggle for life over other and preceding forms. (p. 620)

He went on to open the possibility of higher and lower to also include contemporary species. The species that is more widely adapted and able to colonize or naturalize a new area by displacing or exterminating the native productions, “may be said to be higher…” (p. 620). This second definition of higher, which seems to permeate his treatment of the human origins in Descent, only presents itself in intermittently in some of his other works. His use of higher and lower is limited in Voyage of the Beagle, Expression of Emotions in Humans and Animals, The Autobiography of Charles Darwin, and in many of the excerpts
from various correspondences edited together in his autobiography by his son (Darwin, 2005).

His general weariness to avoid the terms seems to break down in one work more than any other, the *Descent of Man*. Despite the axiom against higher and lower, Darwin (2005b) did use hierarchical terms in his writing to describe the structure of and between organisms. Throughout his psychological treatment of human origins, he used phrases like “highest men”; “highest races”; “lower form”; “lowest savages”; “lower animals.” Some of the classifications which seem unfortunate to readers today were common in Darwin’s time. However, simply apologizing for and dismissing these distinctions would make it easy to overlook the psychological processes which are associated with higher and lower in his theory – the dualistic treatment of high cognitive and lower bodily sensations that is depicted as Darwinian in the treatment of Baldwin, Creighton, and Carroll above.

In the following quote, Darwin (2005b) borrowed from Wallace to distinguish between man and lower animals:

…man is enabled through his mental faculties “to keep with an unchanged body in harmony with the changing universe.” He has a great power of adapting his habits to new condition of life… The lower animals, on the other hand, must have their bodily structure modified in order to survive under greatly changed conditions… The case, however, is widely different… in relationship to the intellectual and moral faculties of man. These faculties are variable; and we have every reason to believe that the variations tend to be inherited. (pp. 822-823)

The use of the previous quote in this project is not to try to make Darwin out to prefer humans to lower animals – he was rather fond of mollusks, worms, etc. Instead, the intent is to draw attention to the unique role that higher mental functions - particularly in humans - play in the Hegelian or neo-Hegelian reading of his theory as a material-dialect (see
Baldwin and Creighton above). Here, this quote can be understood as support for
Dennett’s (1995) neo-Darwinian tree of life metaphor that includes many human tools and
social developments as natural material/socio-historical developments. Even if this
interpretation is employed, logic and mathematics are not depicted as human tools in
Dennett’s emergent tree of life. Baldwin and Dennett’s (1995) reading of Darwin’s
revolutionary or dangerous idea still placed logic outside of human experience, which can
be seen as one of the critiques that Creighton levied against Baldwin. Either way, a
progressive reading of Darwin gives higher mental power related to rationality, reason, or
logical inquiry a preferential option in the development of world history. To a great
extent, Darwin (2005b) can be seen as broadening the definition of what gets to count as
material by questioning whether it is “scarcely possible to draw any clear line of
distinction” can be drawn between “exalted motives” brought under the deliberate
reasoning between opposing desires can be clearly distinguished from “actions performed
impulsively” (pp. 809-810). While knowing exactly where to draw the line is questioned,
he did not indicate that there is no difference or essential unity between the two aspects of
experience. When reading the following quote, pay particular attention to the synthesis of
empiricism and rationalism (see chapter 2):

Man, from the activity of his mental faculties cannot avoid reflection; past
impressions and images are incessantly and clearly passing through his mind. Now
those animals which live permanently in a body, the social instincts are ever
present and persistent… without the stimulus of any special passion or desire… So
it is with ourselves… Any passion… is in its nature temporary…perhaps hardly
possible, to call up with complete vividness the feeling. (p. 811)
Here, the more recently developed, active rational mind is the psychological aspect that has the clear impressions while the purely automata animal and portions of human psychology provide a purely instinctual reaction that is the result of an externally triggered bodily instinct. Even if Darwin’s theory is taken as broadening what counts as material to include mental processes, a portion of the mental activity is clearly different than the passive psychological pathway. A classic positivist assumption within his psychology seems to call into question whether it is possible to make any verifiable line of distinction in relationship to a psychological process (see chapter 2).

Recapitulation, Progress, and the Body-Mind Dualism

Darwin (2005e) had only recently been convinced that variations in an individual might be able to be passed on to offspring. In 1859, it was clear that he did not think that reversion to lower forms could be inherited as a variation that is selective. It is not until 1867 that a paper written by an engineer convinces Darwin that variations present in single individuals might be the starting point for a new variety. This concept found currency in his 1868 treatment of Variations of Animals and Plants under Domestication. The publication of The Descent of Man and Selection in Relations to Sex in 1871, just a few years later, is really two books published together. The first book focusing on the origin of humans is well rooted in his concept of human evolution dating back to before the Origin of Species. It is thoroughly rooted in recapitulation (see below), as was Origin. Sexual selection and variation do not become as centrally located in the compilation until the second book, and even then it is in tension with developmental views rooted in recapitulation. Overall, the principles of use and disuse of higher and lower adaptations
continued to shape Darwin’s general thought. Darwin’s evolutionary model is dependent on rapid growth as a sign of progress and the theory of recapitulation on which it is predicated. This progressive reading of Darwin can be seen in secondary literature at the turn of the twentieth century (see Baldwin and Creighton above) and the essential role of intelligence, reason, and rationality to this progress was a central philosophical assumption at the time of his writing (see chapter 2).

Recalling the pervasive influence of a dualistic conception of mind and body, it was less of a stretch to depict the human body as in continuity with animals than a similar assertion regarding mental development (see chapter 2 - especially Descartes). Darwin (2005b) did not need to do much to convince his contemporaries that the human body is similar to other animals; much work had already been done in this area prior to his writing, cataloguing similarities in bones, muscles and other structures. In recounting this remarkable mechanical similarity, Darwin highlighted the common affect, if not distinct pleasure, when partaking in tea, coffee, and strong beer as a way of pointing to the similarity of tastes and the nervous system of various primates. Concerning the delayed maturity of offspring, Darwin noted continuity with the orang, which was not said to reach adulthood until between ten and fifteen years (Darwin, 2005b). Even differences between the male and female biology was identified to be remarkably similar to anthropomorphic apes. To explain such similarity and continuity, Darwin turned to the theory of recapitulation.

Recapitulation, which holds that more advanced organisms pass through the adult phases of their predecessors, was common at the end of the nineteenth century. The Latin
root of the word recapitulation, *capitus* meaning head, is a clue as to what was considered to be the measure of one’s adult or high status. Darwin (2005b) was convinced of this process in regards to the bodily structures in humans. The human embryo originated as an ovule that was not distinguishable from other animals. As it developed it appeared to possess structures similar to those of the adult fish and gradually developed to more closely resemble other primates. He asserted that, in arrested development, the embryonic formation of an organ stops in a prior evolutionary form while the organism continues to mature. As an example, he described the arrested development of the brain in people then called *microcephalous idiots*. He emphasized their small skulls, limited language, and animal like behaviors as he compared them to lower forms of humanity and lower animals. Such a case might also be considered a case of reversion, or the return of a structure to a form that once would have been normal in the progenitor. Some forms of arrested development and reversion appear to Darwin (2005b) to be occasionally inherited but he did not think that reversion to lower forms should generally be inherited because newer forms have generally been more adaptive.

If physical structures are continuous with other animals, how could one continue to account for the uniqueness of Humans? Sir Henry Maine, as quoted by Dewey (1951), stated that “*EXCEPT* the blind forces of nature… nothing moves in this world which is not Greek in its origin” (p. 46). Dewey goes on to explain… “if we ask why this is so, the response comes that the Greeks discovered the business of man to be pursuit of good, and intelligence to be central in this quest” (p. 46). In *Descent*, Darwin (2005b) challenged this Platonic or Cartesian view of humanity (See Plato chapter 2) by using recapitulation to
explain the material development of human intelligence and social-moral instincts, placing them in continuity with other animals:

If no organic being excepting man had possessed any mental power, or if his powers had been of a wholly different nature from those of the lower animals, then we should never have been able to convince ourselves that our high faculties had been gradually developed. But it can be shown that there is no fundamental difference of this kind. (p. 777).

According to Darwin, high mental and social development have material origins just like lower bodily processes (Creighton, 1909). Thus, there is no fixed point to know when humanity received the breath of mental and moral development which allowed them to achieve their current form because it was a natural, material development.

While espousing continuity, Darwin (2005b) also forwarded a hierarchy by gradation. The difference between humans and animals was in degree not kind. He stated that “the lower animals differ from man solely in his almost infinitely larger power of associating together the most diversified sounds and ideas; and this obviously depends on the high development of his mental powers” (p. 792). Darwin clearly thought that mental powers and moral development were important characteristics of humanity. He indicated that in early humans, “the intellectual and social faculties of man could hardly have been inferior in any extreme degree to those possessed at present by the lowest savages; otherwise primeval man could not have been so eminently successful in the struggle for life, as proved by his early and wide diffusion” (Darwin, 2005b, p. 861). Intellectual and moral faculties were used to distinguish humans from lower animals even if an exact point when “primeval man, when he possessed but few arts, and those of the rudest kind, and when his power of language was extremely imperfect, would have deserved to be called
man” (p. 861). The distinct point of classifications of humans and of higher mental-psychological processes from lower forms is not assumed to be a verifiable point of scientific fact because it is a belief about a process, not a clear, primary sense datum (see classic positivism in chapter 2). In classic positivism, the lack of a distinct point does not deny a potential progressive development or a hierarchical relationship between earlier and later developments. While broadening the definition of material psychological processes to high mental cognitive activities and blurring the lines or transition, Darwin nevertheless presented them as more recent, higher stages of development than passive psychological processes connected to the emotive-sensory process. Thus the dualism, though slightly blurred can be seen to persist.

Mental Development

Darwin set out to show that there is no fundamental difference between the mental faculty of humans and animals. According to Darwin (2005b), “as man possesses the same senses as the lower animals, his fundamental intuitions must be the same” (p778). Darwin forwards a biological empirical epistemology for animals as well as humans. The instinctual knowledge of animals was closely tied to their senses, and certain biological-physiological responses would have been advantageous to survival. For instance, the mother’s milk was let down when she smells her baby or hears its cry. The newborn suckles with no personal experience or training to produce this instinct. Having established continuity, Darwin then seeks to again distinguish humans by pointing out that such basic or lower instincts were much diminished in humans. Darwin (2005b) stated, “it is not improbable that there is a certain amount of interference between the development of
free intelligence and of instinct—which latter implies some inherited modification of the brain” (p. 779). Here Darwin depicts an inverse relationship between higher mental processes, which allow for agency, and lower psychological processes, which are inherited psychological pathways. The movement towards higher organization includes a movement from purely automata towards the ultimate stage of development, reason.

_Imitation._

Imitation was observed by Darwin in humans and in the lowest animals. Darwin (2005b) was certain that “much of the intelligent work done by man is due to imitation and not to reason; but there is a great difference between his action and many of those performed by the lower animals, namely, that man cannot, on his first trial, make, for instance, a stone hatchet or a canoe, through his power of imitation. He has to learn his work by practice…” (p. 780). Darwin asserted that imitation was strongest in the savages [sic], individuals with arrested development, and morbid states of the brain. Animals educated their young through imitation and physical inheritance of bodily structures that facilitated habits of action. His observations lead him to believe that lower animals might also be able to imitate the actions of a species of similar development, but that they could not drastically skip over developmental stages of increased mental power.

_Attention._

Attention was then forwarded as one of the more important developments in relationship to the progressive development of intelligence in humans (Darwin, 2005b). Sustained attention was noted in animals and was presented as essential to training them. The animal given to distraction by multiple stimuli was a hopeless case for domesticating
 unto industrious purposes. Attention allowed certain associations to be schooled such that they are reproduced despite a lack of instinctual inheritance. Sustained memory then becomes a necessary condition for drawing on the reservoir of associations according to some level of judgment in future situations.

*Imagination.*

Imagination was presented as one of the highest intelligent capacities of humans. Independent of conscious thought and will, novel associations can be made between situations and other ideas or images. The involuntary recombining of ideas can be seen in dreams, which humans, dogs, and other animals all have. Darwin (2005b) is unconvinced that, given the expression of pleasure and pain in dreams by both humans and animals in an unconscious condition, the same animals - possessing rudimentary reason – have no self awareness in their conscious experience. Humans, dogs, and other animals have a remarkable power to make connections between associations even when there is no immediate sensory data to support the link. Seemingly unrelated ideas are applied to fill in the blanks.

*Reason.*

Finally, Darwin’s (2005b) stages of mental development reach their conclusion: “Of all the faculties of the human mind, it will, I presume, be admitted that *Reason* stands at the summit” (p. 785). Yet, he continued stating that even this highest stage of human mental development is in continuity with other animals, “Only a few persons now dispute that animals possess some power of reason. Animals may constantly be seen to pause, deliberate, and resolve” (p. 785). According to his observations, animals were even given
to abstractions. A dog could recognize a person and bark aggressively until it realizes that it is not just a person, it is his owner. In other words, even dogs exhibit some agency by choose a different physical response.

Even in this highest form of mental power, Darwin blurs the distinction between instinct and reason. It is difficult to tell when an animal is acting based on reason, individual experience, social training, or the association of ideas. The certain distinction between the association of ideas, or highest reason, and the most basic biological instinct in humans must then be called into question if the human mind and body are continuous with other animals, particularly in what Darwin calls *uncultivated man*. Accordingly, “The savage would certainly neither know nor care by what law… desired movements were effected; yet his act would be guided by a rude process of reasoning, as surely as would a philosopher in his longest chain of deductions” (Darwin, 2005b, p. 786).

*Social Development*

Darwin asserted that few, if any, philosophers had attempted to address morality from the perspective of natural history. The continuity and gradation of social development provided a material explanation for subversion of individual desires, drives, and appetites for the common good. Darwin (2005b) thought that naturalism provided an answer to Kant’s persistent question, which he quoted: “Duty! Wondrous thought, that workest neither by fond insinuation, flattery, nor by any threat, but merely by holding up thy naked law in the soul, and so extorting for thyself always reverence, if not always obedience; Before whom all appetites are dumb, however secretly they rebel; whence thy original?” (p. 800). Again, Darwin broadened what was considered to be materially
explainable. In the following section, the development of social instinct can be seen as a biologically advantageous form of conscience and desire for the good of others and not just self-preservation. The social instinct is a higher form of consciousness than the subjective emotional passions, which are passive and could not speak to or actively contribute to knowledge. A materially explained naked soul-mind is depicted as able to actively free itself from individual desires, emotions and interests and bring about a more harmonious equilibrium – the good life. Darwin’s naturalized, psychological explanation for social developments is especially important to the social developmental psychological approaches in chapter 6.

Sympathy and sociability.

According to Darwin’s (2005b) observations, many animals - as with humans - provided services to one another. They worked together for the common good through a series of interacts or interactions. These bonds or associations were the foundation of society. Darwin indicated that animals with such corporate interests demonstrate the feeling of love that is not present in non-social animals. This feeling of connectedness forms the basis for the “all-important emotion of sympathy” (Darwin2005b, p. 806). The sympathetic instinct motivated the dog to defend his master, the monkey to defend other members of the troop, or the person to run into a building to save a child. These feelings were perpetuated by natural selection as much as the habit of circling the pack with the strongest members to defend against a threat. This instinctual, motivational emotion operated with a minimum of conscious reasoning. These acts need not be motivated by the
desire for pleasure or the avoidance of pain, but instead may be followed out of an inherited, unconscious physical instinct in both humans and lower social animals.

_Social/self-consciousness, social/self-command._

The potential for consciousness in animals was mentioned in the presentation of the mental development of imagination. The dreaming dog and the infant, both incapable of language, were observed as given to night terrors or unconscious pleasures (Darwin, 2005b). They were capable of reflecting on past experiences and associations, a certain level of self-consciousness. The dog and the child likewise had a desire for approbation, the pleasure of approval. Obedience need not be by fear or past or a desirable stimulus other than the good-will of its own or another kind. In this sense, both humans and lower animals can be seen as possessing an instinct that is very close to what is also called conscience, or more accurately social consciousness.

Darwin (2005b) explained that this instinct was a natural advantage for animals that have developed corporate interests and instincts: “All animals living in a body, which defend themselves or attack their enemies in concert, must indeed be in some degree faithful to one another; and those that follow a leader must be in some degree obedient. When the baboons… plunder a garden, they silently follow their leader; and if an imprudent young animal makes a noise, he receives a slap from the others to teach him silence and obedience” (p. 805). Thus, the smile and the frown or a hug or slap are no less strong a form of social education than the spoken word. Even inflection and other more readily identifiable forms of material symbolic interaction are parts of a continuous development of higher articulation (Darwin, 2005b).
Language and social education.

Language is then an extension of previously developed social instincts as well as other material communicative forms. According to Darwin (2005b), even vocalized communication was present in lower animals. Humans were not unique in their ability to articulate feelings through sound or the ability to discern and invoke similar emotions when these articulations were perceived. Thus even animals exhibited the breath of spoken communication, though in a primitive form. Darwin blurs the line of distinction between who has acquired the breath of and understanding of symbolic articulations – some primitive level of words.

Darwin (2005b) observed that both infants and dogs form associations between short sentences and certain ideas or actions independent of the ability to articulate the same language; even the adult human continued the use of:

inarticulate cries to express meaning, aided by gestures and the movements of the muscles of the face. This especially holds good with the more simple and vivid feelings, which are but little connected with our higher intelligence. Our cries of pain, fear, surprise, anger, together with the appropriate actions… the lower animals differ from man solely in his almost infinitely larger power of associating together the most diversified sounds and ideas; and this obviously depends on the development of his mental powers. (Darwin, 2005b, p. 792)

The power of language in social development, then, is the extended power to communicate and develop common opinion or beliefs about how members should act for the public good. Some level of social instinct whether conscious or qua conscious can be seen as present in lower animals, infants, and mature humans. In a positive epistemological-scientific or theological predestined progressive development, it is difficult to tell where in the process one might draw a distinct line in the developmental
process to assert that bodily instinct gives way to a consciously directed psychic will that can be viewed as accountable (see chapter 2). Even in asserting no agency (e.g., Skinner in chapter 4), some line can be seen as being drawn in each of the following chapters as to how much of human experience can be consciously directed.

*Social habits triumph over individual instincts!*

Humans, as social animals, are then influenced not only by instincts of self-preservation, but also the instinctual desire for approval and the common good. The line of distinction between physically inherited social instincts and socially educated meaning becomes blurred in Darwin’s psychology. The actions believed to be most noble, courageous, benevolent, and good may be innately physical – it is hard to tell where to draw the line. Again, the agnosticism is where to draw the line in the process, not in the conception of a continuous hierarchical psychic development. Darwin (2005b) believed that, together, the cultivation of mental and social instincts would allow for the most dignified of human attributes, moral capacity. In response to Kant’s quote above, the triumph of social good over selfish desires would come:

> as love, sympathy, and self-command become strengthened by habit, and as the power of reasoning becomes clearer, so that man can value justly the judgments of his fellows, he will feel himself impelled, apart from any transitory pleasure or pain, to certain lines of conduct. He might declare – not that any barbarian or uncultivated man could thus think—I am the supreme judge of my own conduct, and in the words of Kant, I will not in my own person violate the dignity of humanity. (Darwin, 2005b, p. 809)

Human dignity is bound up with the higher, clearer reasoning capacity and judgment of conduct within society.
To demonstrate why social instincts would prevail, Darwin (2005b) drew on a dualistic empirical understanding knowledge. He asserted that the form of consciousness or perception operant in individual passions (emotional interests, desires, or energies) were temporary. They could be immediately satisfied by some stimulus. Darwin identified the individual desire for another person’s property as “perhaps as persistent a desire as any that can be named; but even in this case the satisfaction of actual possession is generally a weaker feeling than the desire: many a thief, if not a habitual one, after success has wondered why he stole some article” (811). Therefore the intelligible, socially responsible person would be guided through remorse to act rightly, not out of some divine conscience, but because of a purely natural material conscience that brought together naturally selected mental and social capacities.

Marx, one of Darwin’s greatest fans (Carroll, 2003), certainly would applaud Darwin (2005b) for stating that, “Man, prompted by his conscience, will through long habit acquire such perfect self-command, that his desires and passions will at last yield instantly and without a struggle to his social sympathies and instincts, including his feelings for the judgment of his fellows”, but he might have been dismayed by the more conservative aspect of his material-social dialectic revealed in the next sentence: “The still hungry or the still revengeful man will not think of stealing food or of wreaking his vengeance” (p. 813). The poor or oppressed would not think of their own group’s interests and therefore there is not conflict to drive Marx’s socio historical development. Until higher material instincts should become acquired by inheritance, “the sole restraining motive left is the fear of punishment, and the conviction that in the long run it would be
best for his own selfish interest to regard the good of others rather than his own” (Darwin, 2005b, p. 813). Darwin (2005e) considered going into the clergy, and his material view of consciousness may well have been influenced by progressive Protestant theology, specifically the Incarnate Logos (see chapter 2).

In perhaps one of his most teleological statements, Darwin (2005b) said, “Looking to future generations, there is no cause to fear that the social instincts will grow weaker, and we may expect that virtuous habits will grow stronger, becoming perhaps fixed by inheritance. In this case the struggle between our higher and lower impulses will be less severe, and virtue will be triumphant” (p. 820). As seen above, an instinct becomes fixed by inheritance as it becomes a bodily response without any higher cognitive action to direct it. As the bodily instinct become more in keeping with the more highly developed human mind and social instinct, the tension between these more mature and more primitive psychological processes would bring about a harmonious whole. Pointing to the difference between humans and other high primates, Darwin (2005b) sated that higher primates, “would be forced to acknowledge that disinterested love for all living creatures, the most noble attribute of man, was quite beyond their comprehension” (p. 820). The human capacity for reason broadens their social sentiment to include more than a desire for the good of fellow humans. It provides a higher consciousness that seeks to direct the material whole into a harmonious whole system. Higher reasoning and systemic consciousness, whether viewed as Hegelian or neo-Hegelian continues to contain a progressive optimism that might be viewed as teleological (e.g., Baldwin & Creighton).
Emotional Expression

At the offset, it might be worth noting that Darwin (2005b; 2000d) seems to make a distinction between mental and social development by shifting his language to write about emotional expression. Though Descent included some treatment of the emotions, it focused more directly on the development of intelligence and social instincts in humans. Where it gave attention to emotions, it was much less systematic (Carroll, 2003). It can be seen as giving more of a glimpse of some of the dualistic assumptions behind Darwin’s psychology. Darwin’s (2005e) can also be helpful in this respect, bearing some striking similarities to Plato’s distrust of emotion. The section on emotional development returns to Descent to capture some of these insights, as well as drawing from Darwin’s autobiography to examine some of the beliefs that he wished to pass on to his children as a tool for their instructions.

The Expression of the Emotions in Man and Animals was written as a follow-up to the Descent of Man. For the most part, Darwin (2005d) believed that previous treatments of emotion were nonsense, based on a belief that all species including man were created in their current state. A few individuals had done some work to describe the physiology of emotional expressions, but Darwin indicated that no one had given a material explanation for the origin of emotions. Furthermore, he indicated that no one asked why there was continuity in emotional expression between humans and animals, nor why certain physical changes were exercised in the service of different emotions. Instead, it was believed that certain muscles served a special purpose for which they are created. This interpretation can be seen as a purely mechanical view of emotions. The influence of Descartes’
rationalism can be seen here (see chapter 2). Each species was believed to have a distinct apparatus or equipment for the expression of emotions corresponding to their station in the created order. Darwin (2005d) thought that it was unlikely that one muscle was responsible for different emotional expressions such as a smiling muscle. He thought that multiple different physical structures work together in humans and in animals because of a function served in an earlier, shared ancestor.

Many of Darwin’s contemporaries thought that animals were able to express rage, anger, fear, and other base emotions that were necessary for their position, but they did think that animals have higher emotions related to affection (Darwin, 2005d). Darwin (2005d) felt that overlooking inherited instincts and habits developed through individual experience were the keys to understanding gestures and expressions related to emotions. In order to further develop his material psychology, Darwin obtained observations of emotional expression by native or aboriginal peoples from around the world who had limited interaction with Europeans. He also considered observations of infants and people being treated for mental illness. As an additional source, he made and reviewed observations of emotional expression in animals.

From his study of emotional expression, Darwin (2005d) drew three general principles to explain the material causes of emotions: 1) serviceable associations; 2) antithesis to serviceable associations; and 3) action due to the nervous system (as opposed to conscious will). The first principle held that actions which serve some purpose, directly or indirectly providing pleasure or the relief of aversive sensations, become habitual even unto their use in situations that do not produce the desired outcome. The physical changes
that were most directly controllable by the will were believed to be the most recent developments related to emotional expression, as are those movements used to conceal instinctual expression. The second principle, as the name suggests, was the antithesis to the first principle. In the opposite state of mind, the physical change occurs in the opposite direction even if there is no ready use for such movements. Thus the frown can be seen as a smile turned upside down, though it may serve no function as would bearing the teeth for a smile. The third principle indicated that strong sensory inputs can generate an excessive excitation of the nervous system such that it must be dispersed through the body according to habituated channels. Furthermore, the force is believed to be able to be blocked, interrupted, or as James would latter write, be inhibited. The consequences of such events likewise could be seen as expressive.

The principle of serviceable association, in relationship to emotional as well as in intellectual development, is beholden unto the prevailing understanding of recapitulation. Darwin (2005d) believed that emotional expressions, such as being startled by an object not yet differentiated as dangerous or safe, would have been habituated and inherited in earlier forms of current species. The accelerated changes in emotional habit were made possible by reshaping mental associations. This process involved the training and eventual inheritance of certain patterns within the neural system. Successful actions, whether originally consciously or unconsciously performed, could be converted into what Spencer and later Darwin called reflex actions. Reflex actions were, “due to the excitement of a peripheral nerve, which transmits its influence to certain nerve-cells, and these in their turn excite certain muscles or glands into action; and all this may take place without any
sensation or consciousness on our part, though often thus accompanied” (Darwin, 2005d, p. 1367). In other words, emotional responses can be seen as externally generated material responses to the environment.

Among these natural reactions, Darwin (2005d) believed that some bodily responses seemed to be able to be controlled voluntarily, while others operate almost exclusively by instinct (e.g., hand versus heart respectively). This distinction between physiological responses became the basis for the distinction between higher and lower emotional expressions. Some physical structures were more naturally predisposed to conscious manipulation than others. Therefore, attempts to control one’s emotional expression were likely to be only partly successful. The more basic emotional expressions were likely to pervade due to involuntary reflex actions. It also served as an explanation for why people with diminished mental capacity tended towards such basic expressions.

In Darwin’s (2005d) second principle, expression through antithesis was considered to be primarily serviceable in social animals. A basic aggressive posture was an important form of communication from an individual animal to others, but in a social animal, communication of acceptance, affection, or simply the absence of a danger were also important forms of expression. These forms of expression were serviceable for communication between potential mates, between young and old for the purpose of social education, and/or the passing on of not yet inherited habits. According to Darwin (2005d), “This is generally affected by means of the voice, but it is certain that gestures and expressions are to a certain extent mutually intelligible. Man not only uses inarticulate cries, gestures, and expressions, but has invented articulate language; if, indeed, the word
invented can be applied to a process, completed by innumerable steps, half-consciously made” [italics original] (p. 1383). The development of social communication was presented as a process through which various associations were passed on through symbolic expressions. Gestures and articulations were both believed to become simplified over time for the sake of efficiency or rapid communication. As such, the natural origin of the expression was seen as becoming so contracted or abbreviated that the origin was obscured.

Base emotions and recapitulation.

In Descent, Darwin (2005b) intermingled his description of mental and social development with a brief description of some basic emotions. He described emotions that are shared with lower animals: terror, suspicion, rage, etc. Each of these emotions were said to be purely automata in the lower animals and to a great extent in humans. This can be compared to Descartes’ mechanical view of the body (see chapter 2). In Darwin’s (2005b) estimation, these basic, individual instincts functioned largely for self-preservation. As previously described, Darwin also thought that social species shared more intelligent-moral emotions with humans.

Darwin (2005b) asserted that these intellectual emotions formed “the basis for the development of the higher mental powers” (p. 782). Many animals can be seen as having a degree of arousal, excitation, or wondrous curiosity in the presence of novel situations. In Descent, Darwin went on to describe attention, memory, imagination, and reason without mention of these emotional processes. However, as a summary of his treatment of mental
development Darwin (2005b) reasserted the continuity between humans and other animals, especially primates in regards to emotional capacity:

All have the same senses, intuitions, and sensations—similar passions, affections, and emotions, even the more complex ones, such as jealousy, suspicion, emulation, gratitude, and magnanimity; they practice deceit and are revengeful; they are sometimes susceptible to ridicule, and even have a sense of humor; they feel wonder and curiosity; the possess the same faculties of imitation, attention, deliberation, choice, memory, imagination, the association of ideas, and reason, though in very different degrees. (p. 788)

The material explanation for emotional expression, included articulation as well as other symbolic interactions more commonly conceived of as physical. Darwin (2005b) indicated that various utterances by monkeys elicit similar emotions in other monkeys and that inarticulate cries express meaning with the assistance of gestures and the movement of the face. These simple emotions were presented as: instinctual, vividly felt, linked to appropriate action, and limitedly connected to higher intelligence. Expression of such base emotions was because of a lack of mental development or regression to a more primitive behavior. In other words, the irrational or under-rationalized emotional response is not possible in the absence of a reasoning mind to direct the emotional response. As an example of this, Darwin (2005b) described the emotional expression sneering:

Of the anthropomorphous apes the males alone have their canines fully developed; but in the female gorilla, and in a less degree the female orang, these teeth project considerably beyond the others; therefore the fact, of which I have been assured, that women sometimes have considerably projecting canines, is no serious objection to the belief that their occasional great development in man is a case of reversion to an ape-like progenitor. He who rejects with scorn the belief that the shape of his own canines, and their occasional greater development in other men, are due to our early forefathers having been provided with these formidable weapons, will probably reveal, by sneering, the line of his descent. For though he no longer intends, nor has the power, to use these teeth as weapons, he will
unconsciously retract his ‘snarling muscles’… so as to expose them ready for action, like a dog prepared to fight. (p. 760)

In *Descent* and in *Sexual Selection*, women were associated with immature children from their own species or the adult members of lower species within their group (Darwin, 2005b & c).

According to Darwin’s application of recapitulation, the less mature women and children were unable to control instinctual, physical, base, and vile emotions while cultured, mature men were presumed to be able to control such animalistic expressions and divert their energies towards higher, cultivated emotions. Darwin stated, “The cause of this seems to lie in the males of almost all animals having stronger passions than the females” (2005c, p. 895). This seems to be somewhat contradictory, but stronger passions were seen as motivating active responses and the weaker emotions were associated with a passive reaction. This higher mental ability to control active emotions was considered to be secondary sexual adaptations much like the development of enlarged racks in dear or the plumage of birds which gave males the motivational force to improve their station more rapidly by harnessing these passions for higher, more intelligent activities. The next two sections address these higher pursuits and the distinction between active and passive emotions, respectively.

*Higher emotions and high-mindedness.*

Darwin (2005b) believed that even articulate language developed gradually in humans, originally serving a function for communication, particularly related to sexual selection. The males would sing using rhythmic vocalizations to woo a mate and express
various emotions such as love and triumph or serve as warnings rooted in jealousy and rage. Having established continuity, Darwin again sets out to distinguish more cultivated humans, higher passions, and aesthetic emotions. Paraphrasing and correcting Took, Darwin (2005b) stated:

> language is an art like brewing or baking; but writing would have been a better simile. It certainly is not a true instinct, for every language has to be learned. It differs, however, widely from all ordinary arts, for man has an instinctive tendency to speak… while no child has an instinctive tendency to brew, bake, or write… (p. 792)

Higher arts represent a break in continuity with lower animals in Darwin’s theory.

Commonplace or ordinary art was based on subjective, simple, immediate, bodily, instinctual associations. The taste, love, or zeal expressed for common things varied widely. This however was not the result of multiple interests, but a lack of mental development to rise above lower pressures. Darwin (2005b) stated, “Judging from the hideous ornaments and the equally hideous music admired by most savages, it might be urged that their aesthetic faculty was not so highly developed as in certain animals… high tastes are acquired through culture, and depend on complex associations; they are not enjoyed by barbarians and uneducated persons” (p. 797). Higher arts involved learning that made them distinct from instinctual of vernacular art. The highest of these arts seemed to serve no adaptive function except to quicken the moral and intellectual development of humanity (Darwin, 2005c).

Darwin (2005c) asserted that the male, with little exception, was more highly modified in every species. Stronger aesthetic, physical, mental, and moral power and corresponding stronger, more active passions-emotions helped males win mates in
competition with other males of the same species, thus passing on their superior adaptations to other males. He indicated that natural-sexual selection favored a more rapid development of men because they were active and women were passive in the sexual process. Over time, certain groups of males continued to pass on such high passions and zeal for increasingly intellectual activities. One might then gather that the sexiest men are academic scientists, philosophers, monastics – good news for the lonely halls - labs of academia and the cloister. As a more serious note, the distinction between higher and lower emotions and active and passive continues to have implications for how emotion is treated in psychological research.

*Passive and active emotions.*

It might be easier to think of passive and active emotions as weak and strong emotions. According to Darwin (2005d) stronger emotions and sensations, once inhibited, could be habitually channeled for action or could be released in unproductive or negative ways. Darwin believed that the habitual association of strong sensorium with serviceable ends required the harnessing of stronger passions-emotions. He observed that some, “strong emotions… do not ordinarily require for their relief or gratification any voluntary movement; and secondly the contrast in nature between the so-called exciting and depressing states of the mind” (Darwin, 2005d, p. 1393). While a strong emotion, Darwin assumed that the maternal affection has no outward sign – it was passive. In contrast, harm the woman’s child and see how the strong emotion of anger habitually leads to strong physical changes and corresponding action. In contrast, Darwin (2005d) went on to say that a man’s mind may be filled with “the blackest hatred or suspicion, or be corroded with
envy or jealousy, but as these feelings do not at once lead to action...they are not shown by any outward sign" (1393). The more rational male therefore is able to harness these energies for appropriate, personally disinterested social action.

Mirroring the male and female reproductive patterns described in *Selection*, Darwin’s (2005d) treatment of stronger-exciting emotions in *Expression* gave the tendency for action and the passive-depressing emotion dam up or discharge neurological energy in an unfruitful way. Exciting emotions were functional and their antithesis was merely the release of opposite energies over time in a way that is not productive. The exciting emotions could become “more refined” as mental development increased and harnessed them to “direct moral conduct” (Darwin, 2005d, p. 1547). Therefore, Darwin (2005d) concluded:

> We readily perceive sympathy in others by their expressions; our sufferings are thus mitigated and our pleasures increased; and mutual good feeling is thus strengthened. The movements of expressions give vividness and energy to our spoken words. They reveal the thoughts and intentions of others more truly than do words, which may be falsified... The free expression by outward signs of an emotion intensifies it. On the other hand, the repression, as far as this is possible, of all outwards signs softens our emotions. He... who does not control the signs of fear will experience fear in a greater degree; and he who remains passive when overwhelmed with grief loses his best chance of recovering elasticity of mind. (p. 1548)

Again, the need to and difficulty of controlling emotions can be seen in this passage.

Darwin believed that the ability to control emotions was - at least in some degree - an inherited instinct. Because emotions were more automatic than the more recently acquired articulated language, the ability to distinguish between emotional reactions was not only possible in all humans, it was an important tool that must be developed.
According to Darwin (2005d), “our children acquire their knowledge of expression solely by experience through the power of association and reason” (p. 1544). In regard to emotion, Darwin left room for continuity between people in their basic, materially inherited associations as well as inherited grades of individual differences in emotional understanding and control.

*Darwin’s emotional ideal.*

The ideal human nature is not difficult for Darwin (2005e) to describe. Emotions were to be channeled for the service of higher mental, moral, and aesthetic ends. Strong bodily expressions such as anger should submit to reason, selfish bodily passions should submit to the common good, and the quiet pleasure of pure art disconnected from instinctual needs should uplift the mind and moral nature of humanity. Excerpts from Darwin’s autobiography are offered in this final section on Darwin’s treatment of emotions to support and expand upon the claims made in this paragraph.

Darwin (2005e) was confounded by his own physical passions and the desire to live up to an ideal characterized by more intelligent passions. His autobiography bears this out from his days studying at Edinburgh University until near his death. During his education into the scientific community, Darwin (2005e) loved shooting but was “half-consciously ashamed of my zeal, for I tried to persuade myself that shooting was almost an intellectual employment…” (p. 1592). He reflects on his days at Cambridge when time and energy was:

sadly wasted there, and worse than wasted. From my passion for shooting and for hunting, and when this failed, for riding across country, I got into a sporting set, including some dissipated low minded young men… we sometimes drank too...
much, with jolly singing… I know that I ought to feel ashamed of days and evenings thus spent, but as some of my friends were very pleasant, and we were all in the highest of spirits, I cannot help looking back to these times with much pleasure. (Darwin, 2005e, p. 1594)

Darwin greatly admired men of science who think little of themselves and do not pursue their own pleasure. While on the voyage of the *Beagle*, he began to lose his taste for lower sensations in favor of high-minded passions. Looking back on that time, Darwin (2005e) reflected that, “I can now perceive how my love for science gradually preponderated over every other taste… I discovered, though unconsciously and insensibly, that the pleasure of observing and reasoning was a much higher one than that of skill and sport” (p. 1601).

Despite his pleasure in having submitted his passions for ordinary arts and pleasures, Darwin (2005e) mourned the loss of his higher aesthetic tastes:

> My mind seems to have become a kind of machine for grinding general laws out of large collections of facts, but why this should have caused the atrophy of that part of the brain alone, on which the higher tastes depend, I cannot conceive. A man with a mind more highly organized and better constituted than mine, would not, I suppose, have thus suffered… the loss of these tastes is a loss of happiness, and may possibly be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional part of our nature. (p. 1619)

Even at the end of his life, Darwin was not able to disentangle higher passions from the highest mental development, goodness, and beauty. His dualistic treatment of mind and body, higher cognitive emotions and pure passions can be seen as closely related to the Plato’s treatment of emotions from chapter 2. It is the Ideal integration that he is unable to obtain – an observation that he attributed to the limits of his own lack of development in essential areas of human nature. Darwin’s autobiography is a way of taking stock of his life and recording his beliefs for his children’s learning (Regal, 2005). These words come
at the end of his life, penned between 1876 and his death in 1882. Because his autobiography was not intended for publication, it cannot be said that these dualistic representations of mind and body were the result of a personal fear of persecution. Instead, it might be taken as a look inside the assumptions that shaped Darwin’s treatment of emotions and their relationship to cognition. His struggle with higher and lower emotions continued past the writing of *The Descent of Man* (1871) and his publication of *The Expression of Emotions and Man and Animals* (1872) even until the end of his life.

*James’s Pragmatic Naturalism*

Pragmatism is a philosophical tradition that began in the United States towards the end of the nineteenth century. Central to pragmatism is the clarification of inquiry by identifying practical consequences, a fallible epistemological outlook, and an anti-Cartesian approach (Hookway, 2008). According to Kamber (2007):

Gould once remarked ‘Science advances primarily by replacement, not by addition. If the barrel is always full, then the rotten apples must be discarded before better ones can be added’ (Gould 1981, 322). James held a similar view of philosophy and saw pragmatism as a method for discarding philosophy’s rotten apples. (p. 20)

Though James sought to forward a pragmatic, natural psychology, Dewey believed that his psychological treatment of cognition and emotion retained dualistic assumptions (see chapter 7).

*Peirce and Darwin’s Influence on James*

Peirce, considered one of the founders of pragmatism, had a strong influence on both James and Dewey. A few comments about his assertions about beliefs and doubt can help to understand both of these pragmatists’ views. Peirce asserted that no one wanted to
be stuck between hope and doubt forever (Eames, 1977). Peirce (1955a) believed that the process of figuring out was uncomfortable, making belief desirable:

beliefs guide our desires and shape our actions… the feeling of believing is a more or less sure indication of there being established in our nature some habit which will determine our actions. Doubt never has such an effect… Doubt is an uneasy and dissatisfied state from which we struggle to free ourselves and pass into the state of belief; while the latter is a calm and satisfactory state which we do not wish to avoid, or to change to a belief in anything else. (p. 10)

Both belief and doubt have their benefits. Darwin (2005b) said it like this, “without doubting there can be no progress” (p 833). Doubt, though the tension and inhibition of action is uncomfortable, leads to inquiry until an actionable belief is obtained. Belief, though it does not need to lead to action immediately, contains the conditions, associations, and habits necessary to act when the situation presents itself (Peirce, 1955a). James (1950) adopted this view of retained beliefs, and acknowledges the importance of a situated or contextualized experience, “retention means liability to recall, and it means nothing more than such liability... The retention of an experience is, in short, but another name for the possibility of thinking it again, or the tendency to think it again, with its past surroundings” (p. 654). This is analogous to Darwin’s empirical distinction between clearer mental models and lower psychological processes.

James’s theory of emotions drew on Darwin’s naturalism directly and also on Peirce’s (1955b) pragmatic theory of cognition and emotion:

every emotion, every burst of passion, every exercise of will is like cognition… If, however, we ask whether there be not an element in cognition which is neither feeling, sense, nor activity, we do find something, the faculty of learning, acquisition, memory and inference, synthesis. (p. 94)
Thus, learning is seen as a primarily if not purely cognitive aspect, an assertion that shapes James’s theory and through him much of psychology. The emotions, passions, and desires do not possess judgment; they are characterized as an individualistic volitional will or a psychic energy. The faculties are not fundamentally different; they are still psychic forces.

In the philosophical and psychological writings of the early pragmatists, the treatment of belief and doubt are integrated with the treatment of emotion. For Peirce and James, cognition and emotion, though similar in psychic constitution, operate very differently. In chapter 7, Dewey’s critique of this conception of emotion is offered as a critique primarily of James, but as a pragmatic alternative to James influenced psychology writ large over the last 100 years.

*Origin of Emotional Expression*

James (1985) thought that the description and classification of emotions from Descartes onward was “one of the most tedious parts of psychology. And not only is it tedious, but you feel that its subdivisions are to a great extent either fictitious or unimportant, and that its pretences to accuracy are a sham… unfortunately there is little psychological writing about the emotions which is not merely descriptive” (p. 241). James’s theory of emotion is intended to build on Darwin’s theory of emotion, giving an empirical psychological examination of the origins of emotional life. Like Darwin, he seeks to blur the classifications of processes which are not readily verifiable as distinct. James (1985) asserted that description and classification were the lowest form of science, the goal was to demonstrate causal accounts:
Now the moment an emotion is causally accounted for, as the arousal by an object of a lot of reflex acts which are forthwith felt, *we immediately see why there is no limit to the number of possible different emotions which may exist, and why the emotions of different individuals may vary indefinitely, both as to their constitution and as to the objects which call them forth*. For there is nothing sacramental or eternally fixed in reflex action…In short, *any classification of the emotions is seen to be as true as ‘natural’ as any other*, if it only serves some purpose; and such a question as “What is the ‘real’ or ‘typical’ expression of anger, or fear;” is seen to have no objective meaning at all. [italics original] (pp. 248-249)

Thus, instead of describing each emotion as individual things, James thinks that the emotional process as a whole should be treated. While quite uncomfortable with the classification of different emotions, he appears to be much more comfortable with presenting cognition and emotions as distinctly different parts of the human experience.

*Material Origins Psychological Functions*

James (1907, 1969) was concerned with the way in which higher intelligence was viewed as escaping material survival and becoming disconnected from serviceable action (e.g., Baldwin’s reading of Darwin from the same period). He asserted that in the pursuit of rationality and reason, the philosopher and scientist alike seem to pursue something independent of practice. One mark or measure of their abstractions was, “a strong feeling of ease, peace, rest” (James, 1969, p. 132). The pleasure felt was relief from a state of puzzlement, which Peirce would have identified as moving from doubt to belief. To James (1950) the opposite of fixing or crediting an idea was not disbelief, but doubt. The distinction is that doubt does not refuse to believe, it is just unconvinced so far. It is not sure that a particular idea about the world is accurate, and it may not even be actionable.

According to James (1985), the new developments in psychological research at the turn of the century related to neurological pathways seemed to support his idea that an inhibited or
resisted current that was able to discharge resulted in a positive sensation of relief, a positive emotional response.

James (1969) asserted that puzzlement could be solved in two ways that are often seen as in tension. Tension reduction could come from finding the most simple and universally applicable belief. In the face of multiple problems, one belief provides a solution to the puzzle. Tension can also be reduced by breaking the chaos of the world up into manageable parts or categories. There is simply too much to know or figure out. A million and more contemporaneous acts constitute the:

\[ \text{real order of the world. It is an order with which we have nothing to do but get away from it as fast as possible... we break it into histories, and we break it into arts, and we break it into sciences...we discover among its parts relationship that were never given to the senses at all...out of an infinite number of these we call certain ones essential and lawgiving, and ignore the rest. Essential these relations are, but only for our purposes, the other relations being just as real and present as they; and our purpose is to conceive simply and to foresee... [italics original]} \]

(James 1950, vol. 2, p. 635)

Instead of seeing abstractions as tools that enable action and therefore the reduction of mental distress, the abstractions are valued unto themselves as though a primary or essential quality could be identified that would work for all times—a universal law or a distinct form.

James (1969) found this approach, which denies a place for powerful emotional and practical tendencies, to be absurd. Here the conjunction and represents two problems, not one modified by the same adjective. James was interested in strong emotions with potential energy and the use of high cognitive functions to channel such energy for practical action or problem solving. (Recall the treatment of strong and weak emotions in
Darwin’s theory above.) James was interested in textual analysis and linguistic operations (see chapter 2). They shed light on the way people think. James (1950) indicated that there was a tendency to focus on nouns instead of the relational conjunctions, prepositions, adverbial phrases, inflections of voice, and other forms of shading meaning to convey that, which in some situation, was actually felt. Thus, the feeling and the thought, both psychic operations, are important but serve different functions for humans in much the same way that different parts of speech aid in sentence construction and shading meaning given to a specific situation or problem solving event.

James (1969) thought that evolution theory helped to reconnect higher mental functions with practical interests through the concept of the reflex action:

Cognition, in short, is incomplete until discharged in act; and although it is true that the later mental development, which attains its maximum through the hypertrophied cerebrum of man, gives birth to a vast amount of theoretical activity over and above that which is immediately ministerial to practice, yet the earlier claim is only postponed, not effaced, and the active nature asserts its rights to the end. (pp. 147-148)

Discharge theory gives place for emotions and practical action. As stated above, the reduction of tension assumes that there has been an inhibition which is relieved. Either an electric or hydraulic metaphor works equally well. In either case, a charge or pressure is believed to be built up and released by some action. In contrast, the continuous flow of life goes unfelt.

James’s concern with intellectual delight or torment related to doubt – unresolved mental ideation – was secondary to emotional expressions with more distinct bodily expressions. He thought that emotions must either be the result of separate and special
centers of the brain or that they must correspond to motor and sensory centers (James, 1884/1971). He asserted that the, “last alternative comes nearest to the truth, and that the emotional brain-processes no[t] only resemble the ordinary sensorial brain-processes, but in very truth are nothing but such processes variously combined” [italics original] (p.41). James indicated that emotions are a tendency to feel a certain way in the presence of some object. He challenged the conventional theory of emotions in his time which held that an object excited a mental perception and a mental affection, both private and individually possessed (James, 1985).

At the end of the nineteenth century, it was commonly conceived that the affective mental state then gives rise to bodily expression. James’s (1971), “thesis on the contrary is that the bodily changes follow directly the PERCEPTION of the exciting fact, and that our feeling of the same changes as they occur IS the emotion” [italics and upper case in original] (p.42). Here, PERCEPTION is a bodily instinct. It is still a part of the psychic apparatus, but if it is to be considered a cognitive function at all, it is a very low, or low-roads cognitive function because it is passive. The passive, exciting response to the environment is caused by some quality of the environment that has either been adaptive or maladaptive to the individual or the species and is an automata survival instinct devoid of active, high-cognitive psychic faculties of learning, acquisition, memory and inference, synthesis.

James (1971) drew on Darwin to address his primary concern, the origin of emotion, and his attempt to establish a physical reason for their expression instead of nonphysical psychological structures. Darwin’s theory changed the order of operation
from the common way of thinking about emotions. One might have commonly thought that an employee could lose their job security in a bad economy, are afraid, and then tense up or brace against the possible change ahead. James changed the order; he indicated that the feeling of fear is because of the bodily state that follows the perception. The perception produced the bodily condition directly. Therefore, the affective perception of an event need not be consistent with what is positively known by the cognitive apparatus (James, 1985). The two perceptual pathways in James can be clearly seen as an empirical approach to emotions (See empiricism and classic positivism in chapter 2). James (1894) asserts that emotion is brought on by a physical effect on the nerves: “The neural machinery is but a hyphen between determinate arrangements of matter [outside] the body and determinate impulses to inhibition of discharge within its organs…” He went on to say, “Now among these nervous anticipations are of course to be reckoned the emotions, so far as these may be called forth directly by the perception of certain facts” (p.44).

James (1985) asserted that, based on natural history, every animal has some instincts that operate like locks. In the case of pathological emotional experience, the nervous system is depicted as predisposed in some direction such that all objects are perceived in such a way as to elicit the psychic body of which the emotional complex consists. The emotion therefore was the feeling of a bodily state, “every one of the bodily changes, whatsoever it be, is FELT, acutely or obscurely, the moment it occurs” [italics and capitalization original] (James, 1985, p. 245). James (1971) therefore believed that if one could remove all of the feelings related to bodily response, there would be no emotional mind-stuff, only a neutral intellectual perception:
A purely disembodied human emotion is a nonentity... and the more it seems to me that if I were to become corporeally anaesthetic, I should be excluded from the life of the affections, harsh and tender alike, and drag out an existence of merely cognitive or intellectual form. Such an existence, although it seems to have been the ideal of ancient sages, is too apathetic to be keenly sought after by those born after the revival of the worship of sensibilities, a few generations ago. (p. 46)

In this quote, James does not seem to disregard the possibilities of disembodied or disinterested thought. Rational mental structuring remains a possibility, and is in fact essential to James’s argument against his theory of emotions as being materially deterministic.

*Emotion and Value*

The treatment of emotions as a source of knowledge cannot be separated from its connection to human agency and morality. James (1985) resisted the claim that his theory of emotions is thoroughly materialistic (i.e., deterministic), instead asserting that it is a sensational process of inward currents: “Such processes have, it is true, always been regarded by the platonizers in psychology as having something peculiarly base about them” (p. 248). However, James (1985) asserted that they have their own worth, stating, “They carry their own inner measure of worth with them; and it is just as logical to use the present theory of emotions for proving that sensational processes need not be vile and material, as to use their vileness and materiality as a proof that such a theory cannot be true” (p. 248). This is important to his contingent moral philosophy.

To understand James’s intended defense of emotions as having value, it might help to return to Darwin’s (2005b) quotation of Kant in his own treatment of social development: “Duty! Wondrous thought, that workest neither by fond insinuation, flattery,
nor by any threat, but merely by holding up thy naked law in the soul, and so extorting for thyself always reverence, if not always obedience; Before whom all appetites are dumb, however secretly they rebel; whence thy original?” (p. 800).

Darwin’s quotation of Kant is useful in explaining James’s less explicit views on emotion. To James, the emotional perception does not appear to be blind, it is dumb. This does not mean that it has no intelligence, it means that emotions are limited in their articulation beyond primitive, instinctual cries. The expression of emotion predates the development of articulate language in the evolutionary scale. Emotion is not vile, it is just base. James does not challenge the platonizers of psychology for calling it base or basic, but for being vile or material. In Darwin’s developmental model, higher forms of cognition and social-moral judgment depend on learning and language, on an infinitely greater number of associations and articulations (see above). The emotional perception and expression in Darwin and James’s theories exists in continuity with higher articulations and rational functions.

The low cognitive nature of emotions is not because emotions have a limited range of articulation. According to James (1985) emotions and their varied expressions were brought on by the elements experienced and the physiological changes produced. Sensations and emotions are subjective. Because each individual may experience different parts of the whole situation, there is an indefinite number of emotions that different individuals can have. Any emotional expression can be seen as true or natural if it serves some purpose. There is not one ideal form or certain classification of emotional expression outside of the consideration of interests. James’s contingent subjectivism is applied to
emotion as well as to belief. Its value lies in its ability to solve a real problem. An
undirected instinctual reaction that works serves an unconscious purpose just as much as a
belief directed action that works serves an intended end.

Darwin’s evolutionary development by recapitulation and the conservative view of
logical dialectics both assume that later systems are more advanced and that they contain
the more mature form of earlier structures. Therefore, it is just as logical to James to argue
that emotions have a value, a kind of intelligence as do higher cognitive forms. However,
just because there is continuity, does not mean that there is not a major difference by
gradation. Higher learning and social development are important and must direct
behaviors and the accumulation of emotional energies for productive use. A quote is given
in the following pages that expresses this, but an excerpt from it may be helpful here:
“There is no more valuable precept in moral education than… to conquer undesirable
emotional tendencies in ourselves” (p. James, 1985, p. 250). From a moral standpoint,
James still seems to want for individual emotional reactions to be brought under the
direction of more highly developed mental and social sentiments in order to bring about
more than an individual good life. The mind gives order to an otherwise wild or
unstructured emotional reaction.

Higher psychic functions than emotional perception must be employed to
understand multiple interests and seek the common good. James’s (1971) evolutionary
depiction of value seems to draw on Darwin’s (2005b) treatment of social consciousness-
instincts in humans. He presented the tendency of humans as social animals to desire
approbation, but also identifies power and intent as important social values. Other humans
have the potential to treat the observer well (in accordance with my interests) or ill (to act against my interests). James (1971) indicated that once emotional pathways are established by such social interactions, different parts of the environment can set them off:

A nervous tendency to discharge being once there, all sorts of unforeseen things may pull the trigger and let loose the effects. That among these things should be conventionalities of man’s contriving is a matter of no psychological consequence whatever. The most important part of my environment is my fellow-man. The consciousness of his attitude towards me is the perception that normally unlocks most of my shames and indignations and fears. The extraordinary sensitiveness of this consciousness is shown by the bodily modifications wrought in us by the awareness that our fellow-man is noticing us at all. [italics original] (p.47)

In speaking of such bodily expressions, James can be seen as primarily taking on what he called *coarse* emotions – the more bodily expressed emotions brought on by incoming currents of sensation from their object. These emotions that are linked to stronger bodily perturbations include: anger, fear, love, hate, joy, grief, shame, pride, and various forms of these basic emotions. However, he also made room for more cerebral or more cognitive emotions, which he calls the *subtler emotions*.

James (1971) asserted that viewing emotions as a bodily reflex to an object can explain how even intellectual, moral, and aesthetic objects can fall under this evolutionary model. Moral, intellectual, and aesthetic feelings were considered to have a milder bodily reverberation, and were therefore considered to be more subtle. The work of art, the product of one’s labor, the mental puzzle solved is the object of the sensation whether the pleasure or displeasure is acute or benign. For, “Unless we actually laugh at the neatness of the demonstration or witticism; unless we thrill at the case of justice, or tingle at the act of magnanimity, our state of mind can hardly be called emotional at all. It is in fact a mere
intellectual perception of however certain things are to be called—neat, right, witty, generous, and the like. Such a judicial state of mind as this is to be classed among cognitive rather than among emotional acts” (James, 1985, p. 252). Whether high or low, emotions ARE the perceptions of bodily changes while high cognition is a judicial or linguistic function of mind that actively pursues more rational structures.

This does not mean that all emotional experiences are desirable, just as much as it does not mean that they are all undesirable. The valuation of the emotion is at least in part contingent on the situation. Discharge theory, as an evolutionary model of emotions does not guarantee progress – it explains how the process of progress is possible. James (1985) pointed out that both undesired and desired emotional states can build on themselves through their repeated physical experience. In other words, both serviceable (Darwin, 2005d) and unserviceable emotional states can become habituated. The experience of success in writing or other work tasks can embolden a more courageous approach the next time, whereas failure can begat discouragement when approaching the task again.

James (1985) applied the principle of antithesis as a way to redirect the emotional energy into a productive channel; if one desired to change their situation, they should act as though it had already changed:

There is no more valuable precept in moral education than this, as all who have experience know: if we wish to conquer undesirable emotional tendencies in ourselves, we must assiduously, and in the first instance cold-bloodedly, go through them the outward movements of those contrary dispositions which we prefer to cultivate. The reward of persistency will infallibly come… Smooth the brow, brighten the eye, contract the dorsal rather than the ventral aspects of the frame, and speak in a major key, pass the genial compliment, and your heart must be frigid indeed if it does not gradually thaw!” [italics original] (p. 250)
In cases where going through the motions of emotions (either coarse or subtle) did not seem to elicit the actual experience of the emotion, the inability to call upon the involuntary and unconscious elements of their physical expression was given as the reason for the exception (James, 1971). James applied Darwin’s principle of antithesis to social education as a way to show how active, conscious, psychic processes can direct or channel emotional energies that have potential for good but lack purpose and judgment in their psychic function.

The evolutionary explanation for morality is that the naturally psychic equipment allows for directed thought and action. It allows the individual to make the world they want to see. In response to the question “Is life worth living?”, James (2007) asserted that the answer was in your beliefs: “the part of wisdom as well as of courage is to believe what is in the line of your needs, for only by such beliefs is the need fulfilled…You make one or the other of two possible universes true by your trust or mistrust—both universes have been only maybes, in this particular, before you contribute your act” [italics original] (p. 272). To James, life “feels like a real fight—as if there were something really wild in the universe which we, with all our idealities and faithfulnesses, are needed to redeem” [italics original] (p. 273). The psychic mind must be converted into a goal directed belief that can redirect negative emotions and get them on the path towards the good life.

**Empirical Reductionism**

Building on Darwin’s theory of emotions, James (1985) asserted that contemporary emotional expressions were of two origins: 1) vestigial, weakened actions that were once useful to the subject; 2) movements or expression that were necessarily combined with
other useful actions (e.g., the bearing of teeth and the drawing back of the ears when prepared for a fight.) Therefore, the physical expression of fear or anger could be explained by a formerly adaptive survival technique. From Darwin into James, the theory of recapitulation finds some currency. Lower or more primitive emotional expressions such as the infant’s contraction of the brows to protect the eyes when sobbing continues to be associated with the displeasure even in more benign forms such as an adult’s frown. While the screaming and weeping may be restrained in some cultures, frowning can hardly be restrained at any age (James, 1985).

James (1985) also critiqued Darwin, citing his shortcoming in the area of response to similar or analogous stimuli. James asserted that the physical emotional expression can take on a symbolic meaning that can be utilized in relationship to objects with very different natural qualities. As an example he cited a primitive form of communication; affirmative and negative nodding of the head. James sought to identify the original sense fact behind this physical form of communication. According to his observations and explanation, the infant moves its head horizontally from side to side when expressing displeasure – an attempt to keep something unpleasant out of its mouth. Likewise, the head comes forward as though with a suckling smile when affirmingly taking the food into its mouth. Thus, James (1985) concluded that, “The connection of the expression of moral or social disdain or dislike, especially in women, with movements having a perfectly definite original olfactory function, is too obvious for comment” (256). The strong connection of the coarser emotions with femininity continues in the writing from Darwin to James, as the more primitive or basic bodily expressions are believed to persist with less
restriction or development in women than in cultured or cognitive males. James (1971) stated that, “when we teach children to repress their emotions, it is not that they may feel more, quite the reverse. It is that they may think more; for to a certain extent whatever nerve-currents are diverted from the regions below, must sell the activity of the thought-tracts of the brain” (p. 50). Here, James seems to be drawing on Darwin’s inverse relationship between instinctual habits and higher mental faculties.

James (1971) questioned whether the pursuit of truth, of right, of pure cognition would bring about the good life. James began to tackle a different problem than Darwin was engaging; he began to struggle with a contingent relativism in earnest. His own experience of life, as in Darwin’s, led to some confliction over the desire for both high and low emotional pleasures. This tension led James to focus on individual personality differences related to their psychic constitution – both cognitive and emotional psychic processes – where Darwin’s problem with slavery led him to focus on continuity. James noted that the consummate art critic and the scientist had a keen desire to identify the right or best form, and their intellectual pleasure might be so subtle as to be hardly felt. In contrast, the uncultured, the Philistines, might experience analogous triumphs and defeats in a much more bodily way (James, 1971).

According to James’s psychology, Darwin might have been right in asserting that if he had been a person of higher intellectual constitution, he might have been able to have kept his appetite for lower emotional pleasures at bay. Like Darwin, James (1997) seemed to feel that his life was impoverished by his own philosophy and psychology of emotion: “philosophy must favor the emotion that allies itself best with the whole body adrift of all
the truths in sight. I conceive this to be the more strenuous type of emotion; but I have to admit that its inability to let loose quietistic raptures is a serious deficiency in the pluralistic philosophy which I profess” (p. 229). It is not clear that, despite his comments about moral education reshaping emotions above, James can completely resign himself to the idea that one personality type is higher than others. James’s (2007) moral philosophy departs from Darwin’s in this point: that no moral philosophy could be forwarded that would be universal because “personal temperament will here make itself felt” (1969, p. 150). James believed that variation in the emotional constitution of humans might push individuals towards idealism or materialism, social obedience or creative departure. For better or for worse, eternal variations caused by individual differences within a species guarantee an ongoing, emerging tension and release replete with the potential for ongoing emotional experience.

Much of psychological research for the next 100 years built on aspects of James’s interpretation of psychology of emotions (Solomon, 2007). It adopts his empirical contingent, subjective approach in relationship to cognition and emotion in differing degrees and the balance between teleology of past, present, and future swings between and within the research clusters. Much of the psychological research does not appear to have concerned itself to a great extent with James’s more pragmatic natural philosophy and its relationship to perpetual tension and variation. The high place James afforded to cognition and learning still seems to give them a way out, a way to maintain some faith in a distant ideal - an optimistic stance that James (2007) finds to be necessary.
In the chapters that follow, theories related to the intersection of organizational change and learning theory are explored to describe how the relationship between cognition and emotion is treated. The three clusters emphasize different aspects of James’s version of Darwinian psychology. Behavioral materialists (see chapter 4) focus on the material and associational aspects. One sub-group focuses on the external environment including objects and/or events. The other sub-group incorporates individual differences and seeks to train individuals up to their potential through associative learning via stimulus-response. In both clusters, emotion is a passive response to the environment that can be controlled by associative learning. The individual developmental (see chapter 5) approach draws more heavily on individual differences as psychic or personality constructs. The development of more rational individual’s mental structures through their personal history with the world and the psychic organization of more internally logical mental models in keeping with basic structures of times, space, and causality creates the opportunity for improved equilibrium. More desirable emotional expressions follow the improvement of the actively and individually constructed mental schemes. In the social developmental cluster (see chapter 6), the unit of analysis broadens to consider the interaction of social experience of the material world and the development of a systemic logic or rational structure through social consciousness, knowledge, rationality, culture, and/or role behaviors. This systems perspective takes more material and social forces into account, hoping to establish a more lasting equilibrium at the social or systems level. Again, emotion is conceived of as an energetic force to be directed in order to improve the organization of the system.
The presentation of metaphysical approaches in ancient Greek thought and its transition to more epistemological concerns after Descartes provided a foundation for understanding the treatment of the relationship between cognition and emotion in Darwin and James’s psychologies. The dualistic assumptions about higher cognitive developments and lower, more primitive emotional psychological processes can still be seen even though the line of distinction is somewhat blurred. The figure in appendix C helps to depict the hierarchical arrangement of the various psychological processes. Where the previous chapter provides some philosophical foundations, this chapter helps to connect these assumptions to the early development of the psychological field. Darwin and James’s psychology provides a foundation for the theories in the following chapters. Dewey’s critique of the dualistic classification of higher cognition and emotion is presented in chapter 7 as an alternative psychological approach to human experience that may be useful to further theory and practice.
Chapter 4: Behavioral Materialism

Introduction

In the mid-nineteenth century—later, depending on what part of the United States one considers—industrialization, urbanization, and increasing acceptance of the scientific method had dramatic effects on education and society *writ large*. For example, according to Merriam and Brockett (1997), the modern conception of adulthood did not emerge as a distinct stage in the life cycle until the years following the Civil War, when the move from sustainable agrarian means of productions shifted to an emphasis on urban centers and the industrial factory. They later indicated that the new industrial society created a context in which secondary education becomes more vocationally oriented. Instead of a classical, liberal philosophy of education, schooling was viewed by some as a method or mechanism for preparing a workforce that could increase efficiency and productivity.

In pursuit of efficiency, the scientific method was applied to organizations and human behavior - the goal being to identify universal laws that governed production and altered technology and human behaviors to manufacture the desired effect. This approach was particularly essential in the context of the factory and the emergence of the assembly line as a means of production. In this paradigm, “Humans are viewed as malleable, to be shaped to the needs of the organization. Once the laws are codified, people may be taught to apply them in a given situation…” (Cayer & Weschler, 2003, p. 10). Others in this
paradigm seek to identify laws of production and shape environmental stimuli to generate the desired response from employees.

The behavioral paradigm is really a cluster of theories based on empirical and materialist assumptions about the world. This orientation towards the world can be seen as primarily building on externalist epistemological assumptions, though some internalist ideas are incorporated through logical positivism. One sub-group seeks to incorporate individual, genetic differences when addressing stimulus response mechanism. This approach can be seen as influenced by neo-Darwinian developments in biology related to genetics as well as James’s interest in individual differences in psychology. The second group, strongly influenced by logical positivism, believed that inquiry into processes and subjective/individual differences was fruitless and pre-scientific. It can still be seen as part of the Jamesian psychological family. It focuses on specific objects and environmental stimuli that might empirically cause behaviors. Both psychological approaches depict an empirical hierarchy of forms of perception that classifies some higher perceptual adaptations as more clear, accurate, and therefore intelligent and others forms of behavioral perception as contingent, subjective, and given to distraction. The philosophical and psychological assumptions presented in chapters 2-3 and the figure in appendix C may aid the reader in identifying some of the influential assumptions that are contributing to a continued dualistic depiction of higher cognitive and lower emotional adaptations.

In order to give some historical context for the individual difference approach, the behavioral treatment is introduced via Frederick Taylor. A treatment of Taylor’s (1890s-1920s) organizational change approach and the application of his Scientific Management
principles provides a snapshot of the rising empirical, behavioral sentiments in at the turn of the nineteenth century. A treatment of early intelligence research is also presented to give a background to Thorndike’s assertions about learning and intelligence. Thorndike’s behavioral approach to adult learning and emphasis on individual differences is then given as an influential approach to behaviorism. The section on individual differences focuses on an area of behavioral research particularly germane to this project, Emotional Intelligence (EI). The second section presents a behavioral tradition influenced by positivism in the early 1900s. Some background on positivism is provided as well as Watson’s influence on this line of behaviorism. The section then considers Skinner’s attempt to fold mental operations and emotional expressions into a strong behavioral conception of stimulus-response patterns. Some contemporary organizational theory that builds on Skinner’s work is also presented.

Behaviorism and Individual Differences

Scientific Management

Taylor was a mechanical engineer who began to look at work functions at the end of the nineteenth century. He started a new profession, which he called consulting engineers, by combining his engineering experience with consulting skills (Dean, 2001). The scientific management movement that was attributed to him focuses on productivity and efficiency. Assumptions about the world including the supremacy of reason, the economic motivation of individuals, and the importance of production leads to empirical studies of work situations to find the best behaviors to accomplish the work in an efficient manner. The Taylor System, which Taylor preferred to call scientific management, was
often portrayed as a mechanistic approach in which people were viewed as cogs in the wheel; one of the indictments was that it focused on limited and clearly identified ends and a narrow view of individual behavior in which only work activities impact the organization (Cayer & Weschler, 2003). Yet, it is important to consider the appeal and merit of Taylor’s work within the context of its development.

Taylor was breaking new ground, introducing organizational change consulting in response to the rapid change associated with industrialization in the 1890s. In the 1880s, most engineers were interested in differential wages, a focus that Taylor called “initiative and incentive” (Taylor, 1947b, p. 35). He indicated that it would be a difficult task to persuade managers of any other management theory. Taylor was interested in piecework and the manager’s role in increasing organizational efficiency. He believed that managers could help increase productivity and lighten labor’s efforts by more than just using premiums and bonuses to stimulate performance. His 1903 paper *Shop Management* (Taylor, 1947b), presented to the American Society of Mechanical Engineers (ASME), addressed a specific audience which had largely ignored the managerial component of his assertions in favor of his description of piecework. The engineer executives within the ASME at this time consider matters of social significance to be extraneous and required concise papers focusing on the mechanist aspects (Taylor, 1947a). Here, the prevailing opinion in organizational studies is shown to emphasize classic positive emphasis on verifiable objects instead of material, individual, or social processes. During the years that followed, Taylor’s methods were debated and much controversy surrounded the Taylor System. As a result, Taylor published *Principles of Scientific Management* (Taylor,
1947c) in 1911, and Taylor was asked to give testimony to a special committee of House of Representatives during the winter of 1911-1912 to speak to the generalizability of his claims (Taylor, 1947d).

Taylor asserted that management at the turn of the century still had an old view that the right man could be safely left to oversee the organization’s method. Instead of this Great Man mentality, Taylor suggested that management is an art with laws as exact and fundamental as those of engineering (Taylor, 1947b). It may be worth noting what may seem like an ironic juxtaposition of art and fundamental laws. Taylor seems to be extending a positive view of natural science to the humanities and arts. He set out to codify those laws and establish procedures that would restrict creativity for almost all workers. Taylor defined the art of management, “as knowing exactly what you want men [sic] to do, and then seeing that they do it in the best and cheapest way” (Taylor, 1947b, p. 21). Taylor advocated higher wages and lower labor costs as congruent with and dependent on improved managerial practices. He was concerned both with the organization’s needs and the welfare of the employee, but his positivism led to a belief in verifiable facts and laws that would restrict the interactions and agency of workers.

Taylor believed that employees slowed production down—what he called loafing or soldiering—because of a natural instinct for people to take it easy (natural soldiering) and because of the relationship with other workers (systematic soldiering). He was “forcibly convinced of the necessity for a change” by his observations of peer pressure related work slowdown (1947c, p. 67). Since there was very limited mobility within pay classes, Taylor asserts that there was little incentive for productivity. Employees felt that if the manager
knew that they could do more, they would be required to do so without increased compensation. Furthermore, if there was a limited amount of work in an area, workers might run out of work and have no means for supporting their families. Taylor (1947b) asserted that management systems of his time were defective and made systematic soldiering necessary to protect the workers’ basic needs and self-interests. Here the problem that Taylor seems to identify is not the fixed interactions between employees but their motivation within these fixed organizational classes.

Taylor (1947b) posited that there should be standard conditions, high pay for success, and loss in the case of failure. He thought that there was no reason to doubt that people perform best when they have a definite task to accomplish within a specific period of time and applies this principle to both physical and mental work. He asserted that the most important task is training each individual up to the natural ability that the worker has. In both physical and mental constitution, Taylor focused on individual differences in constitution, but remained optimistic that the basic continuity between individuals means that all workers can be improved through training. Taylor continued to be criticized for overemphasizing the worker as the cause of productivity (Dean, 2001).

While his principles may not have been realized, it is important to note that a careful reading of Taylor’s (1947c) conception of the greatest prosperity included the maximum productivity of machines and that he stated that under scientific management, “fully one-half of the problem is ‘up to the management’” (p. 39). Furthermore, he acknowledged the risks associated with attempting to change from old to new management systems. Taylor (1947c) stated that the:
really great problem involved in a change from the management of ‘initiative and incentive’ to scientific management consists in a complete revolution in the mental attitude and the habits of all those engaged in the management as well as the workmen. And this change can be brought about only gradually and through the presentation of many object-lessons to the workman, which together with the teaching which he receives, thoroughly convince him of the superiority of the new over the old way of doing the work. (p. 131)

Taylor went on to say that revolutions in mental attitude had to happen one worker at a time and that once one-fourth to one-third of the organization is changed over, rapid progress can be made because workers under the old system come to desire the benefits of the new way of working. A cascading stimulus-response pattern seems to ensue as the successful adaptation of some become the new object-lesson for others. This model of mental revolution is based on the transmission of desirable mental objects from the teacher to the student, replacing inferior thoughts with superior ones. Here, Taylor’s theory seems to provide a material, objective explanation for individual learning through new individual mental associations and a social revolution in consciousness based on the spread of individual habits throughout the system.

Even in regards to a need for mental revolution, Taylor implicated both worker and manager. While testifying before the Special Committee of the House of Representatives, Taylor (1947d) specifically indicated that the change to scientific management requires, “the equally complete mental revolution on the part of those on the management’s side—foreman, the superintendent, the owner of the business, the board of directors—a complete mental revolution on their part as to their duties toward their fellow workers in the management, toward their workmen, and toward all of their daily problems” (p. 27). It seems reasonable to conclude that mental revolution in these cases would likewise require
the transmitting of superior mental objects from some empirical scientist, teacher, or consultant to the managers, owners, and leaders of industry.

The way in which scientific management is sometimes presented today and the way that it was conceived by Taylor’s contemporaries is different than what he had in mind. In his testimony, Taylor (1947d) listed many things that are important to, but are not the essence of, scientific management. These components continued to influence management practice. To cite a few, he mentioned new systems to figure cost, piecework systems, new schemes for paying workers, time motion studies, and procedures for system change. The “essence of scientific management,” he stated, is “this great mental revolution” (1947d, p. 27). Acknowledging the broader aims of scientific management is not intended to idealize Taylor’s work, but to show its implication for change theory beyond the study of physical movement and environmental stimuli. Material objects also needed to be understood in order to train cognitive or mental behaviors as well as physical work. The negative impact of rigid hierarchical structures and piecework supported by Taylor’s theories should not be overlooked; nor should the consequences of objective views of knowledge. In both instances, external authorities are needed to scientifically identify either the right way to act or think and convey them to passive recipients.

Conformity to organizational needs within a rational, hierarchical organizational structure is achieved by directing or ordering individuals to act or think in specific ways that are justified by empirical facts. According to Cayer and Weschler (2003), the mechanization of work at the beginning of the nineteenth century resulted in hostility by workers: application of time motion studies, piecework, and behavioral modification
through directive training made employees feel like cogs in the wheel. They went on to say
that as a result, the Human Relations School was developed in order to look at
environmental effects on worker’s behavior and productivity.

Industrial psychologists were tasked with this new responsibility. According to
Cayer and Weschler (2003), “The concerns of the industrial psychologist were the same as
those of the Scientific Management School, namely, efficiency and productivity of the
employees” (p. 101). Industrial psychologists treated the work environment as a generic
stimulus to which workers would respond according to universal laws. The, “role of the
industrial psychologist was to aid in the selection of the best employee, examine the effects
of the work situation, and help to design optimum working conditions” (Cayer &
Weschler, 2003, p. 101). Beyond physical ability, aptitude related to intelligence was also
seen as an important point of individual differentiation in this tradition. The next section
provides some background for behavioral pursuits in this vein of research.

Early Intelligence Research

Taylor’s enduring influence is rooted in his assertions related to differences in
individual physical ability and attempts through study of physical movement to maximize
these potentials. During roughly the same period, others sought to identify individual
differences related to intelligence in order maximize mental achievement. Like Taylor,
Binet believed that his efforts in empirical, intelligence research could help to improve the
situation of those he studies, but others applied his methods to restrict and group
individuals to forward organizational aims. Behavioral industrial psychology emerged
primarily in response to dissatisfaction with application of scientific management (Cayer &
Weschler, 2003), but dissatisfaction with treatments of intelligence are probably more appropriately traced back to applications of Binet’s work (e.g., Thorndike’s (1920) concern was related to general intelligence measures, not Taylor’s mental revolutions). Therefore, a few words are included about the early developments in intelligent research.

Binet (1857-1911) was one of the pioneer psychological researchers of general intelligence. He began as a student of Craniometry, the measurement of the volume of the human skull as a predictor of intelligence. After several studies, Binet became disillusioned with the prevailing medical measure of intelligence and began to investigate psychological measures (psychometrics). Research in this area at this time is minimal and indecisive (Gould, 1981). Binet included a series of practical questions to evaluate the mental age of participants. He compared the individual’s score with the average score for different age groups in order to determine the participant’s mental age (Piaget, 1973). The mental age could then be compared with the chronological age to determine capacity.

These methods provided the foundation for Intelligence Quotient (IQ) tests. Binet sought to measure purely innate, genetically rooted intelligence separate from educational experience and cautioned against the general application of the measure beyond its contextual application (Gould, 1981). It may be worth noting Descartes’ concern with innate, a priori knowledge and Kant’s subjective idealism as possible influences to such a genetic interpretations (see chapter 2). The close parallel to Baldwin’s material, empirical explanation of genetic logic might also be seen as sharing assumptions with Binet’s approach to knowledge (see chapter 3). Binet’s intent was to identify poor performing students for additional services, not to label or restrict them. He warned against the
misapplication of his work. Despite Binet’s forewarning, IQ testing becomes a way of measuring general intelligence for the purpose of tracking and grouping individuals based on innate intelligence, considered to be a biological/hereditary trait – an individual variation or difference (Gould, 1981).

Binet’s account of intelligence differed from prominent philosophical, non-genetic conceptions of intelligence. Though he shares a method of introspection, he obtained different results than the apriorists who come to see intelligence as a “mirror of logic” (Piaget, 1973). Binet did not find ready-made ideas outside of human experience to which intelligence assimilates. Instead, his controlled introspection led to awareness of imageless, unconscious thought. Recalling the empirical position on knowledge from chapter 2, these clear perceptions would be the result of an unconscious impression of the primary quality of an object instead of a secondary quality that was bound up with other qualities of the external situation. However, his introspection did not lead to descriptions of how these clearer thoughts might be retained or constructed into increasingly logical mental structures. Piaget (1973) affirmed what Piéron pointed out: “intelligence conceived in these terms is essentially a value-judgment applied to complex behavior” (Piaget, 1973, p. 154).

Spearman sought to identify the correlation between different intelligence tests in order to discover what factor might be the most influential (Gould, 1981). The most recognized of the factors was a general degree of efficiency, general intelligence or the $g$ factor (Piaget, 1973). Conceptions of general intelligence usually include high-road cognitive factors including reasoning, language, memory, visual perception, and auditory
perception. The classification of *high-road* can be seen as a way of indicating that these psychological behaviors are related to the higher, more recent and mature mental developments that are of particular interest in Darwin’s psychology (see chapter 3 and Darwin, 2005b). Mathews et al. (2004) describe general intelligence as a “general competence of the mind (mental ability) or of higher-order faculties such as understanding, reasoning, problem-solving, and learning, especially of complex, structured material (cognitive ability)” (p. 59). In addition Darwinian assumptions, this list of higher mental faculties is also in keeping with Peirce and James’s depiction of a high cognitive function that is distinct from sensory-motor and emotive psychic forces (see chapter 3). This form of intelligence usually focuses on mental manipulation of information and is distinct from activity principally involving physical, emotional, or social characteristics. Stanford adds to Binet’s work and developed a scale called the Stanford-Binet. Terman later standardized intelligence tests and extended their use to adults. Terman’s work became the standard for validating other intelligence measures (Gould, 1981).

General intelligence testing was applied broadly with interpretations of predictive ability across multiple dependent variables. The application went far beyond Binet’s intent to identify struggling French students. Over the last century, the tests have been used to decide who had leadership potential, who should receive continued education, who should engage in manual labor, and even who should be institutionalized (Gould, 1981). The wide use and potential abuse of general intelligence testing concerned some people from inside and outside of the behavioral-materialist research strand. In response to the simple, empirical measures of general intelligence, some researchers sought to identify other forms
of intelligence that \( g \) did not capture. This critique questions whether a single measure prevented one from seeing the potentially different types of intelligence, and therefore the capabilities of individuals who might not score well on general intelligence tests.

Thorndike (1920) was one person who expresses this sentiment.

**Thorndike**

Thorndike was a contemporary of Taylor and his work overlaps with the end of Binet’s. He sought to give a systematic account of human nature and behavior in order to inform education and other forms of “human control” (Cremin, 1969, p. vii). In order to better understand behaviorist conceptions of learning and change, a brief treatment of some of his foundational writings on human nature and what he considered to be the facts of the psychology of learning and the laws of learning in general is beneficial because Thorndike serves as a mooring point for many later theorists. Three volumes of Thorndike’s early work were reprinted in a compilation. The first volume *The Original Nature of Man*, which included several lectures given at Union College, was published in 1913 (Thorndike, 1969a). The second volume, *The Psychology of Learning*, gives specific attention to the universal laws that Thorndike (1969b) argued control learning in general; this volume was also originally published in 1913. Finally, the third volume is a reprinting of Thorndike’s (1903) *Educational Psychology*. In the compilation, the volume is titled *Individual Differences and Their Causes* (Thorndike 1969c).

Thorndike (1969a) indicated that the arts and sciences help humanity to improve by developing an understanding of human nature and of the laws which govern and change it. Here Thorndike can be seen as addressing the concern for explaining the relationship
between the high arts and science as adaptive benefits in the evolutionary process

(Compare to Carroll’s (2003) concern with Descent in chapter 3). He described human nature and changes that took place in it:

in terms of the responses – of thought, feeling, action and attitude – which he [sic] makes, and of the bonds by which these are connected with the situation which life offers. Any fact of intellect, character or skill means a tendency to respond in a certain way to a certain situation – involves a situation or state of affairs influencing the man, a response or state of affairs in the man, and, and a connection or bond whereby the latter is the result of the former. [italics original] (p. 1)

Here, Thorndike’s depiction of recollection is clearly materially grounded as in James’s empirical depiction of intellectual bonds as the potential to recall a reflex act or response to the environment with its past surrounding or environment (James, 1950). Thorndike also believed that all intellect, morals, and bodily movements were the consequence of human constitution from inception (material human nature) and of the surrounding forces that act upon the individual (material environment). This included the natural response to some objects as fear until it is altered by environmental training (Thorndike, 1969a). The aim of education and other forms of human control within this paradigm is to change the situation-connection-response series through behavioral modification in order to unlearn undesirable, original instincts through disuse and negative association and to reinforce positive behavior – including thoughts and feelings – through repetition and reward.

Thorndike’s (1969b) presentation of the aim of education is in keeping with his beliefs about the laws of habit. The two rules for learning that emanate from habit were: 1) Things that go together should be put together and keep apart those things which are different; and 2) Desired connections should be rewarded and undesired connections
should produce discomfort. The laws of habit are important to an understanding of
learning in the context of novel or changing situations. In a novel situation, the individual
reacts in keeping with bonds already possessed related to situations like the new situation
or some element of it. Differences were then dealt with in a way that previous novelties
were treated - staring, examination, and consternation. Perhaps one of the most readily
recognizable images of this tendency can be seen in Bush’s reaction to the news of the
attacks of 9/11 while he was reading to elementary students.

Thorndike’s depiction of the inhibition for action and the unpleasantness of such
inhibition seems to share many assumptions with James’s psychology. According to
Thorndike, these habits produce wonder and an instinct of learning. By this same process
of satisfying and annoying, patterns of association can be shifted to new responses.
Associative shifting occurs by dropping one element of the situation and adding others
until the desired response pattern is adopted (Thorndike, 1969b). Mental, emotional, and
other behavioral responses to change and novelty can then be adjusted through the
manipulation of the stimuli. In this point, there is a diversion in emphasis from James (see
chapter 3). Instead, of directing the emotional-motor sensory response with higher mental
processes, the classification and control of external stimuli is the way that mental,
emotional, and behavioral responses become more adaptive. This positive approach can be
seen as more empirically reductionist than James’s theory which gave greater emphasis to
psychological processes.

Higher cognitive classifications, such as reason, are convenient labels for cases of
behavior where some stimulus is primarily responsible for creating a given response
Thorndike (1969a). Thorndike (1969b) asserted that even learning through inference is based upon laws of readiness, exercise, and effect and that it is only an extreme case of associative learning resulting from the “piecemeal activity of situations” (p. 36). Again, the retained bond is only the possibility for thinking it again being struck by some similar environmental stimuli and thus having a belief about how to act; it is readiness and potential to act in keeping with a retained belief (see Peirce and James chapter 3). Analytic and selective learning occurs as elements of a stimulus are given potency and focus. Humans do not encounter any external situations which impose themselves completely on the observer. A reasonable response to novelty or change depends on the elements of the situation that receive attention and for which bonds of association are employed (Thorndike, 1969b).

Thorndike was specifically concerned with the efficiency of physical and mental work. As in Taylor’s scientific approach, there is an assumption that a more accurate, clear perception of the right way to act or think will make organizational and social progress possible. He believed that properly distributing pieces of work to individuals who are fit to engage in it will reduce resistance and increase efficiency. He asserted that resistance blocks mental work and that it can be reduced by increasing motivation and interest. Efficiency can be improved by connecting one’s work with their desires and the relationship of work to sociability (Thorndike, 1969c). When addressing the factors and conditions of improvement, Thorndike (1969b) presented five commonly accepted aids and two which he defends but admits others might dispute. He indicated that interest in work, interest in improvement, significance, problem-attitude, and attentiveness all
contribute to improvement. He also presented absence of irrelevant emotional excitement and the absence of worry as two additional aids. Further addressing the significance of emotions, Thorndike (1969b) stated, “In the case of intellectual functions, the balance of opinion is that apart from the eager but quiet zest for the work itself and for success in it, all emotional excitement is distracting…” (p. 128). Emotions are irrelevant and distracting because they are not a part of the active, high cognitive apparatus – they are bodily perturbations felt as emotions. Here the dualistic hierarchy of mind and body continues to be evident even though the empirical treatment makes both mind and body natural material developments (see chapters 2-3).

Thorndike (1969a) gave specific attention to the role of emotion and social stimuli in the development of an individual’s situation-connection-response series. The behavior of other humans provides one of the most powerful forces for and against education and social reform work because many of the situation-connection-response series are influenced by the experience of other’s response to stimuli. As an example of social stimuli, Thorndike (1969a) indicated that sympathetic emotion in children was almost completely of a simple kind, and that it continues to be a response to the expressions of feelings and emotions of others. In this view, some emotion was not simply materially instinctual, but also an adaptable habit capable of responding to the perceptions of bodily expressions of emotion in others in varied ways. In Thorndike’s work, other people’s stimulus-connection-response series could then be the stimulus for an individual’s emotional behavior and the bonds of association that develop. Emotional response, like other behaviors, could be shaped by changes in retained, higher cognitive bonds. Here the
focus is on deterministic bonds instead of a dialectical development of social ideas, feelings, or actions. Still, the emotions of others in a given system is a powerful force either for or against learning and change because they can either stimulate zest for learning and efficient work, or emotions can distract from efficiency and productivity. In this view, cognition is a source of agency and knowledge which is able to relegate emotional, energizing psychic functions by shaping the material environment (including other people). Emotion’s potential is in the cognitive harnessing of these wild forces to direct it toward a zest for higher-cognitive functions.

Thorndike (1920) was concerned with the narrow intelligence research that focused on abstract reasoning:

A perfect description and measurement of intelligence would involve testing man’s ability to think in all possible lines, just as a perfect description of mineral wealth of a state would involve adequate testing for iron, copper, gold, silver, lead, tin, zinc, antimony, petroleum, platinum, tungsten, iridium, and the long list of rarer metals. For ordinary practical purposes it suffices to examine for three ‘intelligences’, which we may call mechanical intelligence, social intelligence and abstract intelligence. (p. 228)

Social intelligence, as mentioned by Thorndike, becomes an area of research interest from 1920 until present. Today, many emotional intelligence theorists seek to anchor their work in Thorndike’s brief comments. However, Thorndike’s choice of social intelligence in his list does not seem unintentional; it seems to be consistent with the assumptions of Darwin and James regarding the synthesis of material empiricism with Descartes’ depiction of the human body as having some automatic and some intentional mechanisms (see chapter 2-3).
Multiple intelligences and emotional intelligence research anchors its heritage in Thorndike’s (1920) concern with a singular approach to intelligence. The foundation for Thorndike’s suggestion was the desire to see intelligence measured in such a way that it allowed for the maximum diversity of expression and context (Landy, 2005). Thorndike noted that traditional intelligence tests emphasize verbal content and that other media might be valuable to the study of intelligence. Specifically he emphasized the importance of real situations involving real people so that intelligence is situated in the activity and behavior of humans. In keeping with James’s theory of intelligence, the focus of abstract mental manipulations without powerful practical and emotional tendencies was absurd (see chapter 3). Though much of the emotional intelligence literature seeks to root itself in the comments of Thorndike in Harper’s Magazine, it often fails to incorporate Thorndike’s desire for more situated study of human behavior.

Following Thorndike’s 1920 comments about alternative raw material forms of intelligence, there was a modest amount of research by others seeking to develop a construct for social intelligence. R. L. Thorndike, a noted psychometrician and son of E. L. Thorndike, indicated that only ten studies related to social intelligence are published between 1920-1937, and that most of them were about one specific measure (Thorndike, R. L. & Stein, 1937). One of the earliest concerns about social intelligence as a construct was that it was not differentiated from personality and that a heavy emphasis on verbal ability made it indistinguishable from other intelligence measures. By heavily loading on verbal abilities, measures designed to follow up on Thorndike’s assertions about other
forms of material intelligence narrowly tested intelligence in the exact way against which he wrote.

The validity of social intelligence measures continues to be a source of debate throughout the last century of behavioral research. By 1960, L. J. Cronbach called for a moratorium on research related to social intelligence. Cronbach thought that enough resources had been spent on the fruitless line of inquiry. After forty years, he indicated that the construct still lacks a theoretical framework and the data was disappointing. Despite the lack of verifiable scientific support, social intelligence continues to be lauded as an important if not superior determinant of individual success in multiple areas of popular culture for another forty years (Landy, 2005). While social intelligence seemed like an important construct, finding ways to positively measure it proved to be an insurmountable challenge for over eighty years (Kihlstrom & Cantor, 2000).

Numerous theories of emotional intelligence emerged from social and multiple intelligence theories. Emotional intelligence is described and defined in different ways, at times by the same researcher (Mathews et al., 2004). Proponents of the construct almost uniformly seek to trace their heritage back to Thorndike (e.g., Mayer & Salovey, 1990; Goleman, 1995). Others challenge the use of Thorndike as a theoretical anchor for emotional intelligence, asserting that Thorndike’s comments about social intelligence are misconstrued and that he does not espouse multiple, but one unified intelligence (Landy, 2005). In as much as the concepts hold that there should be more than one venue for measuring intelligence and that intelligence is both innate (material-biological) and that its bonds can be trained (associative learning), the connection of emotional intelligence to
Thorndike may be appropriate. Other theorists suggest that the treatment of emotions in psychological research is based ultimately on James’s theory of emotions (Solomon, 2007). In this project, it is less important to link these assumptions to one specific person and more important to consider the cluster of beliefs that seem to be shared, influencing both theory and practice.

The link between emotional intelligence and Gardner’s (1983) multiple intelligences is less controversial. Gardner clearly forwards a theory of multiple intelligences which influences contemporary emotional intelligence constructs. In 1990, Mayer and Salovey introduced the term emotional intelligence (EI), and they continued to refine their model (Mayer, Salovey, & Caruso, 2000). They defined emotional intelligence as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them, and to use this information to guide one’s thinking and actions” (p. 189). This definition involves characteristics from Gardner’s (1983) inter and intrapersonal intelligences. Mayer and Salovey (1993) hoped that by focusing on emotional abilities, a distinction between general intelligence and emotional intelligence could be made. They also hoped that ability based (behavioral) research would yield better results than the social intelligence research to date which incorporated subjective personality measures. Mayer and Salovey (1997) continued to work on the construct, making the following adjustments to their original definition.

Emotional intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth. (p. 10)
In another attempt to clarify, Mayer (1999) spoke of EI as “the capacity to reason with emotion in four areas: to perceive emotion, to integrate it in thought, to understand it and to manage it” (p. 50).

Mayer and Salovey et al. (2000) described emotional intelligence as one unified intelligence with four subsections: 1) Emotional perception/identification gathered and encoded information for the system; 2) Emotional facilitation of thought utilized emotional information to improve cognitive processes and complex problem solving; 3) Cognitive processes are then focused on the emotions in the subset called emotional understanding; and 4) Emotional management, focuses on one’s ability to regulate one’s own and other’s emotions. This complex model involved components that range from high-road cognitive functions (more purely mental behaviors-psychological processes) such as emotional understanding or emotional management to lower-road cognitive aptitudes (more primitive behaviors-adaptations) such as emotional perception (Mathews et. al, 2004). High cognitive functions related to learning, understanding, directed attention, and directed-controlled emotional behavior seems to be in keeping with James’s division between active and passive psychic pathways, even though they are depicted more clearly as material behaviors (see chapter 3).

Emotional intelligence has also been studied and defined by Bar-On (2000) and Goleman (1995; 1998). Bar-On (1997) described EI as “an array of non-cognitive capabilities, competencies and skills that influence one’s ability to succeed in coping with environmental demands and pressures” (p. 14). Bar-On (2000) attempted to clarify the way that EI relates to social and emotional intelligence. He identified five factors that
facilitate behavior that is emotionally and socially intelligent: optimism, self-actualization, happiness, independence, and social responsibility (Bar-On, 2000). The following ten behaviors are said to relate to emotional intelligence: self-regulation, emotional self-awareness, assertiveness, empathy, interpersonal relationships, stress tolerance, impulse control, reality testing, flexibility, and problem solving. In other words, there are aspects of emotions that can be trained or shaped by higher mental behavior and social consciousness - not all areas of emotions-passions are purely instinctual.

While Mayer and Salover were perhaps the first to publish articles on EI in scholarly journals and Bar-On was the first to develop a commercial measure, Goleman was, without question, the one who made emotional intelligence a widespread concept. In the best selling, Emotional Intelligence, Goleman (1995) said that EI includes “abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one’s moods and keep distress from swamping the ability to think; to empathize and to hope” (p. 34). According to Mathews et al. (2004), this expansive definition is over-inclusive, impossible to integrate into one construct, and many psychologists contend that some of the qualities described in Goleman’s definition clearly fit within existing psychological study of personality traits. The constructs included in both Bar-On and Goleman’s include aspects of both Darwin’s assumptions of the essential role that higher mental developments and social consciousness would play in the triumph of social instinct over individual desires. Likewise, the empirical approaches to knowledge and organizational life share considerable assumptions with James’s emotional and moral theory calling for regulated emotional behavior.
Bar-On and Goleman’s representations of emotion are dubbed mixed models because critics point to the inclusion of personality, attitudes, and other abilities in their constructs (Mathews et al., 2004; Mayer, Caruso, & Saloovey, 2000a). Goleman (2006) more recently sought to redefine emotional intelligence, restricting its focus to intrapersonal attributes including self-awareness and self-management. Inter-personal characteristics were grouped into a separate category, social intelligence. Much of the interest in emotional intelligence over the last seventeen years can be characterized as commercial or popular psychology. Goleman and others are eager to assert that EI is a key determinant of effective leadership. Unfortunately, the data behind the assertions of these writers is not available for peer review. Commercial organizations like the Hays group and MHS and research communities like Mayer, Salovey, and Caruso provide marketable services, and the proprietary data derived from these interactions is not available for review. The problem is usually construed as a concern with scientific thoroughness - that these consultants claim predictive value for their measures of emotional intelligence without rigorous investigation from the research community (Landy, 2005). The focus seems to be on their causal inferences. However, a more covert concern seems to be that some interests are being served and that a dispassionate scientific community would be less likely to fall into bias and error caused by individual or corporate interests. The scientific community as a whole might find more accurate scientific facts. The concern among behavioral psychologists seems to be that he is taking on too much of James’s approach to differential psychic constitutions and processes instead of positive verifiable, objective empirical facts.
Despite the apparent problems of some strands of emotional intelligence research, Ashkanasy and Daus (2005) argued that emotional intelligence still has a place in organizational-behavioral psychology. They saw no need to retreat from the belief that emotional intelligence is a distinct form of intelligence, that it is an individual difference, that individuals can enhance their emotional intelligence through training, and that emotional intelligence is at least partially related to an individual’s ability to perceive emotion in self and others, as well as to understand how to manage emotions in self and others successfully. Ashkanasy and Daus (2005) concluded by asserting that emotion research has long been neglected and the vigorous debate and interest that exists around it is evidence of its importance in organizational studies.

The relationship between emotion, resistance, and organizational change is one such area of interest. Liu and Perrewé (2005) presented a process model for organizational change that looks at the role of emotion. Their model included the following points: 1) The primary appraisal of planned change induces intense emotional states of excitement and fear in employees and makes them hesitant to react behaviorally or attitudinally; 2) The primary appraisal and resulting emotional states can induce either excitement or fear depending on the form of communication by change agents; 3) When change is perceived as congruent, it is seen as potentially successful and less aversive; 4) Emotional arousal is related to employees’ ability to make sense of the change program; 5) In the secondary appraisal, perceived high goal congruence induces excitement and low congruence leads to fear; 6) Specific communication is more beneficial than general communication in stimulating accurate appraisal of change; 7) Excitement and proactive coping behaviors are
more likely to lead to desirable change outcomes than passive, fear induced behaviors; 8) External attribution of outcomes positively relate to fear, frustration, and anger; attributing outcomes internally relates to joy, pride, sadness, guilt, and shame; 9) The quality of communication in the primary and secondary stages of appraisal are positively related to internal attributions for change outcomes.

In this model, there is a clear distinction between primary and secondary stages of appraisal, active and passive emotional forms, and a focus on the congruence of environmental stimuli with previous stimuli related to retained, associated bonds. The similarity to James’s approach is striking, to use an empirical description of the similarity. The primary stage of appraisal is a stimulus-response or reflex arc impression that causes an emotional reaction and the second relates to higher cognitive psychic operations which can shape future action. Emotions are presented as positive or negative depending on whether they are energizing for the desired action or if they are passive or actively distracting from the behavior desired by the people trying to control the behavior. Finally, the way to make sure the transition to new behaviors is smooth is to start with a congruent stimulus and gradually reshape belief into more accurate bonds of association. Liu and Perrewé’s (2005) change model described some of the antecedents needed to create a sense of ownership for change, as the location of outcome attribution is moved from external to internal. In other words, the source of behavior must become more intelligent by moving from a primary, externally driven psychic apparatus to an internal, mental apparatus that has been trained into some more accurate representation of the situation according to the change agent, leader, or programmer.
Other contemporary researcher focuses specifically on the potential for EI to aid in change leadership. Chrusciel (2006) asserted that EI can help to facilitate change by influencing a positive climate and an adaptive culture. He indicated that change performance can be improved if the organization can “exploit” desired behaviors (p. 645), and EI is offered as a way to predict the potential success of employees and the organization. As such, EI is presented as a valid way to assess the, “human resource strengths and weaknesses in preparation for a change transformation” (Chrusciel, 2006, p. 646). He went on to say that it is important for employees to project the appropriate emotions and that at times, the organization has a competitive edge when staff can “squelch their emotions” (p. 648). He asserted that the uncertain future that accompanies change can exacerbate pre-existing, unwanted behaviors that need to be guarded against. Other, desirable emotions were then to be exploited in order to produce the desired result.

Chrusciel (2006) pointed to the importance of EI in leaders. He indicated that they can help to prevent disharmony by interacting with change recipients and resistors empathetically. Thus, managers with higher emotional intelligence are anticipated to give a competitive advantage because they can harness the emotions of the group by shaping the emotional environment. Chrusciel (2006) does not seem to hold back his dualistic mistrust form emotions. In his theory, the negative treatment of emotions and the importance of leaders with high cognitive abilities to regulate their emotional behaviors in order to provide a social stimulus to reinforce the same, desirable response in others is apparent. The EI leader’s own emotional control becomes an environmental stimulus that can squelch disruptive emotions and get people working again.
Strong Behaviorism

Logical Positive Roots

The subgroup of behaviorism treated in this second section is particularly influenced by classic and logical positivism (see chapter 2). Positivists views of science hold that researchers should focus on linking a phenomenon with some general, observable facts and should not get mixed up in the study of processes and forces that could not be readily observed. Logical positivism more narrowly defines what can be known and therefore how psychological research should proceed. According to this approach to science, theories are only found to be meaningful if they can be perceptually experienced and could be proven true or false. Metaphysical statements are found meaningless under the verifiability theory of meaning because they were equated with mere feelings or emotional attitude (Carnap, 1966). Here, metaphysical statements, feelings, and emotional attitudes are treated as analogous to contextualized, subjective processes. This approach to metaphysical statements reveals a general distrust or at most disregard for emotions.

Adult learning theorists often consider Watson to be the founder of the behaviorist movement because of his observation conducted in the laboratory setting (Merriam & Brockett, 1997; Gilley, Dean, & Bierema, 2001). Instead of Thorndike’s call for a more situated approach to behavior in keeping with James’s approach, Watson wanted to control the situation to reduce it to an identifiable sense datum. His work was influential in some areas of behavioral research because of his efforts to define a behavioral approach to research related to human control that reflects a more radical empirical reductionism.
According to Watson (1913), psychology should study human behavior in order to predict and control it through stimulus-response patterns.

Watson studied under more socially and pragmatically oriented individuals including Dewey and Mead, but he did not pursue a holistic, contextual approach. Instead he sought to objectify psychology and reduce it to the smallest possible unit for investigation. He tried to isolate individual actions from others’ actions and from the other behaviors. He viewed all human activity as the result of external stimuli but seemed to bracket off human thought from human behavior as a distinct internal process. Here, his psychology more closely reflects James’ psychology (see chapter 3).

Yet, he departs from James in a significant way. Taking an agnostic position on processes, he leaves out many things including speculation, consciousness, sensations, perceptions, will, and affections (Watson, 1913). It is not that he believed that these operations do not necessarily exist, but that they are unknown and unknowable psychic terrain, and therefore, pursuit into this line of questioning is fruitless. Watson’s skepticism about the value in studying affect and other psychic processes that are not believed to be linkable to observable fact is in keeping with the ideas of logical positivism (see chapter 2). His disregard for affect and even thought processes is of interest to this project but at the same time, is a bit of a dead end for further inquiry. Still, his influence on his students, most notably on Skinner, insures his place as contributor to the foundations of behaviorism. Skinner built on some aspects of Watson’s work, but rejects his artificial separation of multiple psychic constructs from material human behavior.
Skinner

A strong behavioral approach to knowledge and emotion.

Skinner’s version of behaviorism was influenced by logical positivism, in part by Watson, though this approach to science was prevalent at the time (Bredo, 2006). Skinner’s behaviorism might be called a strong behaviorism because it seeks to explain all perceptual behaviors as empirically derived from the material environment. In Skinner’s (1971) philosophy and psychological approach, it is essential to arrange the environment in such a way as to elicit the desired response. By controlling the stimulus, you can control the response. Merriam and Brocket (1997) indicated that much of the history of human resources is tied to a behaviorist approach, including program planning, training, development, and the evaluation of these functions. Bierema (2001) identified Skinner as a key figure in contemporary behaviorist philosophy, and he asserted that Skinner did not think that changing human nature itself offers adequate leverage for the facilitation of behavioral change. Instead, the behaviorist’s role is to identify the desired behavior and produce it by controlling aversive stimuli (Skinner, 1971).

Skinner (1971) asserted that human behavior was still conceived in pre-scientific ways. He indicated that behavior is still attributed to human nature and is enmeshed with a psychological approach like James’s and Thorndike’s which is enmeshed with “psychology of individual differences” in which people are compared based on traits of character, capacities, and abilities (Skinner, 1971, p. 7). Skinner also pointed to the difficult debate that centers on how the nonphysical mind can change the physical world. Here, his critique is more directed towards an internal structuralism or approaches within
individual psychic developmentalism that draw more heavily on rationalism than James’s more empirical, materialistic depiction of the mind (see chapters 2-3). In the epistemological approach that Skinner critiques, the mental life is given primacy and the behavior is simply regarded as by-product of an abstract or thought constructed world.

In either approach, reference to thought or feeling can disengage curiosity that would lead to deeper consideration of the origin of behavior. Skinner (1971) specifically points to the distraction that comes from reference to feelings in causal discourse. When asked why one engaged in some activity, “I felt like it” is taken as a summary or explanation without any consideration of the past or present conditions that might induce the behavior. In James’s psychology (see chapter 3), a response might either be that “I thought I should act as such” or “I reacted as such because of a habitual or instinctual physical response.” As an alternative, Skinner forwarded a modification of James’s relationship between thought, feeling, and action. James indicated that we do not run because we feel afraid, but instead that we feel afraid because we run away. Skinner asserted that James’s argument does not give adequate explanation to the antecedent circumstances that resulted in the running. Skinner is basically asserting that James’s theory of emotion has the right causal order; it just focuses on changing the wrong part of the sequence. James’s psychology calls on people to change emotional behaviors, moods, and attitudes through the use of higher psychological processes in order to make energy available to improve the world instead of actually changing the stimulus that is striking the person in the first place. Skinner’s problem with James might become clearer with a practical example: smiling while being struck in the teeth does not stop the material
onslaught. In Skinner’s modification, the emphasis should be changing that which is doing the striking. The emotion or mood would then naturally follow.

Skinner (1971) did not limit the antecedent stimulus to the inanimate, physical environment. Instead he acknowledged the importance of the social environment, and indicated that it too should be analyzed and changed such that the control minimizes aversive conditions. Skinner (1971) stated, “FREEDOM IS SOMETIMES DEFINED [upper case in original] as a lack of resistance or restraint” (p. 56). Skinner went on to posit that many conceptions of freedom focus on states of mind or feelings which fail to free the ignorantly happy adherent. In psychology influenced by rationalism, the individual psychic, mental function is believed to provide agency or choice to accept or reject the information that it integrates and physical mechanisms of control are the problem. Skinner (1971) reacted against forays into human control through individual training of mental models, indicating that the consequences of control must also be taken into account so that the social environment can be redesigned to make it as free as possible from aversive stimuli.

For the behavioral materialist, a person’s reactions are not the choice of an autonomous person, but the product of environmental and genetic factors. Skinner (1971) asserted that this is not palatable to some because, by appealing to the dignity and autonomy of the individual, a leader can be admired and credited for his/her accomplishments. By the same token, socially undesirable behavior can be blamed on others. The employee who can adapt can also resist. If they resist, it is because they are unwilling to change. As long as the leader is able to maintain that the individual is in
control, the individual can be held responsible for aversive results (Skinner, 1971).

Interestingly, Skinner pointed out that many of those who are opposed to behavioral control nevertheless set out to manipulate minds. Presumably, the effort to change minds is more acceptable because the autonomous person has some internal power which allows the individual to yield to or resist mental manipulation. This internal mental power is related to Darwin’s high mental development of reason and the high cognitive psychic apparatus of James’s psychology (see chapter 3). But Skinner turns this argument on its head, showing that it is not a perception that is changed by urging or rational persuasion. Instead, what changed is the stimuli that one considers and its apparent strength so that alternative courses of action are considered. The empirical aim is to redirect perception to a clear, more accurate perception that is not distorted by subjective, irrational interactions with a particular situation.

If control is inevitable, how does one make judgments as to what actions are right? Skinner (1971) indicated that value is an evolutionary concept of positive and negative reinforcers. Positive reinforcers would promote the survival of the species. In this understanding it is the object and its reinforcing effect that are important. Skinner stated that it would be incorrect to assert that an emotional reaction to stimulus is reinforcing: “It is the reinforcer that feels good, not the good feeling,” (p. 102). While this can be seen as part of the Jamesian family, it is also a direct challenge to James’s tendency to focus on the bodily response to the stimulus, the emotional feeling of the bodily change, instead of the primary quality of the causal stimuli. In Skinner’s (1971) view, both melancholy and cold are reinforcers that are felt, but it is more difficult for the teacher to shape the language of
the internal condition which cannot be as actively accessed. Skinner’s logical positive approach to science shines through in his treatment of sensations and emotions, the process is uncertain but the observable object can be factually observed and verified. Since feelings have behavioral manifestations that are not immediately obvious to the individual or the controller (teacher, parent, leader, change agent, etc.), the language used to describe it is not precise.

According to Skinner (1971), social norms develop as behavioral contingencies become customary and come to govern the group. The values of the group are connected to material contingencies and reinforcers, as previously discussed. Culture and its underlying values create a level of stability and equilibrium. But Skinner (1971) asserted that, “no culture is in permanent equilibrium. Contingencies necessarily change” (p. 122). These contingencies include the physical environment, other groups, internal relationships, and the distribution of power between controllers. The emergent material dialectic need not be progressive, particularly for all individuals – though it could be. Culture seeks to make members work for its survival, even if the perpetuation of the culture is at odds with the individual reinforcers.

Skinner (1971) indicated that the concept of development becomes enmeshed with values when change is considered growth. Change initiatives can be viewed as a deterministic movement through fixed stages toward a more mature organizational state. It is possible to say that something is moving towards maturity if it is progressing from an inferior to a superior state. Skinner (1971) asserted:
If change is interrupted, we speak of arrested or fixated development, which we try to correct. When the change is slow, we speak of retardation and work for acceleration. But these highly prized values become meaningless (or worse) when maturity is reached… It is a mistake to suppose that all change or development is growth. (pp. 134-135)

This has direct bearing on how Skinner understands cultural change. Skinner is not just taking on an individual developmental approach to science, he is also takes on a more socio-historical interpretation (see chapters 5-6).

He presented the way that perceived problems with the culture of American youth were described at the end of 1960s and early 1970s. The description includes terms like: anxious, uncertain, alienation, malaise, and other affective states (Skinner, 1971). Again Skinner believes that naming the emotional states can prevent further description of the troublesome behaviors. Skinner’s presentation of American youth facing cultural change at the end of the 1960s could just as easily describe the presentation of organizational change today. Consider the person whose work world has changed suddenly. The behavior that had been reinforced until this point may be useless in the new environment. To use Skinner’s behavioral explanations in a modern context, the employee feels:

- unsecure and unsure of how to act (*behavior is weak and inappropriate*);
- dissatisfied and discouraged (*reinforcement is lacking and customary behaviors are becoming extinct*);
- frustrated (*extinctions are accompanied by emotion*);
- uneasy or anxious (*acting in this environment has unforeseen aversive consequences and emotional effects*);
- no sense of purpose or accomplishment (*there is little reinforcement for any behavior, new or old*);
- guilty or ashamed (*idleness and failure has previously been negatively reinforced, which...*)
evokes a present emotional response). The italicized phrases represent possible contingencies to which the behavior and emotional experience are responding.

Skinner (1971) posited that, “it is the contingencies which must be changed if his behavior is to be changed” [italics original] (p. 140). The behaviorist in the strong positivist approach believes that all behavior can be modified by changing the conditions from which it is derived. However, when the antecedent is not easily identified or the emotion is mild, the emotion is often erroneously thought to have causal effect (Skinner, 1974). In every instance, Skinner sought to redirect the emphasis towards a thorough materialism that does not concern itself with psychic forces, mental processes, emotional processes, or individual or social consciousness. Unverifiable and uncertain, these tangents to science would waste resources that could be directed towards more productive, positive and objective identification of causal stimuli.

Skinner (1974) believed that mental defense mechanisms used to protect against doubt, mental disequilibrium, and concomitant negative emotional disturbances inferred contingency response mechanisms for emotions. When talking about the repression of emotions, Skinner (1974) used a hydraulic illustration in which the individual must bottle up or contain some emotive energies (positive or negative) until they are able to “let off emotional steam” (p. 171) The hydraulic metaphor that he uses is analogous to James’s electronic metaphor. Prior conditioning in which certain emotional expressions were negatively reinforced in the past can cause individuals to repress these impulses until other acceptable outlets are available. Psycho-somatic illness is explained by contingencies in which the bodily perturbation relevant to behavior and felt as an emotion (e.g., rage) has
physical-medical effects (e.g., migraine). Finally, these sublimations or instinctual energies are discharged through biologically reinforced and socially sanctioned behavior (Skinner, 1974).

According to Skinner (1971), adjusting belief structures through psycho-analysis or instruction is not enough to mitigate undesirable emotional patterns. He indicated that one will not get far by attempting to change the emotional resistance of a group if there is something wrong with the contingencies that reinforce their labor (p. 150). Behaviorists seek to identify the contingencies that would reinforce desired behaviors. The difficult thing is to maintain effective counter-control so that the balance of individual and social interests – i.e., power over aversive stimuli – is maintained. Skinner later stated that, “Control and counter control tend to become dislocated when control is taken over by organized agencies” (p. 163). Thus, in this view, organizational control is not universally bad. It becomes problematic when the universal good is not the standard. The socio-moral implications of Skinner’s behaviorism can be seen as very similar to those forwarded by Darwin (2005b) in *Descent*.

*Skinner’s ideal.*

Even in Skinner’s strong behaviorism, his attempt at a thorough materialism, idealism ultimately finds its way into his approach. The reason for such socio-moral optimism is the same as in Darwin’s psychology. Mental development - recast as an increasingly intelligent behavior - and adaptive social instinct ultimately give Skinner hope for a distant utopian social organization. What Skinner seeks to do is apply the reflex arc, which James only wanted to apply to emotion and psychological process more generally,
to all psychological behaviors – even the highest, pure cognitive perceptual activity. Neither the emotional process nor cognitive process is internally directed. Both are materially determined, where this can mean physical and social stimuli. In order for the ideal organization to come about, some scientist or behavioral psychologist must discover the primary environmental antecedents that are believed to produce desirable or adaptive behaviors in others. The ability to identify these relationships is at the center of Skinner’s evolutionary and positively empirical epistemology. Once desirable association are identified, people can be programmed accordingly.

Even knowledge and logic can be seen as an intelligent behavior which develops through the association of two events or pairing of a stimulus and a response, a reflex arc. Because intelligence and knowledge are in themselves seen as a covert behavior, there must be some other object that causes both behaviors. The belief that all behavior must be controlled by a person’s genetic and environmental histories led Skinner to the conclusion that there is no “creative agent” (Skinner, 1974). He stated that the “experimental analysis of human behavior … should strip away the functions previously assigned to autonomous and transfer them one by one to the controlling environment” (Skinner, 1971, p. 198). Since all knowledge can be linked to some external-physical stimuli, no individual has the agency to creatively make their own environments (Chomsky, 1971; Black, 1973).

According to Skinner (1974), human freedom is avoiding negative stimuli, even if this is achieved by external control. Therefore, there can be no agency, where a human agent is taken to have autonomous choice or moral responsibility. Skinner (1974) believed that the only hope for human freedom is that a person, “come under control of his natural
and social environment in which he will make the most of his genetic endowment and in
doing so most successfully pursue happiness” (p. 221). If there is no free will and no
individual agency, how can one know what behavior is right and manage the self or the
other? Skinner’s moral theory could be seen as asserting that the right behavior is the one
that promotes survival and a more harmonious, systemic balance. Value is nothing more
than an evolutionary propensity to control-minimize negative reinforcers and control-
accentuate positive reinforcers (Skinner, 1971). Cultural values also take on an
evolutionary tenor as a social group seeks to preserve itself in the face of environmental
pressures, including other groups. Self-management, in this vies, is simply a repertoire of
successful solutions or problem solving responses to environmental problems, while
managing others is essential controlling operant conditions for others (Skinner, 1974).
Skinner does not explain how the tension for survival between individual, social groups,
and the human species as a whole can be balanced.

Some of the problems with the strong behavioral conception of intelligent behavior
and social development become more apparent in Skinner’s Utopian vision. Using the
pseudonym Frazier in The Behavior Analyst, Skinner (1985) indicated that in the ideal
human society one would “naturally do the things they need to do to maintain
themselves… and treat each other well” (p. 9). He acknowledged that negative or punitive
power was often used in society but thought that positive reinforcers were more effective
for genetic reasons, “the desire for approbation is perhaps the most deeply seated instinct
of civilized man” (Skinner, 1974, p. 200). Here Skinner seems to be drawing directly from
Darwin’s (2005b) Descent. The potential competition of people with different survival
impulses or even internal struggles is never adequately addressed, because a metaphysical assumption that both systems can be seen as seeking and having the potential to reach a harmonious balance is assumed.

As in Darwin’s theory, the importance of individual variations is downplayed. Skinner’s (1948) representations of the ideal behavioral society, as depicted in Walton Two, has been critiqued for giving inadequate treatment of how a society should resolve interpersonal disputes about the right way to act-think when both seem to be consistent with Skinner’s behavioral system (Kane, 1996). Skinner’s ideal social system appears to be a benevolent, scientific, aristocracy wherein the cream naturally rises to the top and promotes common happiness. Echoes of Plato’s guardians and Darwin’s venerated dispassionate and gentle scientist seem to resonate in the ideal leaders of Skinner’s utopian social organization.

Skinner’s social ideals do not leave much of a blueprint for organizations or experimental societies other than to reinforce the importance of scientific and socially minded individuals who are not distracted by emotions being at the helm. Around World War II, it was becoming less popular to forward deterministic, genetic-historical environmental views of utopian society writ large or in the workplace. In Walden Two, Skinner (1948) attempted to disassociate his philosophy from a particularly troublesome utopian-political vision that grew out of Spencer (1862) and later social Darwinism by indicating that all people could be educated to perfection through programmed learning (Loritz, 1999). Again, Skinner did not depart from Darwin’s emphasis on continuity in Descent (see chapter 3). He focused on the similarity in physical constitution of all
humans as a way to quell the anxiety of observers and allow for all people to become, as Darwin said cultivated, or socially educated via the reflex arc, associated learning, or programmed learning of more accurate, primary perceptions of reality.

A rational chain of command remains a part of Skinner’s (1974) ideal, but the material determinism of his theory left little explanation of how one is to come to occupy such stations in society other than that their desire for approval would cause them to seek the good will and fortune of others. Skinners material idealism, as in Darwin’s theory, ultimately presents both a teleology of original cause as well as a distant, future teleology ideal. In both, the means for obtaining such an end is social-moral education or programming of empirical facts. In the wake of World War II, people were not as optimistic about the essential goodness of humanity, and “Whether on the front line, the assembly line, or the school registration line, they did not want to be programmed!” (Loritz, 1999, p. 9).

Contemporary Contingency-Response-Reinforcement Research

Building on Skinner’s behavioral approach, Goltz and Hietapelto (2002) asserted that resistance to change, which can take the form of non-learning, work slow-down, and other deviant workplace behaviors, is an attempt to escape from aversive stimuli. Organizational changes, in response to these problems, can alter the contingent reinforcement or the level of behavioral response needed for positive reinforcement. Their assessment of organizational change focused on potential changes in reward and coercive power, whereby individuals can influence others through reinforcement stimuli or aversive stimuli, respectively. They noted that managers can act beyond their ascribed authority by

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social networking and interpersonal relationships which increase their potential to control the environment. They stated that, “In particular, resistance can be expected to occur when individuals have lost control over the most potent dimensions and/or the most potent combinations of consequences” (Goltz & Hietapelto, 2002, p. 11).

Geller (2002) responded to Goltz and Hietapelto, indicating that leadership to overcome change resistance takes more than consequence control. Geller established common ground, asserting that no reasonable person would refute the basic consequence-control premise. He also restated the need for leaders to identify appropriate behaviors and have the competence to use relevant antecedents to affect behavioral change. Then Geller diverged, seeking to present the difference between leadership and management. According to Geller, managers stop at consequence control. Leaders inspire people to feel responsible and develop self-management. He stated that, “Leaders also help people interpret extrinsic and intrinsic antecedents and consequences to engender more perceptions of personal choice, control, ownership, and empowerment” (Geller, 2002, p. 31). Geller went on to indicate that counter control would help people perceive the power they have over the consequences of their jobs. After asserting the importance of ownership as an antidote to change resistance, Geller presented the empathetic leader as one who listens with and then leads with empathy – one who leads with compassion and understanding. These skills allow leaders to assess situations and people by observing, listening, and questioning. Abilities related to empathy allowed the leader to respond appropriately to the current physical and social environment with behaviors that invoke the desired behavioral result.
Interpersonal skills and networking abilities, presented as critical to change management by Goltz and Hietapelto (2002), can be seen as linked to aspects of social and emotional intelligence definitions from the first subgroup. Empathy and empathetic leadership, which Geller (2002) presented, is commonly identified as a key element of emotional intelligence (Goleman, 1995; Bar On, 2000). However, the interpretation here seems to more directly emphasize a strong behavioral approach that makes these leadership behaviors the new stimulus that programs or generates the response in others within the social context. Though diverging in some respects, this convergence on the importance of emotionally intelligent behaviors within the behavioral-material clusters of psychology has led some who research strategic change to question whether emotional competence, as measured by emotional intelligence, is an antidote for cynicism and resistance towards organizational change (Ferres & Connell, 2004).

**Behavioral Materialism Summary**

As a cluster of research, behavioral materialism has been emerging in a community focusing on efficiency and organizational productivity. One approach focuses on individual differences and environmental stimuli at the same time. Taylor, Binet, and Thorndike acknowledge the importance of individual differences, but in their own ways deal with issues of capabilities and training of capacity. Behavioral psychology continues to focus on the ability and behavior of employees within the work environment. It seeks to develop psychometrics to identify intellect, physical, and emotional ability and the factors that predicted it. Emotional intelligence research is rooted in individual difference behavioral approaches and provides an example of one of the most vigorous lines of
behavior research that addresses the role of emotion in organizational change. The other approach to behaviorism, which is influenced by logical positivism, either ignores or seeks to explain psychic processes related to cognition and emotions as part of the material stimulus response pattern. Skinner’s behaviorism shifts the focus to environmental contingencies and explains both thought and affect to behavioral responses to these stimuli.

Behaviorism continues to shape areas of organizational change research by focusing on contingency-response-reinforcement mechanisms that produce desired behaviors, emotions, and accompanying results. At times, the individual difference approach and Skinner’s emphasis on environmental contingencies seem to merge without questioning some of the assumptions that caused them to go in different directions in the first place. Within both approaches to behavioral research, emotion is largely suspect. It is not a source of knowledge because it is the passive response to an exciting stimulus. Positive portrayals of emotion in behaviorism are frequently related to emotion as a potential motivational force that can be harnessed by changing environmental stimuli, including the emotional behavior of leaders and other workers.
Chapter 5: Individual Developmental Paradigm

Introduction

According to Merriam and Brockett (1997), emerging industrial societies as described in the introduction to the previous chapter created a context where liberal educational philosophies based on an idea of cultivating or developing individuals to their full potential was losing ground to more behaviorally oriented vocational training. However, liberal adult education saw resurgence in the middle of the twentieth century in response to over half a century of influence from the behavioral-materialist paradigm and its primary emphasis on origins, material causes, and natural laws. Cayer and Weschler (2003) indicated that the Neo-Human Relations School emerged incrementally out of the Scientific Management School and industrial-behavioral psychology, which share scientific management’s aim and measures.

The Neo-Human Relations approach considered the needs of the individual and the organization, but gave preference to the individual and their development towards their ideal, mature, or developed form. Within this humanistic paradigm, the focus is on individual freedom and dignity, ends, affective and emotional aspects of personality, potential for intellectual growth, and change through insight (Bierema, 2001). Both approaches seem to draw on a philosophical and psychological division between high cognitive and emotional aspects to the individual (see chapters 2-3 and appendix C).
As described in chapter 2, I use *Individual Developmentalism* as a name for this research cluster because of the various metaphysical and epistemological beliefs that the psychological research within the grouping seems to most consistently incorporate. It is also able to incorporate aspects of liberal education, also known as classical humanism or rational humanism, and neo-humanism, which emerged as a challenge to behaviorism in the middle of the twentieth century. Liberalism is rooted in the work of classical Greek philosophers including Plato and Aristotle. It focuses on the development of a complete human being, with specific interest in intellectual growth (Bierema, 2001). Humanism assumes that human nature is intrinsically good, that there is a self that has the potential for development, that humans are free to choose and determine their behaviors, and that the individual has a responsibility to contribute to the greater good (Merriam & Brockett, 1997). This individual, internalist orientation to existence lends itself to a psychological focus on internal, subjective construction of meaning structures that might be described as more ideal, rational, and/or logical.

Important contributions to the emergence of this cluster of psychological research related to individual learning and organizational change theory include: Piaget, Maslow, and McGregor. Piaget and Maslow are often placed in different groups. For example, educational psychologists present Piaget as a cognitive theorist and Maslow in a section on motivation (Woolfolk, 2007). Others educators present Piaget in a liberal education section and Maslow with humanists (Bierema, 2001). Though there are differences in the two psychologists’ foci, they both have some progressive ideas about individuals and society. The two are treated together in this project because their emphasis is on the
individual’s development or growth towards a potential ideal form or harmonious equilibrium. Though both acknowledge the importance of the systemic whole, there is a greater stress on individual potential for development and a secondary indication of social or environmental influences and progress beyond the individual level.

The future oriented dialectical metaphysics and individualistic approach to progressive change can be seen as linked to Plato’s ontology and his teleological Utopian vision based on insight into an absolute, \( a \text{ priori } \), and ultimately stable source of knowledge that might bring about a more ideal social State. The more materially grounded subjective, idealistic approach reflects the influence of the Kantian synthesis of empiricism and rationalism (see chapter 2). The focus on individual psychic constitutions and their development to bring about a good life can be seen in James’s psychology and moral philosophy, particularly in his answer to the question “Is life worth living?” In response to this question, the theories in this chapter could be seen as responding that, “Life is what you make of it under the direction of the rational mind, which shapes beliefs, more primitive psychological developments such as emotions, and ultimately actions that can make the world better” (see chapter 3 and appendix C). In contrast to the stronger influence of a positive material metaphysical-epistemological depiction of human understanding as depicted in the previous chapter, philosophical and psychological assumptions in this cluster can be seen as emphasizing the internal process of mental structuring as an import direction in psychological inquiry. This however, does not mean that there is no consideration of the importance of individual material history as the
internal individual developmental cluster is also influenced by empiricism, at least in part via Kant.

Piaget develops a framework for understanding the individual development of intelligence. Maslow forwards a progressive understanding of human potential depicting it in relationship to a hierarchy of human needs. McGregor then brings Maslow’s hierarchy of needs and the language of self actualization to the workplace, making Maslow instantly recognizable within the organizational studies community. McGregor’s work then informs Maslow and he responds by extending his own theory in light of McGregor’s use of his principles. While it is somewhat different than the general structuring of this project, Maslow’s theory is divided into a description of his major theoretical contributions and then a response that follows McGregor’s theory. The approach of these seminal thinkers continues to influence human resource development through adult learning and motivation theory. A few examples of contemporary theory that can be seen as drawing on this chapter are offered at the end of the chapter.

*Individual Developmental Theories*

**Piaget**

*Evolutionary idealism.*

Piaget (1973) contended that psychological theories of intelligence are inspired by both biological and philosophical influences related to the study of knowledge and that many psychologists unwittingly adopt particular positions without consideration of the theoretical underpinnings. He asserted that there are two fundamental and incompatible interpretations: 1) those that view intelligence as the gradual awakening of consciousness
to the existence of facts or primary datum without the construction of anything; and 2) those that explain intelligence by focusing on its development. Piaget is dividing thought psychology into two epistemological camps based on positivist and non positivist assumptions about what can be scientifically studied. He can also be seen as dividing psychology into externalist empirical approaches and internalist empirical approaches, influenced by rationalism via Kant– thus making room to consider active mental processes (see chapter 2 and appendix B).

The first empirical interpretation (externalism) can either incorporate Darwinian evolutionary or non-evolutionary metaphysical theories; biological-psychological applications or purely philosophical. According to Piaget (1973), German thought experiments at the beginning of the twentieth century, rooted in aprioristic philosophy, used introspection to reveal images of logic which impose themselves on the individual. Piaget (1973) indicated that Binet’s work used the same method as the German thought experiments (introspection), but in the process Binet discovered imageless thought inconsistent with mirrors of pure philosophical logic. Here, the implication is that the mind is not functioning as a wandering soul obtaining formal knowledge or insight into a world outside of human experience as in Plato’s ontology. Instead, the mind is being struck by an imageless primary quality that impresses its clear and accurate, scientifically accurate perception. Piaget (1973) indicated that this form of materially determined empiricism corresponded to a Lamarck’s evolutionary model because it “explains knowledge by the pressure of objects” instead of external absolute, ideal forms (p. 13).
Piaget turns his attention to the second interpretation of intelligence which focuses on rational psychic processes. Piaget can be seen as emphasizing the James’s depiction of the process of actively developing higher cognitive mental models, also sharing the desire to distinguish his approach from more purely materially deterministic conceptions of mind. Von Glaserfeld (1996), who was a student of Piaget’s, indicated that Piaget developed an understanding of knowledge that uniquely diverged from conventional representations that tied it to some external reality. It may be worth noting that Von Glaserfeld may be one of Piaget’s more radical students and some of his views on Piaget are contested. In the following description of Piaget, the role of an individual’s material history is clearly evident, and Piaget’s theory can be seen as grounded in a material, evolutionary struggle much like James’s psychology. Piaget (1973), himself, describes his conception of intelligence in mental organization as adaptive or better, as re-adaptive.

Instead of aligning with absolutist philosophies or Lamarckian empiricism, Piaget associated with Darwinian biology which intermixes recapitulation and natural selection by population pressures (see chapter 3). The progressive aspects of Darwin’s psychology carry over in Piaget’s psychology of mind. Kitchner (1986) asserted that, “If there is a single leitmotif in Piaget’s thinking it is this: All reality - biological, physical, psychological, sociological, intellectual - is evolving in the direction of progress” (p. 6). For Piaget (1973), progress was movement towards increased stability, i.e., equilibrium:

Every response, whether it be an act directed towards the outside world or an act internalized as thought, takes the form of an adaptation or, better, of a re-adaptation. The individual acts only if he experiences a need, i.e., if the equilibrium between the environment and the organism is momentarily upset, and action tends to re-establish the equilibrium, i.e., to re-adapt the organism…
Behavior thus conceives in terms of functional interaction, presupposes two essential and closely interdependent aspects: an affective aspect and its cognitive aspect. (p. 4)

Like James and Darwin, Piaget identifies an affective and a cognitive aspect to evolutionary adaptation.

Piaget’s devoted most of his attention to the cognitive aspects of intelligence. In an attempt to define intelligence, Piaget (1973) sought to avoid the temptation to choose either a subjective, instrumental, and relativistic structuralism or a purely materially determined, passive epistemology which obscured the possibility of continuity and development. In his alternative, each functional or instrumental structure has some degree of stability. When existing structure proved inadequate under some material situation, the active mind could restructure ideas such that a better, more stable equilibrium would emerge from the former: “Intelligence is thus only a generic term to indicate the superior forms of organization or equilibrium of cognitive structuring” (Piaget, 1973, p. 7). A full treatment of Piaget’s stage theory is beyond the scope of this project; however, a few words about his description of accommodation and assimilation can help to clarify Piaget’s understanding of adaptation and equilibrium.

Piaget (1973) explained that, from a biological perspective, intelligence is an activity of the organism and that the individual adapts to a part of the surrounding environment. Adaptation is the ability of individuals to interact successfully with their environment (Santrock & Yussen, 1992). Piaget called this successful interaction a state of equilibrium between organism and environment.
Contrary to behavioral conceptions, individuals are not passive recipients of the environment, but instead modify it by imposing structures on it or classifying the experience. Mental assimilation is the active process of engaging the same or similar part of the environment that the organism has previously modified by classifying and incorporating patterns of behavior (Piaget, 1973). The environment can likewise act on the individual, changing in a way that may potentially interrupt the patterns of behavior of the organism and lead to questioning previous classifications. Perceived changes in the external environment might lead to accommodation - the creation of new patterns of behavior. The mental activity might lead to a physical behavior or may remain a conceptual rehearsal. Here, Piaget can be seen as making a similar distinction to James’s theory in that a retained mental association is a tendency to act in a certain way that does not necessitate that the tendency is carried out (see chapter 3).

So far, Piaget’s psychology has not diverged much if any from James’s psychology, but his tendency to draw more heavily on rational idealism eventual becomes apparent. Conceptual rehearsal allows for the possibility of continuity and development, as “behavior becomes more “intelligent” as the pathways between the subject and the objects on which it acts cease to be simple and become progressively more complex” (Piaget, 1973, p. 10). Piaget’s stage theory is built on the idea that intelligence develops through increasingly cognitive, rational, and abstract processes of accommodating novel situations into new levels of cognitive-logical structures (Santrock & Yussen, 1992; Kitchner, 1986). To explain the rationality of mental structures, Piaget draws on philosophical structures of logic as an evolutionary model of mental development instead of a more emergent,
contingent materialistic biological view of rationality. Like Baldwin (1908; 1909a; 1909b), Piaget seems to read Darwian psychology as describing the emergence of highly developed reasoning capacity in humans as giving them the potential for insight into empirically *a priori* material facts and universal laws of change that provided a stable understanding of reality (see chapter 3).

Some interpretations and applications of Piaget’s stage theory indicate that the individual will go through the same phases with or without instruction, and some might even hold that leaders can do little to influence the speed or direction of the process, leaving the individual to work through cognitive and affective changes on their own (Turner, 2007). This interpretation can be seen as in keeping with more conservative views of dialectics, i.e., philosophical arguments, in which each stage is contained in more mature synthesis of the ideas in a more mature form (see chapter 2). In comparison to a biological-psychological model, this can be seen as analogous to recapitulation (see chapter 3).

*Cognition and emotion.*

While Piaget did emphasize the development of cognitive-logical aspects of intelligence, he also made some assertions about the relationship between affect and cognition. Piaget (1973) stated that there had been considerable discussion about the relationship of affect and cognition, and set out to explain his understanding. He first cited Janet’s distinction between *primary action* - the relationship between subject and object (intelligence, etc.) and *secondary action* - the subject’s reaction to their primary action which allows for the release of energy from inside the organism (*elementary* feelings).
Then Piaget (1973) turned to Claparède’s explanation of interests in which the feeling provided the meaning, goal, or end for the behavior, while intelligence provides the technique or means. These two perspectives address the internal regulation of affective energies. Synthesizing these thoughts, Piaget stated, “In so far as feeling directs behavior by attributing a value to its ends, we must confine ourselves to saying that it supplies the energy necessary for action while knowledge impresses a structure on it… We shall simply say then that every action involves an energetic or affective aspect and a structural or cognitive aspect…” (p. 5). Ultimately, Piaget concluded that, “Affective life and cognitive life… are inseparable although distinct… Thus we could not reason, even in pure mathematics, without experiencing certain feelings, and conversely no affect can exist without a minimum of understanding or of discrimination” (p. 6).

A prima facie, or face value, reading of Piaget’s presentation, synthesis, and conclusion could lead one to think that it is somewhat confused. How can a feeling attribute value to something without having made some evaluative judgment or cognitive-structural component? Where does the minimum of discrimination come from? Reading the paragraph above again with an awareness of recapitulation in Darwin’s evolutionary psychology and James’s psychic division of labor makes it less incongruent (see chapter 3 and appendix C). Piaget, in drawing on Janet, jumps over the passive perception and directly to the active psychic processes – the focus of his project. The rest of the treatment holds together much better when James’s passive psychic-sensational process is reintroduced in the beginning of the causal stream.
An object or event strikes the material sensory apparatus of the individual and the passive perception felt is the release of emotional energy. This instinctual perception is automata, emotional, and connected to qualities of the environment that spark a connection with some quality of a previous experience. If it even be considered cognitive, it is a low-road cognitive function—a very primitive stage of rational development. The physical association has no intelligence, but nevertheless generates energies in keeping with the automatic stimulus-response bond aimed at instinctually reacting to a real past or present problem. The primary active psychic processes then structures the current situation and releases the energy through the secondary active psychic process. The emotional perception is an evolutionary instinct, a goal to survive. In keeping with Darwin and James’s psychologies, all bodily instincts must necessarily be a little behind the more mature states of mental development and related social judgments. High cognitive functions must reign in and direct the individualistic emotional values in order to promote more globally rational or logical understanding and thus behavior.

*Maslow*

*Evolutionary idealism.*

Maslow built on Piaget’s understanding of cognition and its relationship to emotion. By the mid 1950s, Maslow and other prominent psychologists were establishing humanism as an important view of human nature and learning (Merriam & Brockett, 1997). One assumption that undergirded humanism was that people are basically good and want to grow and develop towards their ideal state or potential. According to Stephens
(2000), who edited together many of Maslow’s prominent and obscure writings, Maslow’s defining work was his contribution of the hierarchy of human needs.

Stephens and Heil (1998) explained that Maslow forwarded a Third Force psychology as an alternative to behaviorism. The three forces can be seen in the diagram representing Darwin and James’s psychological processes (see appendix C). Stephen and Heil (1998) stated that Maslow’s alternative was built on a new philosophy of humanity based on the human capacity to recognize and develop compassion, creativity, ethics, love, spirituality, and other uniquely human traits. In consideration of Darwin, James, and Piaget’s psychological approaches to cognitive development and motivation, it might be more accurate to note Maslow’s contribution as giving a greater emphasis on the importance of retained earlier adaptations and the ability to regress into more juvenile or primitive psychological processes. Yet, even in identifying the continued benefits of lower psychological processes, the basic hierarchical model is still intact.

The progressive, deterministic assumption of Maslow’s theory can also be seen as in continuity with previous philosophical and psychological conceptions of individual development. Stephens and Heil (1998) went on to quote one of Maslow’s most famous passages:

A musician must make music, and artist must paint, a poet must write, if he is to be ultimately at peace with himself [sic]. What a man can be, he must be. This need we may call self-actualization… It refers to man’s desire for self-fulfillment, namely to the tendency for him to become actually in what he is potentially: to become everything that one is capable of being… (p. 3)

In this quote, one might note echoes of both Socrates and Aristotle’s metaphysics.

Development towards inherent potential is the process of becoming or maturing.
Maslow (2000f) stated, “We have… an essential inner nature which is instinctoid, intrinsic, given, “natural,” that is, with an appreciable hereditary determinant, and which tends strongly to persist” (p. 32). Yet, the individual is not fully determined—where this means determined by external forces—because the current state of the individual is the main determinant for the next stage of development (Maslow, 2000f). In distancing himself from material determinism, his hierarchical treatment of the cognitive mind provides the way out as in James’s defense against the same accusation.

In Maslow’s (Stephens, 2000) theory, immaturity is preoccupation with coping and striving for basic needs; while maturity is the process of becoming human, of self-actualizing, and of Being. Development or maturity is equated with growth in both the inner human nature that is shared species wide and in unique, idiosyncratic personality differences in the individual (Maslow, 2000f). The progressively higher stages of the hierarchy of needs are often represented in a pyramid model and correspond to Maslow species-wide or shared human nature (e.g., Woolford, 2007). From base to peak, the pyramid includes the following needs: physiological, safety, social, esteem, and self-actualization.

Maslow (2000f) indicated that psychologists must assume two worlds, the natural world of facts, laws, and logic, and the psychic world of wishes, hopes, fears, and emotions. These two worlds are depicted as irreducible, yet related and possibly fused. Maslow seems to be more comfortable with the idea of a fixed logical ideal and unchangeable universal laws than James, but his depiction of the relationship between psychological process ultimately remains basically unchanged from the one used to depict
Maslow (2000f) acknowledged that immaturity and maturity can be discussed in terms of development of cognitive capacity and explained that Piaget was one of the individuals who most successfully described the process of cognitive maturation. Maslow can be seen as elaborating on the Jamsian psychological processes that Piaget’s theory was depicted as skipping over in the above treatment of Piaget.

Maslow’s hierarchy of needs can be seen as a tool to explain the relationship of James’s lower psychological processes to Piaget’s stage theory and then extend Piaget’s conclusions based on this more holistic conceptualization of psychological development. Maslow’s (2000f) theory introduced a new cognitive classification: Deficiency (D) level and Being (B) level cognition. The more basic or primitive biological needs correspond to lower cognitive stages including Piaget’s theory and the higher metaphysical developments corresponded with more integrated, mature, and ideal forms of actualized self. D-cognition involves basic need satisfaction and B-cognition involves self-transcending or unselfish cognition. Beyond internal logic and rationality, there must be a more social consciousness that emerges at the top of Maslow’s individual, internal psychic development. As in James and Darwin, higher mental and social development go together, and the most recent cognitive development provides the possibility for evaluating judgments of the slightly lower social consciousness (see chapter 3). However, growth into higher levels of cognition is presented as having its own disruptive consequences. Instead of a quasi-stable equilibrium, Maslow (2000f) talked about homeostatic tendencies
as necessary and natural ways of avoiding growth - discouraging stimuli such as fear, growing pains, or ignorance.

Despite natural homeostatic tendencies, Maslow described the possibility and importance of individual growth towards self-actualization. As to how to help people develop towards this ideal end, Maslow (2000a) indicated that he had given up on improving the world via individual psychotherapy. Instead, he sought to forward his utopian purposes through education and work. For the purpose of understanding the grouping of this project, it is important to position Maslow’s utopian views. Maslow’s (2000f) progressive views can be described as individual developmental, as is seen here: “The sources of growth and of humaneness are essentially within the human person and are not created or invented by society, which can only help or hinder the development of humanness, just as a gardener can help or hinder the growth of a rosebush, but cannot determine that it shall be an oak tree” (p. 49).

Even a collective conscious is part of the natural stage development of an individual mind. Inside and outside the workplace, Maslow (2000a) hoped to stimulate “eupsychian improvements of educational institutions so that they could make people better en masse” (p. 6). Since almost everyone works, Maslow eventually came to believe that work life can be as important, if not more so, than institutional education. The first step is to determine how self-actualized people view work under favorable circumstances. Maslow (2000a) asserted that, “These highly evolved individuals assimilate their work into the identity into the self, that is, work actually becomes part of the self part of the individual’s definition of himself [sic]” (p. 5).
Maslow (2000g) described the contribution of the Hawthorne Interview Program. He acknowledged the behavioral contributions that provided data of immediate interest related to improving work conditions, supervisory training, and employee relations activities conducted by management. However, according to Maslow, the most important and historical contribution is the development of interviewing-listening methods that help to identify the employees’ views of their personal situations. These narratives provided a personal history that needed to be considered in combination with material stimuli.

Maslow indicated that favorable work circumstances exist, not just when basic needs are addressed through changes in environmental stimuli, but also when managers take into account personal, developmental needs. More specifically, developmental needs as perceived by the individual and their progressive evolution of self through assimilating work with identity.

For Maslow, work, identity, and health cannot be separated from intrinsic and core values - a philosophy of life - or religious orientation. He called this framework of values a “cognitive need to understand” (Maslow, 2000f, p. 46). Sickness or neurosis is depicted as a defense against the inner core or an attempt to fulfill basic needs in a self-defeating way that produces neurotic emotions, attitudes, and actions which means that the real self is not expressed fully.

One of Maslow’s (2000f) basic propositions was that “Healthy people are more integrated… In them the conative, the cognitive, the affective and the motor are less separated from each other, and are more synergic, that is, working collaboratively without conflict to the same ends” (p. 47). In this view, the rational premeditated actions of highly
developed people would be no more apt to produce desired results than spontaneous reactions. This possibility is presented as an alternative to an age-old rational system that dichotomously and hierarchically arranges epistemological processes as is seen in appendix C. In the next section, Maslow’s treatment of the relationship between cognition and emotion can be seen as continuing to fit into the Jamesian family.

In Maslow’s view of development, both of the active and logical psychic apparatus and the more materially driven sensory apparatus can be seen as held in tension, pulling each other forward towards a more ideal form as in Aristotle’s metaphysics or in a material-individual historical dialectic (see chapter 2). Instead of a material and socio-historical dialectic developing towards an Absolute Ideal, Maslow’s unit of analysis is the individual. The material struggle and the construction of an individual, cognitive narrative is Maslow’s modification of Piaget’s stage theory of mental development. Maslow draws more heavily on the material, sensory apparatus in hopes of bringing a more stable equilibrium that is not predisposed to psycho-somatic illness or catastrophic breaks in the normal flow of the system because of the rational mind trying to get out ahead of the contemporary individual situation.

Cognition and emotion.

For Maslow (2000f), an awareness of healthy unconsciousness and its synergistic relationship with secondary cognition approximates the peak-experience. It opens the door to previously restricted areas of preverbal, ineffable, primary processes and intuitive-esthetic types of cognition which can address aspects of reality that abstract logic and verbal capacities cannot address. Rationalism continues to be connected to active, high
cognitive processes, but unlike James, Maslow explicitly links rationality with logic and fact. Maslow (2000f) presented four points which express the necessity for primary-or earlier psychic processes: 1) creativity has its roots in the non-rational; 2) language is and must always be inadequate to describe total reality; 3) any abstract concept leaves out much of reality; and 4) what we call knowledge often serves to blind us to the portions of reality not covered by the abstraction. Thus, Maslow, like James ultimately asserts that more primitive psychological adaptations have a value of their own.

The active psychic processes for Maslow (2000f) are connected to deficiencies in basic needs. They are helpful simplifications used to overcome problems, but they do not know or take in the whole experience. The Being or B-cognitions provide another way of knowing that opens the door to perceptions with love or care and unencumbered attention. B-cognitions allow one to find creative solutions by seeing more interests than one’s basic needs for survival. In other words, B-cognition allows the individual to voluntarily regress into the socio-consciousness and emerge to evaluate how all interests can simultaneously be balanced in subsequent action. James’s was not so certain that various interests could not persist.

In an undated paper, Maslow (2000d) wrote about the importance of highly evolved and psychologically healthy people. These individuals need to be taught to be creative and able to confront novelty and be comfortable with change. Furthermore, managers must also learn to select, lead, and develop the same creative persons to whom they were often previously antagonistic. This antagonism was depicted as rooted in mechanical, authoritarian organizations that sought efficiency through environmental and behavioral
constraint and continued to treat workers as interchangeable parts. Maslow (2000c) blamed the inability for these types of organizations to change on their obsession for schedules, planned-out futures, and sameness.

Maslow wove together beliefs about values, the unconscious, and creativity. As quoted by Stephens and Heil (1998), Maslow stated:

So, this argument is definitely saying that our higher needs and motivations are biologically rooted. Every human being has the instinctive need for highest values of beauty, truth, and justice, and so on. … [E]ach of us is born with certain innate needs to experience higher values; just as we are born physiologically with the need for zinc or magnesium in our diet. If we can accept this notion, then the key question isn’t “what fosters creativity?” But it is why in God’s name isn’t everyone creative? (p. 11)

Here the reference to raw materials such as zinc and magnesium to alternative forms of intelligence or knowing about the world seems to be very similar to Thorndike’s (1920) comments presented in the previous chapter about the need for multiple conceptions of intelligence. These questions shaped Maslow’s academic research agenda in the late 1940’s.

The highest form of human development, according to Maslow (2000h), is the ability to voluntarily regress into primitive, passive, immature, or feminine processes and then return to higher, active, mature, and masculine functions. In the early 20th century, the concept of neotony challenged the idea of recapitulation (Gould, 1977). This theory focuses on the way in which slowing down maturation, or staying in a juvenile state longer contributes to higher developments. Even in Darwin’s (2000b) theory, the similarity in longer periods of adolescence when the mind continues to develop and make new
associations was recognized as continuous between humans and higher primates – a common source of higher mental ability.

Maslow (2000h) connected creativity, love, care, and undirected cognition to more juvenile human forms and more primitive psychic processes and sought to promote the use of the higher and lower psychological adaptations to their maximum potential:

The normal adjustment of the average, common sense, well-adjusted man implies a continued successful rejection of much of the depths of human nature, both conative and cognitive. To adjust well to the world of reality means a splitting of the person. It means that the person turns his back on much in himself because it is dangerous. But it is now clear that by so doing, he loses a great deal too, for these depths are also the source of all his joys, his ability to play, to love, to laugh, and most important for us to be creative. By protecting himself against the hell within himself, he also cuts himself off from the heaven within. In the extreme instance, we have the obsessional person, flat, tight, rigid, frozen, controlled, cautious, who can’t laugh or play or love, or be silly or trusting or childish. His imagination, his intuitions, his softness, his emotionality tend to be strangulated or distorted. (p. 27)

A high-peaker can be seen as voluntarily regressing into these passive, childlike, and feminine functions and then emerging to question if what was passively impressed upon them is true.

Maslow (2000h) asserted that reality testing is part of a secondary, masculine active psychic process. The creative and emotional experience must be evaluated and either selected or rejected in relationship to the judgment of others (real or implied) based on its structural coherence, its logical reason, the ability to prove it is true, and its measure against the standard of the common good. Other than the equating rational-potentially useful beliefs with logical-accurate facts, Maslow’s basic assumption that the active psychic must make meaning out of the mass of primary perceptual information is quite similar to James’s psychology. Depending on the reading of Darwin’s psychology it bears
the same distinction or is almost completely analogous (see Creighton and Baldwin in chapter 3).

Maslow wove together the threads of self-actualization, emotion, the unconscious self, rationality, creativity, and organizational change when lecturing the U.S. Army Engineers in Virginia. Some of the highlights from the lecture, “Emotional Blocks to Creativity” provide a helpful synthesis of Maslow’s contributions.

Given the title, one might expect that Maslow would set out to show how emotions interrupt or inhibit creativity. Much to the contrary, Maslow recounts Roe’s research which found that many good scientists were rigid, constricted people who were afraid of their unconscious. Maslow (2000b) asserted that, “you may then arrive at a peculiar conclusion that I’ve come to and that is that science can be defined as a technique whereby uncreative people can create and discover, by working along with a lot of other people, by standing upon the shoulders of people who have gone before them, by being cautious and careful” (p. 220). These rigid and tight people try to control their emotions, remain orderly, neat, punctual, systematic, and controlled. The psychodynamic term that he is sharply split. According to Maslow (2000b), these tendencies were considered to be present in all people, but the repression and need to achieve safety via orderliness, predictability, and control can, in the extreme case, be classified as a compulsive-obsessive neurosis. For such individuals, the ultimate safety and reduction of anxiety is to freeze reality such that they can believe that there is a space where nothing changes, but instead conforms to universal laws and rules.
But one might question, of what is this person afraid? Where from does this anxiety originate? According to Maslow (2000b), the dynamic psychologist would say that the individual, “is afraid if his [sic] emotions, or of his deepest instinctual urges, or his deepest self, which he desperately represses” (p. 222). In doing so, Maslow (2000h) indicated that the constricted person can maintain some kind of equilibrium, but at the cost of play, fantasy, joy, relaxation, and spontaneity. As seen in Darwin’s (2005e) own description of his propensity for turning out universal laws like a machine devoid of artistic or creative beauty, the cost of extreme rationality and empirical inquiry is the loss of what Maslow (2000h) referred to as the deeper self. Thus, Darwin’s problem according to Maslow’s theory would be conceived of as the more primitive part of the self not being pulled along to aid in the development of the unified, whole person. Here, he arrives at the same assumptions as Darwin if he is not drawing directly from his writings. Maslow (2000b) further asserted that this suppression of emotion and the unconscious cannot be separated from western gender roles and the suppression of perceived femininity: softness, emotion, imagination, fantasy, color, poetry, music, tenderness, languishing, and being romantic.

According to Maslow (2000b), the person who has split the logical self from the deeper self “cannot live in the world of emotion…doesn’t know whether he is in love or not because love is illogical… can’t even permit himself to laugh frequently because laughing, too, is not logical, rational, and sensible” (p. 224). The neurotically rational person losses sight of the true self, other people, and nature. Maslow can be seen as applying the general concept of a material-rational dialectic at the individual level (see
chapter 2). If the pursuit of accurate, true, and certain knowledge gets too far ahead of the lower psychological processes the system will try to readjust through some other route or punctuated adjustment. In light of an openness to catastrophic systemic adjustments, it is not surprising then that Maslow’s B-cognition seeks to move beyond a priori, or fixed, time and space structures. Maslow (2000b) asserted that B-cognition, “is independent of control, taboos, discipline, inhibitions, delays, planning, calculations of possibility or impossibility. It has nothing to do with time and space or with sequence, causality, order, or with the laws of the physical world…” He continued: “it has nothing to do with action. It can make things come to pass without doing or without acting, simply by fantasy. For most people it is preverbal… premoral, pre-ethical, pre-cultural. It is prior to good and evil” (Maslow, 2000b, p. 225). Here, Maslow’s cognitive theory seems to depart significantly from that of James and Piaget. It almost seems to take on a spiritual or mystical tone that is hard to place in the general approach of the theory treated in this project.

According to Maslow the healthy, creative person is able to fuse or synthesize the primary and secondary; the conscious and the unconscious; the deeper self and the higher conscious self. Maslow (2000b) asserted that “slowly we have learned what we lose by trying daily to be only and purely rational, only “scientific”, only logical, only sensible, only practical, only responsible. The integrated person, the fully evolved human, the fully mature person, must be available to himself at both these levels, simultaneously” [italics original] (p. 227). In Maslow’s estimation, his propositions require the disassembling of many of the dichotomous, either/or divisions of self: evil and good, unconscious and
conscious, the emotional and rational. Maslow compared this process of restoring unity to the split person as a maturity that is childlike. Much of his audience would have recognized this as a reference to Jesus’ teachings about the coming Kingdom of God which would come to people with childlike faith (recall from chapter 2 that one of the problems people faced who believed in predestination was that it was difficult to know when one came to the age of rational-spiritual accountability for their moral behavior). Maslow can be seen as indicating that in the rush for rational-logical progress within positive approaches to psychology misses something by devaluing lower mystical aspects of reality. Still, as in James’s theory, there is a hierarchy and distinct classification of the type of value that each psychological stage contributes in the overall, developing system.

These creative, self-actualized, mature, and childlike people are what Maslow (2000b) believed changing organizations need. They are individuals who are dissatisfied with the way things are and are willing to create another world or a higher social order. How then do change leaders identify creative individuals? Maslow (2000b) described them as:

the ones that make trouble in an organization… tend to be unconventional;… unrealistic; they are often called undisciplined; sometimes inexact; “unscientific,” that is, by a specific definition of science. They tend to be called childish by their more compulsive colleagues, irresponsible, wild, crazy, speculative, uncritical, irregular, emotional. (p. 229)

These less institutionalized individuals are able to regress voluntarily to their unconscious and then return to the world of order and rationality to consciously assess their creations (Maslow, 2000b). According to Maslow (2000h), “A peak-experience happens to a person, but the person makes the great product” (p. 29). Here Maslow can be seen as
forwarding a mystical-empirical understanding of how basic experiences-perceptions provide material that can then be actively constructed into more logical and rational mental systems by higher psychological adaptations that are not passive.

One of the main problems Maslow believed organizational leaders face is the management of creative persons. How does industry encourage balance in a Western world that has suppressed emotion and forwarded cognition as the only source of knowledge? How do organizational leaders develop trust and promote the personnel that they have been controlling or forcing out/firing? Maslow’s hierarchy of needs, ideas about D-cognition and B-cognition, assertions about the importance of self-actualization, creativity, and organizational change, and questions about how organization would work out these problems become the basis for McGregor’s work.

McGregor

McGregor is given credit for exposing Maslow’s research on the self-actualization of individuals to organizational studies (Cayer & Weschler, 2003). According to Stephens (2000), McGregor used Maslow’s motivational theory as a framework for his book The Human Side of Enterprise, and as a result, Maslow became famous in the world of business overnight. Maslow (2000c), in a lecture given to the Harvard Business School months after McGregor’s death, encouraged the students to consider The Human Side of Enterprise beyond its immediate application as motivational theory for industry. Instead, he wants them to “see it in the way that I do as a first step in the direction of a new kind of thinking for the next century or so. The drawing of the conclusions about society, about utopia, eupychia, about education” (p. 63). Maslow believed that to limit McGregor’s
work to the immediate issue of industry and management is to miss the applicability to all human relationships. Maslow (1968) hoped to further McGregor’s Theory X and Y with Theory Z, which focuses on values and creativity. Breaking from the general format of this project, Maslow’s Theory Z is presented after McGregor’s theory because it would not have made sense to present it before Theories X and Y.

Like Maslow, McGregor’s work was not an outright rejection of behaviorism. Instead it identified the shortcomings of behaviorism in addressing the human side of enterprise. The ability to predict and control human behavior for the benefit of the institution was acknowledged as a critical part of management in progressive organizations. However, McGregor (1960) identified some problems with organizational theory and practice. One of the main problems was that theory and practice were built on assumptions that are frequently implicit, unconscious, and conflicting. Unexamined assumptions can lead to inconsistent management behaviors.

Theory X.

Returning to the primary concern with tacit assumptions - there are three assumptions about human nature and behavior that McGregor (1960) identified as pervasive in organizational literature and managerial policy and practice: 1) people dislike work and will try to avoid it; 2) therefore, people must be coerced, controlled, directed, and threatened with punishment in order to get them to work toward organizational goals; and 3) people prefer to be directed, avoid responsibility, and want security more than any other incentive. McGregor named this set of assumptions Theory X. According to McGregor, theory X was not without evidence to support it. Yet, he asserted that there are plenty of
other phenomena in organizations which are not consistent with Theory X. McGregor turned to Maslow’s motivation theory to consider the complexity of human behavior.

McGregor (1960) posited that people continuously put forth effort to satisfy needs and that once satiated, these needs no longer provide motivation. As one’s physical needs were met, the worker’s focus switched to higher needs such as safety and social. McGregor (1960) called self-actualization the capstone need and renamed it, self-fulfillment, which he defined as realizing one’s own potential, self-development, and the opportunity to be creative. Once basic needs were met, the thwarting of higher needs by organizations could result in resistance, antagonism, and uncooperativeness. But McGregor (1960) emphasized that resistance is a consequence and not a cause. This is an important distinction. He posited that many managers and organizational theorists mistaking associate resultant passivity, hostility, or resistance as human nature instead of a symptom of illness caused by the deprivation of social and egoistic needs.

McGregor asserted that human resource management approaches, based on Theory X, tends to view workers as permanently arrested in the adolescent developmental stage wherein people need to be controlled or at best directed. Here, the depiction of adolescents as needing to be controlled or directed can be better understood when considering the way that more primitive or juvenile forms is considered in Darwin, James, and many other psychological treatments in the project thus far. Maslow and McGregor both seem to be comfortable with the idea that earlier stages of development whether juvenile, feminine, or both lack in control or conscious, mentally directed behavior because they are more passive in the evaluative or judicial psychological understanding of life. McGregor’s
concern is not with the depiction of juveniles, but in the treatment of more mature workers who have progressed beyond such low stages of development. He indicated that in such a setting, the thwarting of higher needs causes predictable behavior, “…indolence, passivity, unwillingness to accept responsibility, resistance to change, willingness to follow demagogue, unreasonable demands for economic benefit” (McGregor, 1960, p.42).

Theory Y.

While McGregor (1960) believed that many humanitarian advances were made in industry between 1930 and 1960, he still identified Theory X as the predominant and fundamental theory of management. He presented some alternative assumptions which he called Theory Y: 1) physical and mental work is as natural as play and rest; 2) people will exercise self-direction and self-control when they are committed to the cause; 3) under the right conditions, people accept and seek responsibility; 4) creative potential is present in the many not the few; and 5) people’s potential is not being maximized in most organizations. McGregor (1960) stated that the implications of these principles are sharply different than those of Theory X:

They are dynamic rather than static: They indicate the possibility of human growth and development; they stress the necessity for selective adaptation rather than for a single absolute form of control. They are not framed in terms of the least common denominator of the factory hand, but in terms of a resource which has substantial potentialities. (p. 48)

McGregor focused on the potential for individual development. In so doing he shifted part of the responsibility for laziness, indifference, resistance, uncooperativeness, and lack of creativity to the manager instead of the employee.
According to McGregor (1960), the integration of individual needs and goals of employees allowed for self-control instead of external-control solely. In this model, the individual must be an active partner in organizational decisions because they will impact personal needs and goals. The assumption implicit in the approach is that conditions can be created where each individual’s goals and needs are consistent with the success of the enterprise. McGregor stated, “Theory Y assumes that people will exercise self-direction and self-control in the achievement of organization objectives to the degree that they are committed to those objectives” [italics original] (p. 56). Thus, motivation is a function of one’s commitment to common objectives which are integrated with individual needs.

**McGregor on emotion.**

McGregor (1966) asserted that, “Human loyalty, enthusiasm, drive, commitment, acceptance of responsibility, and self-confidence are all emotional variables. So are the values that ‘we hold dear.’ Motivation is an emotional force” [italics in original] (p. 222). McGregor, drawing on Maslow, continued to forward a view of emotions as energizing, motivational psychic forces with their own value, in keeping with James’s theory of emotions (see chapter 3). Unfortunately, according to McGregor (1966), emotion is considered to be a dirty word in the manager’s dictionary and many managers seek to eliminate the effects of emotion on behavior. He connected these beliefs about emotion with underlying assumptions about human nature. The first tacit belief was that people are composed of two separate aspects: 1) the rational component that acts on facts and logic; and 2) the emotional, irrational, and misguided aspect. The related assumption within this
philosophy is the belief that only a few are able to separate them and subordinate the emotional to the rational (McGregor, 1966).

McGregor forwarded a different position than what he saw in organizations, but the approach that he constructed seems similar to James, Piaget, and Maslow: “The emotional and the rational aspects of man [sic] are inextricably interwoven and only to a very slight degree separable” (McGregor, 1966, p. 219). Within this view, one cannot eliminate emotional influences, nor should they try to do so. McGregor indicated that emotions will continue to influence thinking, reasoning, and decision making whenever they are aroused, whether one tries to suppress them or not. He believed that the more important the problem, the greater the emotive arousal. Ultimately, “importance is a function of the (conscious or unconscious) meaning of the issue or the problem or the situation to the individual” [italics original] (McGregor, 1966, p. 224). In other words, value can be attributed to a situation either by lower instincts or by more highly developed conscious psychological processes. With this view, the individual cannot eliminate the effects of emotion in themselves, nor can they manage the subjective emotions in others through control, coercion, persuasion, or command. These energetic forces must instead be directed into positive, motivational functions by higher psychological adaptations.

Maslow’s response to McGregor.

Again, returning to Maslow after a treatment of McGregor may seem a little bit weird to the reader, but it is presented in this way because Maslow’s (1968) theory Z is a response and addition to McGregor’s (1960) which was just presented as an application of Maslow’s earlier work. Maslow (1968) believed that Theory X and Y existed in a
hierarchical continuum that naturally culminated in the level he called Theory Z. He set up his argument by reasserting the difference between *peakers* and *nonpeakers*. The former he related to deficiency of D-cognition, stating that to these individuals, “people or things are taken essentially in a practical, concrete, here-now, pragmatic way, as deficiency-need suppliers or frustrators; that is, as useful or useless, helpful or dangerous, personally important or unimportant” (Maslow, 1968, p. 172). These individuals progress through the hierarchy of needs and address self-actualization and individual potentiality. Maslow (1968) indicated that, “these people tend to be ‘doers’ rather than mediators or contemplators, effective and pragmatic rather than aesthetic, reality-testing and cognitive rather than emotional and experiencing” (p. 172). Such healthy or self-actualizing people were said to fit into McGregor’s Theory Y model. Maslow also asserted that there also *transcenders* who were more aware of the realm of Being or B-cognition. These individuals surpass Theory X and Y individuals through increased fulfillment and a move towards *full humanness*. This is presented in contrast to stunted or diminutive humanness of nonpeakers (Maslow, 1968). Maslow’s full humanness includes a list of the characteristics of Darwin and James’s highest, most cultivated humans, but it emphasizes a return to the adaptive aspects of lower forms as the means to this ideal end. Here he diverges, at least in part from Darwinian psychology.

The transcender does not give up the ability to test reality as in D-cognition, instead the perception of beauty, value, aspects of eternity, and/or of Being is additional and made possible by voluntary regression. Maslow (1968) indicated that the transcender, “speaks easily, normally, naturally, and unconsciously the language of Being (B-language), the
language of poets, of mystics, of seers, of profoundly religious men, of men who live at the Platonic-idea level…” (p. 174). It may be important to point out that Maslow can be seen as reinterpreting, not representing Plato (see chapter 2). Poets and common artists would have been left out of Plato’s utopia, not characterize the highest people who would have controlled and sought to eliminate such passions. According to Maslow (1968), transenders have a vision that they believe is imminently possible and can bring about the ideal, perfect, potential world. The current stage of development in psychic constitution is the main determinant of the next stage of the dialectic. Just beyond the mature, skeptic is a more developed, child-like, open-minded, and hopeful rationalist. Maslow hypothesized that such individuals might seek out settings and occupations where B-cognition is more likely.

Maslow (1968) connected B-cognition with his own vision for planning the Eupsychia. His choice of the word Eupsychia, meaning good individual instead of Utopia which has a social connotation, is an interesting turn of words that reflects Maslow’s individual developmental sentiments. In Maslow’s (1968) Eupsychia, the superior individuals, leaders, and managers of society needed to “be separated from privilege, exploitation, possessions, luxury, status, power-over-the people, and so forth” (p. 181). His Euspsychic vision for leaders seems to closely parallel the description and treatment of Plato’s guardians in setting up his utopian Republic. The assertion is that less money and a focus on higher, metapay, would please both the transcender and the diminutive individual, preventing antagonism between individuals of differing developmental progress. Maslow (1968) stated that this type of individual is a benevolent authority figure who is “more
awe-inspiring, more ‘unearthly,’ more godlike, more ‘saintly’ in the medieval sense, more
easily revered, more ‘terrible’ in the older sense. They have more often produced in me
the thought, ‘This is a great man’ [sic]” (p. 176). Maslow can be seen as repositioning the
Great Man back above the scientific, material-behavioral psychological engineer and the
purely rational-logical, cognitively contained leader by attributing to them an even higher
ability to regress into deeper, lower psychological processes and remerge to actively
structure these forays into passive, creative, and caring sentimentality. Some individual
developmental theorists like Maslow do in fact have an explicit progressive, teleological,
and utopian vision, but their emphasis is on the development of the individual person - of
the great person - and their contribution to universal progress.

Contemporary Individual Developmental Context

One way to approach organizational change is to focus on individual meaning
structures, stages of cognitive or affective development, or personal maturity. Within this
tradition, the self is moving towards some ideal form or potentiality. As evidenced in
some of the contemporary research that follows, it seems likely that some researchers
assume that there is a self that has the potential for growth or diminution and the potential
to accept or resist organizational change. The research presented by these authors appears
to give primacy to the individual, their meaning structures, and their growth. It does not
preclude the possibility that the individual can be taught or influenced by social forces. A
quote from Maslow, previously presented above, may be worth considering again here:
“The sources of growth and of humaneness are essentially within the human person and are
not created or invented by society, which can only help or hinder the development of
humanness, just as a gardener can help or hinder the growth of a rosebush, but cannot determine that it shall be an oak tree” (Stephens, 2000, p. 49). Or to consider some readings of Piaget, the teacher can help the student develop, but does not alter the structure of the stages of that development.

It appears that few contemporary researchers completely deny the influence of social factors in organizational change. Social influences were even acknowledged and explained in the previous chapter on material-behavioral psychological approaches. Much of the contemporary research included in this section draws on social theory; however, the focus of these authors is on individual stages of development, individual training in order to shape meaning structures, or capturing individual responses to change. Weick (1995) indicated that social scientific approaches to learning and change oscillate in their view of reality and of how knowledge is created in order to try to understand a phenomenon. When acknowledging this tendency, he specifically cited a study by Isabella (1990) which is presented here. At least one of the authors included in this section also draws on behavioral approaches change and emotion (Miller, 2003) and others draw on some social-psychological views of cognition or emotion within the following studies (Isabella, 1990; Schmidt & Datnow, 2005), but there are elements that typify the individual developmental research tradition.

Isabella.

Isabella (1990) presented a change curve that showed the natural progression of individuals through change. She indicated that many researchers study observable behaviors and actions related to change, but few try to understand the interpretive and
cognitive aspects. In her literature review, she acknowledged that others assert that managers and other individuals must undergo a change in their cognitive structures, frame of references, or perspectives, however the nature of these interpretations had not been explicated. Her qualitative study resulted in the construction of a four stage model of how key events are interpreted - anticipation, confirmation, culmination, and aftermath.

Isabella’s (1990) article drew heavily from social cognitive theory and her reference list is replete with individuals who will be considered in the social-developmental paradigm. While she does espouse some of these perspectives in the study presented here, her emphasis is on individual cognition and meaning construction instead of the group processes and interaction. Espousing one set of beliefs and acting on a different set of assumptions leads one to be unaware of the limitations and problems inherent in either perspective. A lack of awareness of underlying assumptions could also lead others into blind activity or practice (Short, Bing, & Kehrhahn, 2003).

During the anticipation phase, managers indicated that they were struggling to make all of the bits of information floating around make sense. The rumors that circulated helped to give material used to structure the uncertainty. Isabella (1990) stated, “In the absence of alternative information from upper management, organizational members have a heightened sensitivity to any information that suggests or could be construed as suggesting the inevitability of an outcome” (p. 17). The tidbits of information need to be incorporated into an individual’s interpretive picture. Uncertainty and the resulting rumors, in this early stage, were depicted as continuously being adjusted by the individual in order to construct a picture of the new reality. Isabella seems to adopt a more subjective
and contingent view of knowledge and reality in keeping with James’s (see chapter 3) view of belief or meaning making.

During the second stage, confirmation, this picture of the new reality allows the manager to access previously retained interpretations and patterns of action from the past. For instance, one manager stated, “The last organization I worked for went through an acquisition, and basically nothing changed, so I expected that nothing would change here too…” (Isabella, 1990, p. 22). These existing frameworks contained cognitive schema and behavioral scripts for how to respond to the change, which reduce anxiety because they gave a reasonable course of action (Isabella, 1990). Like James’s discharge theory, the presence of a belief that at least has the potential to direct action is enough to reduce tension (see chapter 3). To insert the language of Piaget, these meaning structures provide a relative level of stability by re-establishing a temporary equilibrium. While behavioral scripts might be associated with formal patterns of behavior or organizational roles as described in social psychology (see chapter 6), it does not appear that Isabella further elaborates on a system perspective or builds analysis of social forces into the study. These beliefs are not shaping her methodological approach to the research, a more individual interpretation of behavioral scripts seems to be operant.

In the culmination stage, more information becomes available. The perceived change in the environment requires the individual to adjust, or readjust their cognitive structures. Isabella (1990) talked about this sense making process as the reconstruction of views or frames of reference. In this stage, individuals were said to be more receptive to symbolic messages or actions, especially by management. Isabella (1990) indicated that,
“At this time more than ever, there could conceivably be varied and multiple individual realities and divergent interpretations as individuals attempt to make sense of the changes experienced” (p. 25). Here, sensemaking is seen as related to environmental stimuli including social symbols and the life history of the individual.

Isabella (1990) assumed that all meaning is created *a posteriori* and that these interpretations can come to be shared through social interaction. In the final stage, aftermath, individuals and the collective evaluate and interpret the consequences of the change and seek to restore certainty, or equilibrium. In this last phase, Isabella expressed the strongest social-developmental sentiments in the model. Emphasis is placed on the individual reconstruction and a subsequent sharing-reshaping of these interpretations socially. The judicial role of the community in meaning retention is more clearly an example of a social structuring of belief.

Isabella (1990) indicated that movement from one stage to another is facilitated by personalization of the change and affective reactions to these individual triggers. Isabella’s (1990) findings indicated that individuals construct and may construe reality as they “attempt to deal with the uncertainty of limited information” and “as managers question how they will individually fit into their organization after the event occurs” (p. 31).

Though Isabella’s study and conclusions primarily focused on cognitive aspects of change, she concluded:

Abelson (1963) noted that most thorough cognitive processing was based on “hot cognition,” or emotion-laden cognition. In this research it was very clear that the collective construed reality included both elements of fact and feelings and emotional reactions. To the extent that emotion and cognition are intertwined
(Gioia, 1986b; Park, Sims, & Motowidlo, 1986), personalization of trigger events appears to bring such an affective dimension into play. (p. 33)

Here, there is no doubt that emotions remain individual and that they are triggered, passive responses based on individual histories. While Isabella may waiver on how individual or social the sensemaking process is (Weick, 1995), she does not waiver on the nature of emotions. She presents emotions as individually subjective and materially generated in keeping with James’s theory (see chapter 3). Even in her conclusion, Isabella acknowledged some collective aspect of reality construction, but ultimately she explained the relationship emotion and cognition in terms of personal meaning construction and active and passive pathways. Though emotion did not figure largely in Isabella’s treatment of the stages of cognitive change, it provides a point of comparison for the stages of emotional experience in Miller’s (2003) theory.

Miller.

Miller (2003) asserted that one of the biggest mistakes that change agents make is ignoring or minimizing the importance of the human response to change. Here the human response to change is the emotional reaction, and one is left to wonder if this means cognitive responses are something other than human responses. She indicated that, though leaders cannot control employees’ emotions, they can help them through their emotional response to the change. She based many of her statements about the importance of emotion to the change process on Goleman’s behavioral work on emotional intelligence. Yet, Miller provided a progressive model of how change is emotionally experienced and expressed by the individual. According to Miller (2003), changes in emotional expression
change over time through the following stages: 1) uninformed enthusiasm and denial; 2) informed cynicism and resistance, anger and checking out; 3) exploration and hopeful adoption; and 4) commitment and acceptance. In each stage emotion appears to be dependent on cognitive structuring of available information.

Miller (2003) asserted that there are no shortcuts and one cannot accelerate the process that goes on within the individual. While Miller did acknowledge the importance of a systems understanding of change, much of her focus is on training, development, learning, and intrapersonal adjustments to change. The HRD professional’s role in coaching, training, and guiding organizational leadership through change is also emphasized by Miller (2003) and other human resource development theorists including Walton (1999). Gilley and Maycunich (2000) emphasized the importance of leaders as they create meaning for employees and create an environment where employees can develop, grow, and flourish.

Miller (2003) argued that, in keeping with the findings of the American Productivity and Quality Center’s benchmarking study in 1997, involvement of educated and empowered workers is essential. Individuals must be educated on the actual characteristics of the change, as well as how it impacts them and their activity in order for their emotional response to move through the stages presented above. As in James’s theory, the ability to active structuring of beliefs about a situation and the choice to direct and change passive emotional reactions to the situation are both associated with more cognitive psychological processes (see chapter 3). As in some readings of Piaget and
Maslow, Miller depicts an internal individual process of development that must follow its natural-logical course of development.

*Individual development and educational reform.*

In this section, as in the previous chapter, the research of several related studies are presented together under one subheading instead of organized by individual authors. A specific organizational context was conveniently selected to explore how individual developmental approaches might look within a specific organizational context, an educational workplace. According to Hargreaves (2001), cognitive science and the need for new work skills in a knowledge society is increasing turning attention to constructivist approaches to learning and developing, but they fail to “get to the heart of [developing really good teaching]” (p. 1056). Hargreaves, a social constructivist, contends that educational policy and administration literature is largely driven by technical, cognitive-science concepts of teaching. He indicated that in recent years, there has been a counter-discourse to material-behavioral approaches involving the role of emotion in teaching and learning that is primarily personal, psychological, and individual in nature. Hargreaves (2001) stated, “This work highlights the virtues of caring (Acker, 1992; Noddings, 1992; Elbaz, 1992), passionate (Fried, 1995), thoughtful (Clark, 1995), and tactful (vanManen, 1995) teaching” (Hargreaves (2001, p. 1057). Educational reform theorists continue to formulate individual and social constructivist suppositions, or some blending of the two, in the wake of Hargreaves, assertions.

A series of articles were published in the journal, *Teaching and Teacher Education*, which look at the relationship between emotion and change in accord with recent calls for
research on emotion and the workplace (Reio & Callahan, 2004). Reio (2005) indicated that contributors to the special edition explored how emotion related to reform and participants’ professional and personal identity. Like Isabella, some of these authors approach their research from a primarily individual developmental perspective, even though social-psychological theory is intermingled. Four major themes emerged from the studies: 1) teachers’ emotional experiences of reform influence risk taking and identity formation; 2) change affects teacher learning and development; 3) change theory could help improve reform efforts; and 4) there are individual similarities and differences in response to reform efforts (Reio, 2005). Reio (2005) indicated that much of educational reform is based on a universal, rational approach that neglects the individual performer and that this is problematic because it is the individual teacher who implements the change in the classroom. While this introduction to the series emphasizes the individual over the group or social system, contributors approached their research from various points on a continuum between individual and social developmental perspectives. Schmidt and Datnow’s (2005) article provides an example of how educational reform can be approached in a way that demonstrates many of the aspects of the individual developmental paradigm.

Schmidt and Datnow (2005) indicated that change often requires individuals to learn something new, which can generate discomfort. They posited that, initially, teachers try to make sense of change in relationship to their prior experience and existing knowledge frameworks. According to Schmidt and Datnow (2005), new meaning constructs become necessary as more information becomes available. The key that they
point out is that this meaning construction is augmented by structured learning opportunities that aid individuals in developing the cognitive frames needed to interpret changes and the implications that they have for the individual.

Schmidt and Datnow (2005) found that when teachers made sense of change at the school or system level, they attached less emotion to it than when they reflected on their own classroom. In this study, the type of emotional response - positive or negative - was also connected to the quality of the individual’s understanding of the purposes of the change. One of the unusual findings of the study was that “for some teachers, the reform had no meaning at all. They could not define it nor did they know what it was” (Schmidt & Datnow, 2005). This level of uncertainty and disconnection with reform purposes is presented as resulting in debilitating emotional effects. The depiction of emotions as some form of pent up passive emotional energy that distorts or prevents appropriate action is in keeping with James’s discharge theory of emotions (see chapter 3). The resulting assumption that seems to shape the interpretation of the participants’ stories is that the cognitive structuring is distinct from the emotional reaction and can only bring about an appropriate release or harnessing of these motivational forces once some belief is identified as potentially implementable. The hierarchy between higher, active cognitive processes and lower, passive emotional reactions continues to persist.

Flexible reform efforts were proposed to provide more room for teachers to make their own interpretations and meanings, which can be assimilated to existing understandings and beliefs. One of the key themes in Schmidt and Datnow’s (2005) article is that the purposes of reform must be understood and assimilated with existing values and
purposes within the individual teacher. Schmidt and Datnow (2005) indicated that structured learning opportunities are needed to persuade individuals to abandon their commitment to old ways and learn something new. Active psychic pathways must be addressed on an individual basis in order to bring about more positive emotional reactions to change.

**Individual Developmental Summary**

Organizational change at the turn of the twentieth century was based on mechanical conceptions of an individual’s role in the organization. Scientific management and behavioral psychology focused on the needs of the organization and seek greater efficiency by exploiting physical properties and stimulus-response mechanisms. Individual developmental theorists shifted the focus to the individual processes and needs, rooting their approaches in classical humanism and liberalism. Humanism assumes that there is a self that has the potential for development, humans are basically good, and humans are free to choose their behaviors. The theorists presented in this chapter included Piaget, loosely representing a liberal cognitive approach to cognition and emotion and Maslow, representing a cognitive-motivational theory representing a neo-humanistic approach. McGregor is also considered because he brought Maslow’s theories to the business community and created a dialogue with Maslow that addressed issues related to change at the organizational level.

Individual developmental approaches to cognition and emotion continue to shape organizational change research by focusing on employees’ cognitive restructuring of information into more stable and more accurate representations of the change. As more
adequate cognitive frameworks are developed within the individual, the expectation is that the unproductive emotional reactions can be redirected into more positive and motivating emotional energies. Ultimately, this approach seeks to reshape mental frameworks instead of controlling environmental stimuli in order to make organizations more efficient and productive. It also promotes the importance of individual interests and the valuation of change according to the personal history of each individual. The treatment of emotion as a secondary, passive, and energizing force remains consistent with the treatment of emotions in James’s theory of emotions – frequently drawing on hydraulic or discharge theory as a metaphor for describing emotional processes.

Cognitive research appears to give little attention to Maslow’s intentional regression into passive, emotional, and feminine states. Even in critiques of the necessary, sequential progression of his hierarchy of needs, the focus is on motivation; his intent to build on Piaget’s cognitive stage theory does not seem to even receive criticism (e.g., Woolford, 2007). The rational, cognitive aspect is associated with an active agency to construct individual, reality (logical or relative), and the emotional aspect is associated with a passive arousal and potential energizing forces need to be directed.

Even in more contemporary individual psychological research into organizational change or organizational reform, the emphasis continues to be on the highly adaptive, active mind and its ability to structure the world. Emotion continues to be portrayed as a passively generated, lower psychological adaptation that must be brought under the direction of more rationally constructed meaning schema. The theories presented in this chapter, despite some nuances, continue to perpetuate hierarchical if not dualistic
representations of mental and physical psychological processes. The model used to depict Darwin and James’s psychology can be seen as virtually unchanged in this chapter.
Chapter 6: Social Developmentalism

Introduction

In the early twentieth century, dissatisfaction with behaviorism and the individual developmentalism of the Neo-Human Relations approach created a context in which social psychology grew as a discipline. Integral to this development was an interest in studying system change and using the social group as the primary unit of analysis instead of the individual. According to a social psychological interpretation, the Hawthorne studies indicated that: social norms are more important than the physical environment in determining productivity; workers react as members of a group rather than as individuals; and leadership within informal work groups is essential to the development of norms that compete with desirable organizational norms (Cayer & Weschler, 2003).

During roughly the same time, a battle for consciousness ensued in the Soviet Union – a struggle to redefine consciousness as a social phenomenon. According to Luria and Leontiev, as cited by Brune, “The first and most important task of that time [the late 1920’s and 1930’s...] consisted of freeing oneself, on the one hand from vulgar behaviourism, and, on the other, from the subjective approach to mental phenomena as exclusively inner subjective conditions which can only be investigated introspectively” (Bruner, 1962, p. vi). Vygotsky’s theory of development pleased some Marxists because it emphasized socio-historical determinism of consciousness and intellect (Bruner, 1962).
Drawing on Vygotsky directly or indirectly, social psychologists study organizations, cognition, emotion, and change through a socio-historical and developmental lens.

_Social Developmental Theories_

_Vygotsky_

Vygotsky began his work in psychology in 1924. His initial degree was in law, but he read widely in linguistics, social science, psychology, philosophy, and the arts (Bruner, 1962). Bruner (1962) stated that Vygotsky “would not brook either materialist reductionism or mentalism, nor the easy Cartesian dualism that opted frontally for one and let the other in through the back door” (p. vi). In other words, Vygotsky did not accept a complete material determinism as would be characteristic of some empirical, behavioral approaches to science that attempted to identify the original environmental stimulus that necessarily causes a specific effect. Here his issue is with a traditional, objective view of the stimulus-response mechanism. Vygotsky did not accept individual mentalism either because it can be interpreted as having fixed stages or structures that move towards a more coherent internal, individual logic or rationality independent of the material world.

Vygotsky’s concern with Cartesian dualism is that, dividing experience into material and internal rational structure simply allows one to focus on one active source of knowledge while allowing an additional passive source of knowledge to slip into one’s epistemology or psychology of learning. Vygotsky sought to bring aspects of the two approaches into balance with a socio-historical interpretation of language and thought.

Vygotsky applied a dialectic approach to psychology involving material and socio-historical influences. Vygotsky opposed stimulus-response conditioning, offering an
alternative system wherein people could intervene in the environment through language and other symbolic interactions (Bruner, 1962). He also criticized Piaget’s neo-Kantian approach which he found to be overly individualistic. In this section, some of Vygotsky’s contributions to social psychology and social constructivism are considered, particularly his: socio-historical vision of development, the importance of symbols in mediating thought, and the conception of the zone of proximal development.

Vygotsky (1962) believed that psychology was too atomistic, reducing complex wholes into elements that do not adequately reflect the properties of the whole. His metaphysical concern with wholes draws on Aristotle, Hegel, and Marx (see chapter 2). He specifically spoke to this issue in relationship to cognition and emotion:

The fruitfulness of our method may be demonstrated also in other questions concerning relations between functions or between consciousness as a whole and its parts… We have in mind the relationship between intellect and affect. Their separation as subjects of study is a major weakness of traditional psychology since it makes the thought process appear as an autonomous flow of “thoughts thinking themselves,” segregated from the fullness of life, from the personal needs and interests, the inclinations and impulses, of the thinker… By the same token, the old approach precludes any fruitful study of the reverse process, the influence of thought on affect and volition. (p. 8)

Here, Vygotsky places affect and cognition in a continuous whole, but continues to describe them as two psychological forces that might be able to influence each other.

Vygostky’s problem with the idea of thoughts thinking themselves in a disembodied mind can be seen as a critique of the continued influence of Descartes’ rationalism - especially in light of his concern with Cartesian dualism in the first paragraph - and not Hegel’s Absolute Ideal which is also pure thought thinking itself (see chapter 2). His concern
appears to be with viewing parts in total isolation without considering the process of their interaction.

Vygotsky (1962) proposed that it is more important to study psychological units - the smallest parts that still retain the properties of the whole instead of smaller elements which do not. He stated, “Unit analysis points the way to the solution of these vitally important problems. It demonstrates the existence of a dynamic system of meaning in which the affective and the intellectual unite” (p. 8). After Vygotsky identified the importance of affect in selecting bits of reality for intellectual investigation and the reverse process of affect derived from thought, he moved from this example of segregated thought into his project on language and thought with little to no reference to the relationship between cognition and affect in learning.

Vygotsky believed that thought psychology owed much to Piaget, but still found it to be too individualistic. According to some theorists, his criticisms of Piaget’s theory may not be as applicable to Piaget’s later work (Hanfmann & Vakar, 1962). According to Vygotsky (1962), Piaget’s early work focused on gradual socialization of very individual, personal meaning states. In this reading of Piaget, early language use is egocentric, and later, it is socialized. Vygotsky (1962) countered that all language frameworks are essentially social, preferring to use the categories egocentric and communicative: “the true direction of the development of thinking is not from the individual to the social, but from the social to the individual” (p. 20). He further elaborated on this process indicating that cultural development occurs on two planes: first the social/interpsychological and then the individual/intrapsychological (Cole, 1996). Vygotsky asserted that linguistic symbols and
socio-cultural experiences shape speech structures that ultimately become the foundation of thinking. His reading in linguistics, law and social theory can be seen as leading him to different views of how knowledge is constructed than Piaget (see chapters 2 & 5).

Vygotsky (1962) went on to summarize the main conclusion of his research, “the nature of the development itself changes, from biological to sociohistorical” [italics original] (p. 51).

Vygotsky (1962) believed that individual meaning construction and social construction operate as a unitary process. In response to radical individual psychological theories, he presented a unified process in which individual and social development inform each other. Some readings of Piaget’s stage theory hold that a child’s development must go through the same phases with or without instruction. Vygotsky’s unified process was also in response to psychological conceptions of learning as habit formation and complex conditioned reflexes. Identifying James as the origin, he went on to present Thorndike as the protagonist of reflexology (1962, p. 95). Vygotsky presented an alternative: “instruction given in one area can transform and reorganize other areas of child thought, it may not only follow maturing or keep in step with it but also precede it and further its progress” (1962, p. 96). In this view, progress is not bound by material response or by individual structures, it escapes individual biological models of evolution based on individual variation and selection by taking on a social-historical view of development and progress. The material, the individual, and the social are all in a dialectic together. Here the term dialectic is used loosely to reflect a philosophical evolutionary model. While a dialectic in a conventional sense denotes the interaction of two arguments or forces moving towards a more mature and integrated third point, a systemic whole or philosophical
development need not be limited in to two positions. Perhaps a rational-legal legislature in which multiple points of interests come together to reason out a position that forwards the common good would be a better image, particularly given Vygotsky’s initial degree and reading in law.

Vygotsky (1962) linked his theory to the work of Herbart who asserted that certain forms of instruction called formal discipline can develop mental function, not just skills and knowledge. In other words, instruction is more than replacing one mental object with one that is more accurate, it also shapes the cognitive processes that are involved with learning. The idea that instruction can enhance development led Vygotsky to focus on process instead of product. In his theory process represents a dynamic, future oriented approach that utilizes the zone of proximal development, or the developmental space just beyond what the students could achieve by themselves. According to Daniels (1996), the zone of proximal development is a place where individual and social are brought together. As the individual reaches increasingly higher planes of thought through interaction with others, the higher cognitive level reshapes the lower meaning frameworks. Vygotsky (1962) asserted, “In this as in other instances of passing from one level of meaning to the next, the child does not have to restructure separately all of his earlier concepts…” (p. 115). Instead, generalizations were seen as being made based on overarching principles and perceived connections between specific situations that could make adjustments to the whole system.
Lewin

Lewin (1951c) believed that some aspects of Vygotsky’s cognitive theories were too simplistic. Despite some criticism of Vygotsky’s theory, Lewin builds on it, sharing a focus on a social unit of analysis and a social-historical approach to learning and change. Cartwright (1951) asserts that many of Lewin’s contributions to conceptions of human behavior relate to an increasingly broad inclusion of determinants within an interdependent field. Expanding the Vygotskian unit of analysis beyond needs, wants, cognitive structures, and proximal social events, Lewin also believed that economic, political, legal, and other influences should be taken into consideration as part of the life space of the individual. Throughout his life, Lewin’s conception of human motivation increasingly moved from a focus on individual needs to a focus on social influences such as “group membership, personal ability, economic and political resources, social channels, and other influences usually omitted from psychological theories of motivation” (Cartwright, 1951, p. xii).

According to Lewin (1951e), up to the 1920s, academic psychologists breathed “the ‘pure scientific air’ of sensory perception and memory, [and] did not deem it appropriate for a scientist to consider these ‘darker and mystical aspects of life’”, i.e., affective states (p. 31). His comments here do not reflect awareness of James’s theory of emotions or Dewey’s response to James’s theory, both of which predate 1920. The influence of logical positivism on psychology at the beginning of the 20th century likely influenced Lewin’s perception of the field (see chapter 2). Lewin (1951b) stated that psychologists in the 1920s and early 1930s were keenly interested in fact finding and
“scientific” psychology while, on the whole, being adverse to theory. He indicated that they were “particularly skeptical of the idea of psychological laws in the fields of needs, will, and emotion, that is, in fields other than perception and memory” (Lewin, 1951b, p. 1). Lewin brought together a psychological and philosophical vantage point when addressing the need for more enthusiasm concerning theory. He warned that enthusiasm for theory that outpaces maturity of concepts can create an empty formalism that breeds “either-or” categories. The great philosophical concern being that the assumptions underlying the concepts and measures would be lost and treated as given facts.

Lewin (1951e) noted a professional atmosphere in which emotions and forces were both considered to be outside of the field of positive science. His theoretical concept group atmosphere, or social field theory, returned a focus to forces and a role for emotion. Here, Lewin’s work might be seen as somewhat analogous to Maslow’s work building on Piaget within the individual developmental approach, as both Piaget and Vygotsky acknowledged the importance of an integrated approach to thought and emotion but focused primarily on cognitive developmental psychology. Lewin’s social field theory sought to give a more thorough treatment of the relationship between cognition and emotion. Lewin (1951b) posited that the construct, system in tension, presupposes a field theory: “The essence and the purpose of this construct is to include a tendency for change in the direction of equalization of the state of neighboring systems” (p. 11).

Despite Lewin’s comments about the dearth of psychological treatment of emotions at the beginning of the century and his concern with theoretical assumptions, Lewin seems very comfortable using hydraulic or discharge theory language in describing how emotions
play into his social theory of systems in tension. When discussing interpersonal relationships, Lewin (1951b) indicated that differences between systems or regions of a system can be destroyed by heightened emotional tension, either up or down. He went on to say:

The possibilities of a field theory in the realm of action, emotion, and personality are firmly established. The basic statements of a field theory are that (a) behavior has to be derived from a totality of coexisting facts, (b) these coexisting facts have the character of a “dynamic field” in so far as the state of any part of this field depends on every other part of the field. (p. 25)

James’s psychology also uses a discharge model for the relationship between cognition and emotion within a larger systemic whole, but he deems the complex whole beyond individual knowledge and perhaps beyond full corporate understanding (see chapter 2). Lewin, however, does not see this as an insurmountable barrier – at least not when the social system as a whole is the unit instead of the individual. Recall that Vygotsky, who Lewin drew on, assumed a different evolutionary model for socio-historical and linguistic change than the biological or genetic model applied to individuals (See above).

According to Lewin (1951e), systems seek equilibrium and heightened emotions provide energy that can disturb, maintain, or reestablish equilibrium. Therefore, one must consider the total field and all of its interrelating parts in order to understand the dynamic nature of systems. Several examples of dynamic and non-dynamic constructs relevant to field theory were given by Lewin (1951e): 1) Position is a special relation of regions; 2) Locomotion is the relation of position to time; 3) Cognitive structures involve the position of multiple points; 4) Force is the tendency for locomotion; 5) Goals are the distribution of forces in space; 6) Conflict occurs when two or more force fields overlap and disturb
equilibrium; 7) Time perspective is necessary for many emotional states such as fear, hope, and guilt; 8) Power is the ability to induce a force from one system to another; and 9) Values “determine which types of activities have a positive and which have a negative valence for an individual in a given situation” (pp. 39-41).

Here, Lewin might be seen as mapping out a metaphysical-epistemological system to explain how Kantian individual subjective *a priori* structures of time, space, and causality can be held in tension with material-physical scientific approach. The shift to physics-like-language from a biological language can be seen as the main difference with James’s discharge theory (see chapter 3). Lewin can still be seen as part of the Jamesian family, his criticism depicted throughout this section seems primarily aimed at application of his theory instead of James’s theory itself. Both see the whole as a complex, interrelated system in which the individual only experiences-must deal with a small portion. Valuation therefore occurs related to the individual in a given situation, forces are tendencies to act, and value determines if the behavior is positive or negative.

These constructs in the list above, are part of the field that makes up a person’s *life space*. Here, Lewin’s physics-like language seems to give way to biological evolutionary metaphors of niches. According to Lewin (1951d), this is one of three areas where change is of interest to psychology. Life space refers to the psychological environment of the individual and might refer to the individual’s needs, motivations, mood, goals, anxiety, and ideals. Lewin clarified that there are many parts of the physical or social world that do not affect the individual at a given time, and are therefore not part of the life space. However, the third area of interest is the *boundary zone*. This area of an individual’s life space
involves the intersection of the physical or social world and the needs, motivations, and moods of an individual in a given situation (Lewin, 1951d). Even the areas that exist beyond the boundary zone are considered to have possible implications for the future. Lewin (1951d) called the scientific task of identifying potential physical and social environmental variables the *psychological ecology*.

Lewin (1951c) characterized field theory as having constructive or genetic methods. Here his return to a biological metaphor seems to be more in keeping with Baldwin or Piaget’s depiction of evolution and learning as a genetic, logical-rational dialectic than Vygotsky’s socio-legal depiction, with the exception that he broadened the number of determinants that should be considered as part of the individual learner’s life-space. Instead of associative classification, as in behaviorism, the essence of Lewin’s genetic method is the construction of a specific situation with various elements or forces that make up the total situation. These systems units, like genes, combine to determine the potential development of the whole. Lewin (1951c) indicated that this approach to behavior required one to consider the constructed history of the individual and the non-psychological environment, both of which contribute to the individual’s life space. Here, the difference between parts of the whole that have psychological forces which contribute to development and purely automatic material components of the environment is worth noting. Assumptions related to the rationalism or the Incarnate Logos seem to continue to influence a distinction between what makes progress possible. Like Maslow, Lewin can be seen as broadening the psychological forces that should be given attention and considered to have a potentially positive contribution to the development of the whole.
Lewin (1951f) viewed reality as a dynamic whole: “In the social as in the physical field the structural properties of a dynamic whole are different from the structural properties of the subparts. Both sets of properties have to be investigated” (p. 192). Physical, individual mental structures, and social structures all need to be investigated depending on the question that needs to be answered. By expanding the unit of analysis beyond the individual, the structural properties of groups and the relationship between interrelated parts could be examined. Lewin (1951b) hoped that his approach prevents social psychology from slipping into the teleological metaphysics by incorporating the psychological past, present, and future into a dynamic, present life space. He thought that it avoids deterministic teleology of the past (behavioral/associational materialism) and the future (individual developementalism/structuralism) by focusing on the present field of development as the condition for behavior-thought-action.

Perhaps foreshadowing the struggle that social psychologists would have in seeking to hold these two fields in tension, it is not clear how successful Lewin is in avoiding a teleological position. Some of the assumptions that seem to accompany the classification of psychological and material aspects of the whole have already been mentioned. On the material side, by leaning back on the language of physics he might be seen as giving an explanation for how the material also contributes to systemic development in a way similar to the psychological. Lewin (1951b) asserted that directed action according to psychological forces is no different than directed physical forces or vectors:

- by defining direction in terms of hodological space, an adequate representation is possible of what has been meaningful in some of the other claims of teleology. The puzzling relation between knowledge and dynamics which had a mystical character
In this quote, the seemingly mystical roundabout and effective paths taken by animals can be seen as drawing on one of the arguments Darwin (2005b) made for the continuity of rationality between humans and lower living forms. Lewin can be seen as unveiling the mystical aspect of these lower forms life interactions (recall Maslow’s Being cognition in chapter 5) by explaining them in terms of a dynamic material system. The path of least resistance is not just an individual, internal mental structure characteristic of highly evolved logical-rational beings, it is true of the rational structure of the material world as a whole. Lewin’s (1951b) hope was that a science would progress in such a way so that in its mature state, the internal topological and hodological relationships could be described just like other mathematical or geometrical concepts. Topological and hodological interactions and the knowledge to understand and shape them can be seen as basis for Lewin’s progressive teleology. Like Maslow, his approach to positivism does not dismiss earlier psychological forms, but it even goes further to emphasize the rational fabric of all of experience.

Lewin (1951c) applied these principles to the intersection of change and learning. He indicated that it is common in psychology to conceptualize all change as learning. He identified the term learning as a practical representation of several psychological processes which he broadly defined as “doing something better than before” (Lewin, 1951c, p. 65). Four types of changes are identified as forms of learning: 1) changes in cognitive
structures; 2) changes in motivation; 3) changes in group belonging or values; and 4) voluntary muscular control. Thus, Lewin broadens what is included as rational, intelligent, or necessarily developing to include everything from the highest logical cognitive structure to the most basic bodily form of interaction in the system. Lewin indicated that changes in cognitive structuring is a natural process of development. Cognitive structures change as the relationship between two areas or regions of one’s life space become differentiated. In other words, unstructured areas of one’s psychological environment become structured or are given meaning when a problem with their previous balance or equilibrium is detected.

Lewin (1951c) related cognitive structuring to the physical and social world, saying, “needs, emotions, language go through a similar process of differentiation” (p. 72). He acknowledged the difficulty inherent in changing one’s motivations, values, or ideologies, but asserted that successful change of some ideological and social behaviors is necessary. Tension is heightened in these situations because values-ideologies and cognitive structures are interwoven, making conversion difficult. The difficulty is that the higher and lower psychological processes work very differently (Lewin, 1951c).

Lewin does not seem to think that the difficulty is insurmountable, as in James’s psychology-philosophy. Instead, his teleological ideal seems to be much more certain as in some readings of Darwin as a material explanation of a logical progression of a systemic whole. Lewin’s interpretation extends the rational line of continuity back beyond Darwin’s (2005a) imagery of a psychological breath imparted into multiple or one original form. As in Hegel’s philosophical evolutionary model, Lewin’s field theory could be seen as maintaining the basic assumption that the Real is Rational and the Rational is Real.
However, in Lewin’s theory it does not result in pure thought thinking itself, but in a rational system including both material forces and materially derived psychological forces that are all moving towards balance. Ultimately, the model used for Darwin and James’s treatment of the relationship between higher and lower psychological forms is pushed even lower to explicitly acknowledge the rational impression in even the material or non-psychological aspects of the universal whole.

Consistent with the model in appendix C, Lewin (1951a) depicted directed thought and mental conversion as an active psychic process, emotions as bodily expressions. Emotions therefore could be rational whether consciously directed or not. Though both cognitions and emotions could be socially mediated, the means for cognitive change is conversion of belief based on better knowledge and emotions are changed by behavioral or associational response mechanism. Lewin (1951a) asserted that:

Human behavior is either a directed action or an emotional expression… it has been shown, too, that goal-setting depends upon certain ideal goals, upon what the sociologists call the “ideology” of the person. Cultural anthropology proves that these ideologies vary extremely among different cultures. As to emotional expression, experiments have shown that, for instance, the emotional reaction to failure can be changed to a great extent by appropriate praise or change in social atmosphere. This substantiates the general thesis that the management of tension by the individual depends upon his particular social and cultural settings. (p. 131)

The way in which cognitive beliefs and emotions are changed is being depicted as fundamentally different. The ideologies of individuals are therefore, not only shaped by their own history and individual consciousness, but by the history and social consciousness of the group(s) with which individuals associate in a give situation. Emotion can be influenced by changes in ideology (individually or socially directed thought) or by
stimulus-response mechanisms. Lewin’s treatment of the relationship of cognition, emotion, and change remains basically unchanged from James’s psychology.

Change and learning, therefore, cannot be studied at the individual level alone. Social forces must be considered when investigating change, resistance to change, and learning. Lewin (1951f) asserted that group life is always changing. Periods with less transition might be different than times of turmoil, but the difference is in degree of stability or flux, not absolute stability and punctuated change. Lewin depicted resistance to change in a way that might be considered unconventional. He first presents the possibility that a change could be an impediment to productivity, and that the social system might resist this hindrance in order to maintain a favorable status quo. Lewin (1951f) posited:

The mere constancy of group conduct does not prove stability in the sense of resistance to change, nor does much change prove little resistance. Only by relating the actual degree of constancy to the strength of forces toward or away from the present state of affairs can one speak of degrees of resistance or “stability” of group life in a given respect… The practical task of social management, as well as the scientific task of understanding the dynamics of group life, requires insight into the desire for and resistance to, specific change. (p. 201)

The previous quotation highlights the importance of identifying both the relative strength of forces as well as social values that shape the valence of these forces as positive or negative. Considerable amounts of energy may be marshaled to maintain continuity amidst changing conditions (Peirce, 1955a). Lewin’s depiction of resistance acknowledges the possibility that all change does not guarantee progress, though moving away from the ultimate balance would add tension to the topological and hodological relationship within the system.
Attention to both values and forces informs Lewin’s (1951f) two basic methods for changing behavior in organizations in a progressive direction. Assuming that the force field is seeking a state of quasi-equilibrium through the tension of opposing forces, there are two ways to create change: 1) increase the force towards the proposed change; or 2) reduce the opposing forces. In the first scenario, the concomitant increase in tension can amplify fatigue, aggressiveness, emotionality and lower constructiveness. In order to reduce opposing forces and create permanent changes, learning must take place. This makes sense in relationship to Lewin’s (1951b) metaphysics of directed action. Learning is a way to generate a psychic force with a specific vortex or direction. Emotion during change, viewed as a bodily stimulus-response mechanism by Lewin (1951a), is not a directed response until it is brought under control by learning. The emotional response is individual and unable to take into consideration broader interests. Therefore, the total social circumstance must also be considered in Lewin’s (1951f) theory so that groups, subgroups, relationships between subgroups, and social value systems are reorganized so that the whole system moves or acts differently.

Lewin (1951f) described this as a social learning process in which established social customs or habits unfreeze, move, and refreeze with a different orientation towards the force field. In the unfreezing state, existing meaning structures, cultural habits, and equilibrium must be disturbed. According to Lewin (1951f), the process of disrupting complacency may require a deliberate “emotional stir-up” (p. 229). He found the same to be true of the refreezing process. Little detail, however, seems to be given about the nature of emotion’s role in this process or how one might deliberately stir-up emotions to benefit
the process. One is left to draw on Lewin’s other writings (e.g., 1951a) that suggest that appropriate praise or change in the social environment would result in a different emotional mood or expression.

Lewin (1951f) did address differences in the success of individual versus group reeducation. An individual is less likely to go through this reeducation on their own because straying too far from group norms can result in increased difficulty for the individual and even excommunication from the group. Lewin (1951f) indicated that deviance may not be opposed because it is contrary to any given social value, but solely on the basis that the difference disturbs the quasi-equilibrium which has itself achieved a level of value for the group. To support this, Lewin drew on examples and research that suggests that it is more difficult to change the behavior or values of an individual through training or lecture than it is to change the mindset of a face-to-face group through consensus building.

Ultimately, it is the depiction of the process of instruction that changes, not the idealized aim. Lewin’s field theory seeks to be a psychological via media between behavioral materialism and individual developmental structuralism. To hold these approaches in tension and keep them focused on the present, he forwards the importance of learning in the social and physical context. Lewin’s (1951b) progressive psychological approach is based on the synthesis of physical determinants, individual history, and a systems approach to change. He redefines the panpyschic dream of bringing the rationally-psychologically endowed portions of the world into harmony, broadening its focus to acknowledged the rational constitution of all that exists. His hope is that more holistic
empirical measures and the knowledge this could generate mathematical and geometric representations of the world that would provide the means for directing forces into its ultimate equilibrium.

_Sociology and Social Psychology_

_Kuhn_

Kuhn (1962/1970) developed a socio-historical look at the structure of conceptual change within the scientific community. His social theory of how knowledge develops within the field of science significantly influenced social psychological approaches to human understanding (Toulmin, 1972). In part, he is briefly treated here in order to provide a context for some of the theories that follow, but his theory also continues to preferentially treat rationality and minimize the role of emotion. The description of the context of organizational change in chapter 1 reflects Kuhn’s distinction between periods of normal, paradigmatic change and rapid, revolutions in thinking. Kuhn continues to separate rationality from emotion in his structural model, seemingly omitting a role for emotion and focusing on knowledge structures at the social and individual level.

Kuhn’s study of the history of science caused him to question the idea of science as building on prior concepts, with the working edge of scientific inquiry incrementally uncovering objective truth. His theory is sometimes categorized as post-positive (e.g., Bredo, 2006), but it is also post-structural in that it questions individual, subjective views of rationality-logic and the internal logical progression of knowledge within a specific social or scientific community. Kuhn (1970) forwarded a theory that holds that there are two distinct forms or phases of science. Normal science proceeds slowly, accepting a
particular theory or idea as the foundation for its inquiry and practice. In this period, social norms constrict or focus attention on limited aims, language, acceptable procedures, and modes of inquiry. The aim of science in this period is not to invent new theories and the community is often intolerant of those who do (Kuhn, 1970). His description of periods of normative science seems to focus on what Peirce describes as the social institution of beliefs. These institutions serve to conserve and shape what questions can be asked and what answers will be judged within the acceptable level of change from the existing structure. This conservative and continuous adjustment of beliefs about existence might be compared to normal *chronos* time in a holistic view of history from chapter 2.

In contrast, scientific revolutions represent a break with social norms and ideas. This punctuated change in the system can be seen as similar to the second theological distinction in time, *kairos* time (see chapter 2). Kuhn (1970) described these rapid periods of change as occurring outside conventional scientific work. A new paradigm bursts forth from a problem that cannot be solved by conventional or institutionalized wisdom. Kuhn (1970) acknowledges that sometimes a new structure is developed over time as indicated by Einstein concerning his alternative to classic mechanics, but goes on to assert that: “More often no such structure is consciously seen in advance. Instead, the new paradigm, or a sufficient hint to permit later articulation, emerges all at once, sometimes in the middle of the night, in the mind of a man deeply immersed in crisis” (pp. 89-90).

In Kuhn’s (1970) theory, the radical conversion of thought is presented as somewhat mysterious and unintelligible. This might be off-putting to some readers (e.g., Toulmin, 1972), but Kuhn could also be read in a way similar to Darwin, Maslow, and
Lewin. As in these earlier theories, Kuhn can be seen using the language of his time to present a more material-rational explanation of how change occurs. His approach to positivism could be seen as attributing value to earlier forms of knowledge that a traditional positivism would discredit. The seemingly mystical or metaphysical conversion is based on a material problem and a more rational resolution of some immediate tension. As such, Kuhn’s depiction of how beliefs change within the context of immanent problems might also be seen as part of the Jamesian family. Also similar to James’s holistic approach, though Kuhn maintains a hierarchical classification of human knowledge, it is not clear that he conceives of history as necessarily developmental-teleological. Nevertheless, he is treated in this chapter to aid in understanding some of the theories that follow, though an argument could be made for his inclusion at the beginning of the next chapter.

Kuhn (1970) indicated that the more mysterious form of problem solving might remain permanently inscrutable. From a socio-historical perspective, Kuhn sees revolutionary scientific change in much the same way as people talk about literary works, particularly poetry and lyrics. The mysterious articulation seems to be inspired as though brought on by some muse. Hegel’s Incarnate Logos, or a Rational Conductor of a socio-historical train could certainly stand in for the artist’s muse within the field of science. Kuhn, however does not take on a religious tone. His attempt at explaining it is more materialistic and pragmatic. Kuhn (1970) asserted that young men and newcomers to a tradition who are less indoctrinated into institutions and rules of a particular scientific community are more likely to redefine the rules of the game, to adjust the playing field so
to speak, and to conceive of another way to make the ideas and material world work together to solve a problem.

Kuhn’s rapid and discontinuous model of change requires a different evolutionary model for the history of knowledge than the more continuous model of natural selection. The mind in crisis, confronted with a real problem that must be addressed upsets the conventional balance in an individual and breaks the flow all at once as in the evolutionary model of punctuated equilibrium. Gould and Niles (1993) described Kuhn’s work as “a punctuational theory for the history of scientific ideas. Punctuated equilibrium, in this light, is only palaeontology’s contribution to Zeitgeist, and Zeitgeist, as (literally) transient ghost of time” (p. 227). Thus, change happens gradually until a cataclysmic event occurs.

In this material explanation for *kairos* time, a naturally occurring problem like a great flood subsides and the material conditions are radically changed such that other adjustments happen in a sudden lurch like someone learning to drive a stick shift for the first time. Getting into the next gear is not a smooth transition. The revolutionary progression of knowledge, likewise allows for acceleration and at the same time, a bumpy socio-historical ride. A sudden consciousness of previously unrecognized ideas and/or associations sharply splits with social norms and jolting the community into a different way of seeing the world. Kuhn (1970) wrote about the similarities between changes in beliefs within the scientific community and political change, so the similarities in language between the revolutionary emergence of consciousness in the scientific community and in economic classes for Marx within this socio-historical and material-dialectical approach to understanding should not be surprising (Toulmin, 1972).
Kuhn’s (1970) material dialectical approach to changes in the scientific community’s ideas called into question a divine or Holy Ghost that was breaking in to direct evolutionary history towards a final ideal goal. Progress and development is thus explained as a resolution of conflict within the scientific community such that there is a more fit way to engage in future practice:

...from primitive beginnings but toward no goal. The belief that natural selection, resulting from mere competition between organisms for survival, could have produced man together the higher animals and plants was the most difficult and disturbing aspect of Darwin’s theory. What could ‘evolution,’ ‘development,’ and ‘progress’ mean in the absence of a specific goal? ... a sequence of... revolutionary selections, separated by periods of normal research, is the wonderfully adapted set of instruments we call modern scientific Knowledge. Successive stages in that developmental process are marked by an increase in articulation and specialization. And the entire process may have occurred, as we now suppose biological evolution did, without benefit of a set goal, a permanent fixed scientific truth, of which each stage in the development of scientific knowledge is a better exemplar. [italics original] (p. 172)

Kuhn’s reinterpretation of positivism to give a materially adaptive benefit to earlier forms of development such as the seemingly mystical understanding of life problems becomes a basis for his post-logical and materially defined approach to knowledge.

Kuhn (1970) can be seen as calling into question a preordination of historical structures or of an explanation for radical shifts in knowledge by divine inspiration (literally in breathing). The development of history and progress does not escape the material and socio-historical dialectic. Even if there is value in both more primitive forms of articulation and specialization as well as in later, materially selected forms, one might ask: “What is essential and special about these higher articulations and forms?” On the
surface, Kuhn (1970) did not want to tackle such ontological questions. He simply said that not only must there be something special about the scientific community:

The world of which that community is a part must also possess quite special characteristics, and we are no closer than we were at the start to knowing what these must be. That problem—What must the world be like in order that man may know it?—was not, however, created by this essay. On the contrary, it is as old as science itself, and it remains unanswered... Any conception of nature compatible with the growth of science by proof is compatible with the evolutionary view of science developed here. (p. 173)

Kuhn seems to be unwilling to explicitly link his theory to any logical or rational structure to the material, socio-historical dialectic, but other readings of Kuhn assert that some assumptions to this effect remain (Toulmin, 1972). Though Kuhn was unwilling to tackle the nature of existence and how humans come to know and direct the material progression. Others in this paradigm were more willing to pick up where he left off.

*Katz and Kahn*

Katz and Kahn’s (1966/1978) social psychology of organizations tends to emphasize the potential of physics as a material science to explain the internal workings of social systems. It might be seen as a socio-systems model of change. According to Katz and Kahn (1966) behaviorism, based on Newtonian mechanics, was too static to appropriately address the relationships and forces involved in systems and social structures. As evidence of this, they point to early social psychologists including Allport (1924) and later Miller and Dollard (1941), stating that their behavioral approach led to theoretical problems related to the identification of social stimuli. They indicated that Lewin’s field theory helps to correct some of the assumptions of behaviorism. However, they went on to say his theory does not go far enough in focusing on social systems as the
unit of analysis: “The psychological field of the Lewinians is an individual field. Though field theory does utilize the dynamics of relationship and emphasizes the properties of a given structure no matter what its phenotypic history, it is still addressed to the problems of organization within the individual rather than within the collective” (1966, p. 3). Despite these concerns, they believed that field theory was the greatest source of progress in social psychology from 1945-1965 and that it allowed for a better incorporation of perception and cognition knowledge than had previously happened in learning theory.

Katz and Kahn (1966/1978) acknowledge that Lewin’s research on group processes went beyond industrial psychology in his time and that his approach was more systematic than previous research. They built on Lewin’s observation that systems are always in motion, in a state of quasi-equilibrium that may be quasi-stationary. They also drew on his understanding of opposing forces and resulting tension as the dynamic character of quasi-equilibrium. Katz and Kahn (1978), while appreciating and building on Lewin’s group process theory, also identified its limitation: “Although this was a great advance, it still did not deal with individuals as organization members” (p. 10). They further asserted that most studies of group dynamics are unwilling to move beyond research on small groups.

In the first edition of *The Social Psychology of Organizations*, Katz and Kahn (1966) set out to shift the emphasis from traditional individual psychology to system constructs. They pointed out that social psychology needs to move beyond basic introductions based on small group research into the study of whole social structures. Their work drew attention to the development of open-systems theory as a dynamic alternative to classic organizational theory which assumed closed structures. They also
identified a popular fallacy that equated the goals of the collective with the purposes of the individual member. Instead of identifying the rational purposes of leaders and key members of organizations, Katz and Kahn (1966) set out to identify the inputs, outputs, and functions of organizational systems.

Nine essential characteristics were identified as common to all open systems: 1) Energy is imported from the external environment (input); 2) The export of a product to the environment; 3) A cycle develops in which products result in returned energy (throughput); 4) Open systems continue by expending less energy than they import (negative entropy); 5) Systems can only absorb some sources of energy based on encoded adaptive characteristics; 6) Dynamic homeostasis develops when the ratio of energy expended and imported is obtained and surplus energy is needed to maintain the system during growth or development; 8) Open systems progress towards greater differentiation and multiplication of roles and functions; and 9) Open systems tend towards equifinality (pp. 19-26). Equifinality is the principle that the same final state can be reached by different paths of growth or development. In other words, even without the direction of something outside of the material system, an ultimate final state might be reached naturally through varied paths of interactions.

In Katz and Kahn’s (1966) open systems model, reform is resisted because organizations have built in protective structures that help to maintain some stability during change. They asserted that organizations have a dynamic relationship with their social and natural environment. Attempts to keep the environment constant can cause changes within the organizational structure as well as changes in environmental inputs which can have
revolutionary implications. Their treatment of equifinality calls into question the closed
systems concept of one best way to achieve an objective, but it falls short of questioning
that there is a distant, ideal state to be achieved.

The open systems model, presented by Katz and Kahn, offered a social
developmental approach to organizations. In this model, organizational systems are
maintained and continue to grow by integrated subsystems that maintain patterns of
behavior and balance energy input and output. Katz and Kahn (1966) identified the
following subsystems as vital to the mature organization: production-supportive
subsystems that help with procurement; production subsystem that transform inputs;
maintenance subsystems that hold people in functional roles; adaptive subsystems that look
at changes in the environment and are concerned with organizational change; and
managerial subsystems that direct the others subsystems. Organizational development
towards maturity was depicted as following three stages: 1) primitive system; 2) stable
organization; and 3) elaboration of structure. As a social system progresses through the
stages, more subsystems are included and their relationship becomes more stable and
complex. In the primitive stage, people come together based on common needs and
common environmental problems in a cooperative behavior structure that results in needed
outputs. Increased need for reliable performance leads to management structures, formal
production structures, maintenance of roles, and balancing of individual and organizational
needs. Ultimately, in the third stage, managerial structures seek to balance environmental
energy flow, create subsystem boundaries, and begin to develop adaptive systems to help
the system change to allow for continued growth and dynamic homeostasis with the social and physical environment.

Further explicating their position on the social development of organizations, Katz and Kahn (1966) stated, “In keeping with the structural-functional approach, we have given emphasis to the factors which have to do with creating and maintaining a stable system. We have not viewed that system as static but as moving toward a closer approximation of its ideal form” (p.107). Hegel’s Absolute Ideal and Marx’s material and socio-historical dialectic seem to resonate through the works of Vygotsky, to Lewin, and in Katz and Kahn’s organizational idealism. Katz and Kahn (1966) - while presenting social systems as developing towards more stable, ideal forms - indicated that systems might also regress into more primitive stages of development.

Katz and Kahn’s (1966) idealistic teleology is predicated on an assertion that social systems are different than mechanical and progressive biological systems models. According to Katz and Kahn (1966), social systems are contrived and do not have clearly defined physical boundaries. Instead, organizations are primarily psychological in their constitution and are able to last longer than physical systems which are limited by entropic forces. Here, Lewin’s directed psychic forces take on a slightly new meaning. The psychic forces are more clearly seen as social consciousness patterns of social interaction. The unlimited, perpetuating potential of social systems is derived from its constitution of events and patterns of behaviors. These “formal patterns of behavior achieved through rule enforcement are role behavior, sanctioned by norms, which are justified in their turn by
values” [italics original] (Katz & Kahn, 1966, p. 70). As in both James and Lewin’s theories, these forms of consciousness have their own values in the system.

Where Kuhn appeared to be a little more cautious about the ability to predict the future direction of scientific-social progress, Katz and Kahn (1966) identified some sources of predictable interactions. In their social psychology, cycles of behavior are maintained by social roles, which can be described as expected, recurring behavior sequences that are part of interdependent activities necessary for organizational outputs. The situation is complicated as one social role might encompass several activities, and an individual is likely to have multiple roles. This can create role conflict, in which the individual is torn between two or more expectations which cannot be reconciled. Here the conflict is between previously worn social-psychological pathways instead of James’s more individual psychological pathways which become biologically reinforced (see chapter 3).

Katz and Kahn (1966) posited that, “in formal organizations the roles people play are more a function of the social setting than of their own personality characteristics. The basic criterion, then for studying role behavior is to identify the relevant social system or subsystem and locate the recurring events which fit together in converting some input into an output” (p.174). In other words, by identifying the various subsystems that are interdependent, one can see how the perceived needs of one subsystem exert force or pressure for other subsystems or individual members to adopt a given role that helps to perpetuate patterns or cycles of behavior.

Having identified the possibility that roles are determined more by social setting than personality, Katz and Kahn (1966) went on to assert that personality can actually be
shaped by role behavior. Instead of presenting personality as a primarily innate psychic orientation that develops through stages towards an individual ideal, the social system shapes individuals within the system to fill existing social roles. In response to those who believe that personality is largely determined by early life experiences, they stated:

Our approach to personality is more dynamic than that; we believe that personality is essentially the product of social interaction, and that the process of personality formation continues throughout life. More specifically, the model of role-taking which we are proposing treats personality variables in three ways: as a determinant of the role expectations of others, as mediating factors between sent role and the ways in which it is experienced and responded to, and as factors which are affected by experience and behavior in organizational roles. (p. 195)

Interpersonal relationships within the organization direct pressure on the individual and have influence on their behavior as well as their personality. Potential conflict with direct supervisors or peers is coercive power which can shape the person’s role and concept of self.

Using executives as an example, Katz and Kahn (1966) indicated that identity refers to “emotional ties with groups of the same or superior power…” (p. 286). They went on to recognize two forms of group identification: organizational and professional identifications. These are distinguished by their relationships to organizational units and professional associations, respectively. Within these groups, communication is transmitted and social channels shape and reinforce individual perceptions of events and information. Katz and Kahn (1966) indicated that projection has a reciprocal relationship to identification – defining projection as: “the attribution to others of our own feelings and beliefs” (p. 287). In other words, individuals tend to see others as sharing the same ideas and values.
The belief that personality is shaped by social interactions throughout one’s life, and more specifically, that organizational and professional identifications exert pressures that shape perceptions of one’s self and their social and physical environment sets the stage for a consideration of Katz and Kahn’s treatment of emotions. Organizational behavior is a function of one’s current personality and situation. Katz and Kahn (1966) presented four dimensions of personality which shape decision making: orientation to power versus ideological orientation; emotionality versus objectivity; creativity versus common sense; and action orientation versus contemplation. They pointed out that there are two types of emotionality that can influence objectivity and judgment:

One is the load of preconscious affectivity, the emotional impulses which can move into the conscious sphere; the other stems from deeper defensive needs of which the individual has no awareness. The second would consist both of chronic emotional biases and the momentary emotional impulse. (p. 292)

Here, Katz and Kahn’s depiction of emotions clearly divides emotion up into affections that reach into the conscious region and those that remain purely bodily impulses. Their Jamesian depiction of emotions continues to fit within the model offered in appendix C.

Katz and Kahn (1966) further elaborated on the nature of the lower, defensive needs referenced in the quote above: “Defensive needs refer to weaknesses in the basic character structure which are such a threat to the ego that they are not consciously recognized by the person but nevertheless overdetermine his [sic] behavior” (Katz & Kahn, 1966, p. 292). They went on to assert that such defensive needs can assert themselves at any point in the problem solving process; stating, “They can block out or distort the analysis of the problem, or the assessment of consequences, or they can overweight a given
type of solution” (p. 293). Here the more primitive psychological pathways can be seen as disrupting the potential for higher evaluative judgments.

Katz and Kahn (1966) addressed problem solving in organizations with a brief mention of Dewey’s cognitive theory: “We shall follow the classical account of Dewey (1910) in describing four stages in the process of problem solutions, and then relate them to the way in which individuals function in an organizational context” (p. 487). Drawing on Dewey’s (1910) How We Think, they proceeded to distinguish between immediate pressures, the analysis of the problem and its characteristics, the search for alternative solutions, and weighing the consequences of the different alternatives in order to arrive at a final choice. Applying Dewey’s cognitive theory, Katz and Kahn indicated the progression through these stages is shaped by the personality characteristics of the leader, the nature of the problem, organizational context, and the cognitive limitations of the individual based on the aforementioned variables. Ironically, while drawing on aspects of Dewey’s theory of cognition, Katz and Kahn (1966) treat emotion in a way that is more in keeping with James’s theory of emotion than Dewey’s.

Katz and Kahn’s (1966) apprehension with emotionality [sic] may be linked to Lewin who used the same term. It might also relate to the strong influence of Weber’s (1947) historical representation of authority and rational organizational structures. They argued:

…modern social organizations rest primarily upon rational and legal grounds. Bureaucratic structure in the Weberian sense utilizes role systems in their purest form and they represent the most pliable, the most effective instruments for environmental transactions and exploitations in the evolution of social systems. For maximum utilization of the energy sources in the environment, including man
himself, and their transformation into social products, the formal social organization may be the greatest social invention in history. (p. 208)

The rational-legal structure is presented as the pinnacle of organizational development. Other organizational forms, including traditional or charismatic, were considered to be more primitive. According to Katz and Kahn (1966), charisma is not an objective assessment but is instead connected to a person’s emotional needs and to the impact of dramatic events. Nevertheless, when discussing organizational change, both cognitive and affective aspects are presented as essential.

At first glance, having treated emotion as suspect and exalting the social invention of rational-legal organizations, it may seem odd that affective requirements for organizational change would be emphasized. Katz and Kahn’s concern with emotion resides in the decision-making process. One might assert that it is an epistemological concern for objective truth. They called the higher rational, cognitive requirement a systemic perspective (Katz & Kahn, 1966). In order to highlight its importance, they claimed that intellectual aspects of leadership had been neglected in leadership while focusing on persuasiveness, warmth, and interpersonal skills. In response to this focus, Katz and Kahn asked, “but to what end? If a leader is seriously mistaken about the systemic requirements of his [sic] organizations or the demands of its environment, his interpersonal abilities may become organizational liabilities” (p. 313). A distinction is drawn between the intellectual, cognitive role of leaders of organizational change and the affective. The systemic-intellectual aspect is presented as the source of knowledge instead of opinion or passive affective attraction or reaction. The affective aspect of change
leadership was presented as a magical emotional tie based on emotional needs and a desire of the rank and file employee to identify with a great individual - a person with some appearance of the group - who can provide the sound judgment and knowledge needed by the common person (Katz & Kahn, 1966). Again, a distinction seems to be made either tacitly of intentionally that a positive scientific perspective is a more advanced form of knowledge than a mystical or metaphysical orientation towards existence.

Later, in the second edition, Katz and Kahn (1978) adjusted the language used to introduce the aspects of organizational leadership. Cognitive orientation and task-orientation are used to set up the systemic perspective, the major cognitive requirements for the change of organizational structures. The systemic perspective was said to allow for an understanding of internal and external relationships as well as the symbols and values of the organization-in-society. Katz and Kahn (1978) posited: “Effective leadership takes account of these symbols and avoids their arousal when dealing with issues internal to the organization… the wise course is to deal with the practical realities and skirt the symbolic issue… the institutional leader is the unique possessor of systems perspective, and it is this quality which distinguishes him or her from the leader who is merely interpersonally adept” (pp. 542-543). Here, Lewin’s desire to identify competing forces and reduce emotional arousal by overlapping force fields seems to shine through. Katz and Kahn went on to state that change leaders shape the changing environment to fit the needs of the organization and exercise freedom to change internal structures to address organizational goals instead of being tied to existing social or technical systems.
Complementary affective requirements were presented as important, but they could be possessed by the top leader or a proxy. When referring to the affective aspects in the second edition, Katz and Kahn (1978) employed the term socio-emotional supportiveness to introduce charisma. Based on their research since 1966, Katz and Kahn (1978) indicated that “people feel intensely about the charismatic leader and they do not have a discriminating image of his or her strengths and weaknesses” (p. 546). They asserted that the degree of emotional arousal among followers and the degree of perceived power held by the leader can be used as measures of charisma. In this interpretation, emotional arousal is typified by two kinds of interpersonal interactions: 1) Leaders provide a mystical or wishful, symbolic solution to some conflict; or 2) A leader generates emotional excitement by raising consciousness of members’ needs and presents a way to address them.

Katz and Kahn (1978) did more than further elaborate the differences between the two leadership functions in the second edition. Production functions of social systems were explicitly connected to the cognitive-task orientation and maintenance functions were connected to the socio-emotional, affective orientation. The two orientations were said to help provide the energy required to produce outputs and to keep the group together. While presenting emotion and affect as important, it is not treated as a reliable source of information. Instead, it is a more passive and nurturing function – a means for group cohesion or a liability to sound, active judgment.

Later, Katz and Kahn (1978) introduce the reader to some possible explanations for their emphasis on cognition, concern about emotion, and attempt to balance the two
psychological functions. They noted that industrial psychology had often failed to acknowledge that both the cognitive and affective aspects were important. They criticized the human relations approach, asserting that the work of McGregor and others emphasized the supportive-affective aspects of leadership, assuming that the approach would lead to better performance without consideration of the cognitive-task oriented functions (Katz & Kahn, 1978). The criticism of McGregor and humanism more generally does not appear to take into consideration the fact that they are intended to serve as a corrective to exclusively cognitive-task oriented management (represented in Theory X) without denying the importance of these functions. The critique might also be more of a reflection on how the theory was applied than how it is presented.

Gould

In 1972, Gould (1993) forwarded an evolutionary model of rapid, revolutionary change in keeping with prominent socio-historical theories of his time such as Kuhn, but the cause was not mysterious or unintelligible. In Ever Since Darwin: Reflections in Natural History (1973/1977) and in The Mismeasure of Man (1981), his depiction of the potential for rapid advance of scientific knowledge seems to be offered as a socio-biological explanation for Kuhn’s persistent problem of how knowledge is able to change rapidly. He gives a reason for the emergence from crisis with a new source of equilibrium. It is linked to the discovery of more accurate scientific facts (Gould, 1981). Gould (1981) expressed a personal conversion in his view of scientific development. As a child, he believed that if he added one brick to the tower of scientific knowledge, he would have done his duty in advancing humanity’s understanding. Gould (1993) asserted that
Darwin’s depiction of gradual, continuous evolution held up to logic, but it did not hold up to his observations of the paleontological record. His exposure to Kuhn’s socio-historical writings, Darwin’s argument for continuous change, and his desire to make room for his empirical, paleontological observations led him to an adult conversion to a view of science as including a revolutionary, punctuated component (1981).

Gould (1993) later acknowledged that his paleontological “contribution to a… transient ghosts of time, should never be trusted. Thus, in developing punctuated equilibrium, we have either been toadies and panderers to fashion, and therefore destined for history's ashheap, or we had a spark of insight about nature's constitution. Only the punctuational and unpredictable future can tell” (p. 227). Here, Gould seems to depict a very uncertain view of knowledge. However, he calls upon the possibility of a spark of insight. In some of his other writings, it is made clear that this mysterious insight is linked to more accurate, empirical scientific facts and not to some outside reality (Gould, 1981).

Gould’s (1981) interest beyond paleontology can be seen as raising consciousness about the social prejudice behind much of the cognitive-intelligence research of his time. He thought that science in this area shifts between two foundational facts; humans, “are both similar to and different from other animals” (Gould, 1977 p. 259). Gould continued:

In different cultural contexts, emphasis upon one side or the other of this fundamental truth plays a useful social role. In Darwin’s day, an assertion of our similarity broke… harmful superstitions. Now we may need to emphasize our difference as flexible animals with a vast range of potential behavior. Our biological nature does not stand in the way of social reform. (p. 259)

One of Darwin’s (2005e) great concerns was slavery, and his inquiry was in part a way to discredit the way in which persistent classifications were used to uphold such institutions.
Gould (1981) aimed to discredit racism and sexism by pointing out the biological similarities of different groups in relationship to mental development. According to Gould, the flexibility of the human mind was the essential difference between humans and other animals. This greater intellect gave greater potential for creative revolutionary progress, an assertion that can be directly linked to Darwin and need not be connected to Kuhn (see chapter 3). Gould (1981) asserted that, “The evolutionary unity of humans with all other organisms is the cardinal message of Darwin’s revolution for nature’s most arrogant species… We are inextricably part of nature, but human uniqueness is not negated thereby. “Nothing but” an animal is as fallacious a statement as “created in God’s own image.” (p. 324). Human uniqueness, lies in the increased organization and articulation of human language and the higher number of associations and evaluations that the highly developed mind allows them to make. It is this human attribute that allows for judicial decisions about the factual basis of their own social ideas and ability to direct history toward a different interaction.

Society and science need not build on prior knowledge, but can break radically from previous understanding by debunking errors made out of social prejudice (Gould, 1981). Gould (1977) challenged logical coherence as a model for science generally:

Science is not a heartless pursuit of objective information. It is a creative human activity… acting more as artist than as information processors. Changes in theory are not simply the derivative results of new discoveries but the work of creative imagination influenced by contemporary social and political forces. We should not judge the past though anachronistic spectacles of our own convictions… (p. 201)
Though more implicit, Gould’s depiction of science as motivated by the heart and contemporary problems is both an energizing force for seeking higher empirical facts and a potential source of subjective bias or social prejudice in the process.

Like Lewin and Kuhn, Gould’s (1981) language seems to recast Comte’s classic positivism, making a return to more mystical or metaphysical ways of knowing necessary when social prejudices have taken knowledge in the wrong direction. Gould said that, “If it [debunking] is to have any enduring value, sound debunking must do more than replace one social prejudice with another. It must use more adequate biology to drive out fallacious ideas” (p. 322). Thus, even new insights like punctuated equilibrium, or the recasting of old ones in less otherworldly expressions, must hold up to scientific evaluation over time. While criticizing the extent to which social prejudice shape scientific ideas, Gould (1981) remained optimistic that empirical, scientific inquiry is capable of identify more objective reality by which to dispel superstition belief.

According to Gould (1977), the reason that scientific revolutions brought on by more empirically accurate facts can be seen in Darwin’s theory of natural selection. He contended that the simple logic of natural selection cannot be the reason for the misunderstanding, misquoting, and misapplying of Darwin’s writing on natural selection. In other words, logic is not the problem, it is the difficulty of breaking with one logical argument in order to take the conversation in a different direction. He presented the logic of natural selection as the assertion of two undeniable facts and a logical conclusion:

1. Organisms vary, and these variations are inherited (at least in part) by their offspring.
2. Organisms produce more offspring than can possibly survive.
3. On average, offspring that vary most strongly in directions favored by the environment will survive and propagate. Favorable variations will therefore accumulate in populations by natural selection.

Why then has natural selection been so difficult to integrate in many fields of research? Gould (1977) contended that “the stumbling block to its acceptance does not lie in any scientific difficulty, but rather in the radical philosophical content of Darwin’s message - in its challenge to a set of entrenched Western attitudes that we are not yet ready to abandon” (p. 12). He cited three radical parts of Darwin’s philosophy: 1) Nature serves no purpose; 2) Evolution does not inevitably lead to higher things; 3) Darwin consistently applies materialism to all of nature, including humanity. In other words, Darwin is revolutionary because his world history based on a material, empirical, positive view of development does not explicitly assert a divined, intervening Artificer. Gould does not dispense with logic, facts, or a human capacity to have the insight to discover them. He merely challenges the notion that progress is predestined or guaranteed.

Gould’s (1977) asserted that human social evolution and science operate in a way that biological evolution does not, because of higher mental adaptations that make learning possible. Knowledge follows a Lamarkian model that allows fast progress, “Humans are learning animals… Whatever one generation learns, it can pass to the next by writing, instruction, inculcation, ritual, tradition, and a host of methods that humans have developed to assure continuity in culture… Cultural evolution is not only rapid; it is also readily reversible because its products are not coded in our genes” (pp. 323-325). The important part here is that like Kuhn, Gould switches evolutionary models when he is talking about writing, instruction, and tradition. Naturalism post-Darwin discredits a
Lamarkian evolutionary model of habitual use as a mechanism for passing on variations because of Mendel’s genetic model and further development of Darwin’s use of variation and population as a mechanism for natural selection.

The important part here is that like Kuhn, Gould switches evolutionary models when he is talking about writing, instruction, and tradition. These higher intellectual and social developments in humans are interpreted much more closely to a Lamarkian or Darwinian (pre-Mendel) evolutionary mechanism. In his more socio-biological writings, Gould could have arrived at these depictions of higher and lower psychological functions from either Darwin’s own psychology, or from socio-historical writings such as Kuhn.

By adopting a discontinuous model of evolution regarding social and intellectual developments, Gould is able to balance his desire to present the similarity between all races and both genders, as well as forward a unique human nature that allows them to shape the course of material, socio-historical reform. The potential for human progress is dependent on insight into empirical facts and the construction of a better logical interaction. Though this more accurate knowledge requires the motivation and creative energy of the heart, the artful associations that bias inquiry steeped in contemporary problems must ultimately be evaluated over time to see if they measure up to higher, empirical facts. Though more implicit, Gould’s depiction of human psychology continues to fit into the model presented in appendix C.

Schein

Schein’s (1978/2004) work could be labeled as a socio-cultural approach to organizational psychology. He acknowledged the importance of Lewin’s work to the study
of human systems. Seeking to build on Lewin’s work with small groups, he asserted that forces are created in all social situations, including organizations. Whether one considers the organization as a whole or subgroups within a larger social system, Schein believed that creating and managing forces related to culture is a unique and critical function of leadership. Schein adopted a social developmental approach to organizational culture, leadership, and learning, which he described as a fundamental evolutionary perspective. His presentation of organizational learning, leadership, and culture results in a four stage theory of group evolution and a three stage model of organizational development. Each step in group evolution involves cognitive and socio-emotional aspects. While acknowledging a progression from group formation to maturation, Schein (2004) cautioned against suggesting that particular organizations should be evaluated against an absolute or “right” culture (p. 8). Instead, Schein asserted that the consideration of organizational culture and learning should be situational, taking into account the environmental context.

Schein (2004) asserted that cultural differences at the macro level - ethnic or national - are readily recognized but that it becomes more difficult, if not puzzling, when contemplated in reference to organizational systems and smaller groups. He noted that when leaders seek to initiate behavioral change in organizations, they often face what seems like unreasonable resistance. Each group tends to believe that their norms, values, and ways of seeing the world are the right ones. According to Schein (2004), these meaning frameworks help to differentiate the organization from the environment or other groups and provide a source of identity. Schein’s (2004) definition of culture might help to put the puzzle pieces together:
The culture of a group can be defined as a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. [italics original] (p. 17)

Culture is an aspect of group life that shapes the psychological functioning of group members, including awareness, cognition, emotion, and ultimately behavior.

Socially constructed cognitive structures keep group members from facing all environmental stimuli as novel and unpredictable and help to provide a level of stability:

The function of cognitive structures such as concepts, beliefs, attitudes, values, and assumptions is to organize the mass of environmental stimuli, to make sense of them, and to thereby provide a sense of predictability and meaning to the individual. The set of shared assumptions that develop over time in groups and organizations serves this stabilizing and meaning-providing function. (p. 320)

As cultural assumptions are passed on within the organization, the environment continues to change, creating varying levels of disequilibrium. When reading the following stages, keep the psychological model in appendix C in mind, noting the way that Schein’s explanation for the material origin and natural development of groups emerges towards more mature (higher) stages.

Changes in the environment can create “normless and ruleless situations” (Schein, 2004, p. 66). Anomie creates emotional reactions which can be expressed as anxiety. When observed corporately, the collective has experienced a shared emotional reaction.

According to Schein (2004), the first step in group formation is at the emotional level - the group defines who is in and who is out based on whether or not they shared the emotional response to some environmental stimulus. To put it more plainly, did the event strike them the same way? At this point, it is assumed that no judgment or meaning has been
attributed to the bodily response. *Groupness* develops further as individuals in the group take action and someone articulates the meaning of the event. According to this model, a key aspect of leadership and culture formation is construing meaning for emotion stimulating events. As the group continues to develop or evolve socio-historically, Schein asserted that it progresses through four stages: group formation, group building, group work, and group maturity.

During group formation, individuals primarily seek to address their own need for authority, inclusion, identity, and physical need. Individuals are more concerned with their own emotional needs than the common aims of the group (Schein, 2004). Early in the group’s history, much of the energy is directed towards the emotional needs of individuals and the reduction of cognitive and social anxiety. Schein (2004) indicated that *marker events*, “those that arouse strong feelings and then are dealt with definitively” (p. 73), begin to establish group norms. At a cognitive level, the group seeks to identify procedures that will help them accomplish their primary goal. At the socio-emotional level, the group is creating boundaries for membership and addressing power, influence, intimacy, identity, and role formation (Schein, 2004). The group formation stage culminates with a feeling of cohesion - of “We are a group.”

In the Building Stage, the group begins with the assumptions that were developed in the first stage. The group assumes a level of cohesion, liking each other, or even superiority over other groups. This fusion is indicative of a strong emotional need to belong and deny difference (Schein, 2004). At the socio-emotional level, the group focuses on harmony and conformity. According to Schein, many organizations become
arrested in this stage of development. In other words, these organizations fail to move towards their full or mature potential state. The group cannot change to an assumption that diversity is good until conflict occurs, avoidance of conflict is noted, denial of aversion between members becomes obvious, or eruptions of negative feelings occur (Schein, 2004). Here, Schein’s depiction is particularly reminiscent of James’s discharge theory of emotion in which inhibited emotional energy must be vented if they are not directed towards a productive use.

If the group evolves further, it begins to work towards task fulfillment - a stage called Group Work. Socio-emotionally, the group moves from trying to act like everyone likes each other and is the same to a point of accepting each other despite differences (Schein, 2004). According to this stage theory, maintaining the illusion that everyone is the same or likes each other takes up the emotional energy needed to actually do the work of the group. Here, emotions are explicitly presented as a force to be channeled or directed. Schein (2004) connected the highest emotional maturity with the ability to engage in reality-testing of norms and assumptions so that new norms and assumptions can arise. Paradoxically, emotional maturity frees energy for work and creates a condition where norms can be questioned, which can cause anxiety to reemerge and reduce the energy available for task completion. Schein (2004) described the paradox in this way: “It is a paradox of evolution or development that the more we learn how to do things and to stabilize what we have learned, the more unwilling or unable we become to adapt, change, and grow into new patterns, even when our changing environment demands such new patterns” (p. 83). Though this is presented as a major challenge, it is not seen as
insurmountable. A major component of Schein’s project is helping organizations bridge the gap between the cultural assumptions that are held, espoused, and the tangible material objects and events that cause tension within meaning structures.

In the final stage, Group Maturity, the group has developed a culture based on the group’s learning history. The strength of the culture can be attributed to the intensity of the group’s emotional history. Groups that have survived and overcome striking emotional events have a strong sense of social history – shared experience. Schein (2004) described these socio-historical elements as forces that come to define the identity of the group, its place in the world-mission, and its operating procedures. Socio-emotionally, the focus is on preservation of the group and its culture (Schein, 2004). As the assumptions become increasingly tacit, the natural problem is that stability may come at the cost of an inability to learn, adapt, and grow – the socio-cognitive function.

Schein (2004) also developed a three stage model of organization development: founding-early growth, midlife, and maturity-decline. The stages of organizational development can be seen as roughly analogous to Lewin’s more individually oriented learning stages - unfreezing, moving, and refreezing – upon which Schein seeks to build a more social psychological application. Schein asserted that there are different, natural mechanisms for initiating cultural change in organizations at the three stages of development. Schein did not elaborate on the relationship of emotion and cognition when addressing organizational learning as a model of evolutionary development. This is not completely surprising, given that to Lewin and Schein, emotion is passive and learning is
active. In this socio-historical evolutionary approach to organizations, cognition is adaptive and emotions continue to be depicted as reactive or at best motivational energies.

Continuing to build on Lewin’s learning theory, Schein (2004) identified three distinct processes that create motivation to change during the unfreezing-disconfirming phase: 1) There must be enough disconfirming information to cause disequilibrium and discomfort. (Disconfirming data are the sources of information that indicate that goals are not being met.); 2) The disconfirming information must be connected to ideals and values, causing guilt or anxiety; 3) There must be psychological safety created by an ability to see the possibility of a solution and learning without a loss of identity or integrity. (Schein, 1980; 1999b). Schein (2004) calls this kind of change - a change in which something must be unlearned and new learning must be generated - transformational change.

Transformational change seems to have some analogous connotations to revolutionary, conversion, or a complete changing of form. He pointed out that transformational, cultural change is difficult because it often involves changing routines and patterns that help to provide individual and group identity. He stated that, “The key to understanding resistance to change is to recognize that some behavior that has become dysfunctional for us may nevertheless be difficult to give up because this might make us lose group membership or may violate some aspect of our identity” (Schein, 2004, p. 321). Learning new ways to think perceive and feel can create learning anxiety because it can be a threat to self-identity and may cause the learner to wonder if the change will influence their acceptance in the group. (Again, as in his definition of culture, Schein gives a place for learning new ways to feel, but he does not elaborate on this in a way that would cause
one to believe that he is breaking from Lewin’s limited, associational treatment of how emotions can be socially mediated through praise or modifying the social environment.)

Until the threat to self is addressed by creating psychological safety, it can be impossible to contemplate change, much less begin the process of learning something new. Psychological safety is achieved by permitting members to see that new learning will not affect their source of identity, their integrity, or their group belonging (Schein, 2004).

Schein (2004) used cognitive restructuring in his model instead of moving. A focus on changing role behaviors and material forces, as Katz and Kahn’s (1966) social-psychology of open systems is not seen as sufficient to guarantee lasting change. Continued energy or forces must be exerted to maintain coerced behavioral change. Consistent with Lewin’s (1951b) psychologically directed action, restructuring of cognitive models carries with it the possibility of more lasting change because it is a directional force that is imported into the system. According to Schein (2004), the process of learning new possibilities can come from imitation of perceived exemplars or from trial and error. When the desired behavior and underlying concepts are clear, exemplars can help others see new options. However, old cognitive structures and behaviors can return once the role model is no longer accessible. This depicted as particularly true when the exemplar is not perceived to be like the observer.

The focus on cognitive structures and learning instead of role behavior seems to ultimately bring Schein back to a more individual psychological construction of knowledge, though it does not appear that he explicitly connects this to Lewin’s psychic forces. Schein (2004) asserted that it is often preferable for people to search the
environment and develop their own solutions. The ultimate goal must be clear so that the learner can choose their own means to accomplish the goal. In this way, the learner may own the change and experience it as congruent with their personality. Interestingly, despite Schien’s focus on shared meaning through social and cultural assumptions and their formation, he still maintains a certain propensity for describing cognitive restructuring as largely individual and even related to an individual’s personality as though it is an innate psychic constitution.

Finally, the last step is refreezing. New cognitive structures and behaviors must be reinforced by confirming information. Just as disconfirming data leads members to question assumptions, refreezing new meaning structures requires data that supports new beliefs and actions. Schein stated, “If we want real internalization of the new cognitive structures and standards of evaluation, we need to encourage scanning and trial-and-error learning from the outset… [internalization] is best achieved when the learner is actively involved in the design of the learning process” (Schein, 2004, p. 329).

It seems likely that Schein continued to build on Lewin’s work as he addressed sociopsychological foundations of learning anxiety. Lewin (1951f) indicated that there are always force fields seeking to balance opposing forces. Schein proposed four forces against change: fear of temporary incompetence, fear of punishment for incompetence, fear of loss of personal identity, and fear of loss of group membership. Like Lewin, he asserted that lasting change may come when the force of survival anxiety or guilt is stronger than learning anxiety. The second principle that Schein presented is that learning anxiety must be reduced instead of seeking to elevate the opposing forces of survival anxiety in order to
achieve the desired equilibrium (Schein, 2004). This is consistent with Lewin’s field theory which holds that there are two methods to create change: increasing anxiety, which can cause fatigue, aggressiveness, emotionality and lower constructiveness (1951f) and reduce opposing forces through learning, which can create permanent changes by introducing a psychological force that can direct action (1951b).

**Contemporary Social Developmental Context**

*Antonacopoulou and Gabriel.*

Antonacopoulou and Gabriel (2001) argued that many organizational researchers tend to focus either on emotion or learning and neglect the other to the detriment of an understanding of the interaction and interdependence of the two phenomena. They posited that learning is an essential element of emotional and social development. Prior learning creates meaning structures which are triggered by new events. These interpretations affect the emotional reaction to the situation. Antonacopoulou and Gabriel (2001) asserted that, “To be emotional is to have some knowledge that shapes one’s likely response” (p. 441). They also allow for the possibility that ignorance can also inform one’s emotional response. Bringing these observations to bear on the organizational context, emotional responses to organizational events are largely shaped by the interpretations of employees.

Thus, learning can also reshape emotional experience. Increased understanding can create an opportunity for the individual to reconsider an emotion. The reconstruction of meaning frameworks can influence the experience of emotion in future events that draw on these understandings (Antonacopoulou & Gabriel, 2001). While acknowledging the potential for emotions to be learned and reconstructed through different experiences,
Antonacopoulou and Gabriel (2001) also asserted that emotions may resist objective evidence. Psychoanalytical approaches to emotion suggest that many emotions may remain subliminal and may be at odds with consciously acknowledged interpretations of events. They continued, “Thus, a significant departure of psychoanalysis from other approaches concerns the relative imperviousness of certain emotions to learning” (Antonacopoulou & Gabriel, 2001, p. 442).

While learning - social or individual - is at times presented as a mechanism for taming or encouraging appropriate emotion, learning might also be shaped by emotion. Antonacopoulou and Gabriel (2001) indicated that an understanding of how emotion contributes to learning is limited. Their treatment of emotion’s impact on learning draws on Piaget’s individual constructivist theory as well as More’s (1974) emphasis on the importance of conflict in the process of unlearning and moving to new learning. Antonacopoulou and Gabriel (2001) concluded that emotion has a motivational aspect, either positive or negative toward learning. They indicated that learning occurs in a tension of resisting forces and the “emotion, for its part, is often working against other conflicting emotions, at times domesticated and harnessed by learning, at others wild and unmanageable” (p. 445). In another article, Antonacopoulou (1998) indicated that helping individuals in organizations gain a better understanding of their emotions is vital to organizational learning. The conscious understanding of emotions and their appropriate expression is presented as an essential part of emotional maturity.

Antonacopoulou and Gabriel (2001) pointed out that much of the organizational change literature depicts emotion in a negative light, frequently as resistance. They
indicated that little is known about the positive role that emotion can play in change and even the natural role of resistance as a way of maintaining some coherence with values from past experience. Furthermore, employees’ reactions to change are often divided into either-or groups of resistance or readiness for change. They asserted that this oversimplification prohibits meaningful consideration of a range of interpretations of change and emotional experiences of change. Ultimately they indicated that dualistic representations do not correspond to some of the essential elements of a social constructivist conception of emotion: 1) Emotions are social phenomena; 2) Emotions are expressed in community through language or action; 3) Emotions are learned behaviors that are influenced by social roles; 4) Emotional labor is the attempt to reconcile socially acceptable emotional display with individual feelings; and 5) Emotions are often practical, not irrational (Antonacopoulou & Gabriel, 2001). While Antonacoupoulou and Gabriel seem to be uncomfortable with the dualistic treatment of cognition and emotion, they nevertheless seem to continue to forward a classification and assignment of psychological value similar to that of James.

In Antonacoupoulou and Gabriel’s (2001) call for more understanding of the functional role of emotions in learning, they seem to continue to emphasize a distinction between cognitive appraisals of situations and emotional reactions. While seeking to establish a functional, socially mediated role for emotions in the learning process, it is not clear that Antonacoupoulou and Gabriel (2001) have broken with the persistent Jamesian theories of emotions as passive physical reactions to objects, events, or psychic-cognitive constructions of reality.
Social development and educational reform.

As indicated in the Individual Developmental chapter, a series of articles appeared in *Teaching and Teacher Education* (2005) looking at the role of emotion during organizational change. Another article from that edition is represented here to point out some of the aspects of the social developmental paradigm. While the line between individual and social developmental approaches is used to assist in discussing differences in the research method and theoretical foundations, researchers do not fit neatly into a box because their ideas are shaped by multiple theories and the problems that they seek to address influence what they draw on at a particular time (Weick, 1995). Nevertheless, the following article helps to point out some aspects of a social system perspective of organizational change.

Very little research looks at the role of teachers’ emotion in educational reform using an explicit framework of emotions (van Veen, Sleegers, & van de Ven, 2005). van Veen et al. (2005) sought to address this paucity by restating a cognitive social-psychological theory of emotion, based on the work of Lazarus (1991, 1999). They indicated that, “The focus of the current study is not so much on the role of emotion in the interactions among people or how the context shapes the emotions, but on the cognitive-affective processes of the individual teacher” (p. 918). Ironically, though they claim to focus on the individual teacher, their treatment of social and systems influences is more profound than some other contributions to the special edition that assert a social-psychological approach. van Veen et al. (2005) used Lazarus’s preference for the term ego-identity instead of self. They introduced this term to move beyond an independent
concept of a self within an individual’s body to encompass the person-in-the-world. Drawing on Lazarus’s work, van Veen et al. (2005) presented a social understanding of emotion that extends beyond the individual to include social roles, relationships, and function.

Building on Lazarus’s work (1991), the social structure is conceptualized as relational because emotions, positive or negative, always involve the potential benefit or harm of the individual’s interaction with the environment. Furthermore, emotions are depicted as having a motivational component because they help to clarify what elements of the environment are relevant to the status of personal goals. Therefore, emotions are cognitive, in as much as they involve some appraisal or basic knowledge of what is taking place (van Veen et al., 2005). Here, the attribution of a very basic cognitive valuation is not altogether different than that of James, this form of cognition is just very basic. If there is absolutely no appraisal of wants, needs, or goals, there is no emotion. van Veen et al. (2005) stated, “In the case of a mature individual, the appraisal of a situation tends to be heavily influenced by social-cultural variables and personal development” (p. 920).

In this study, van Veen et al. (2005) took into consideration multiple socio-cultural variables. Much of the study draws on interviews with an individual teacher, but considerable effort is made to describe the contextual background of Dutch secondary education, the political forces behind educational reform, role expectations within the system, and group interaction and tension related to the reform. The findings of the study are evenly divided into two sections, a description of the professional situation and an analysis of the participant’s emotions. In conclusion, van Veen et al. (2005) stated that
their analysis showed: “the many different aspects in the environment that play a role in how the teacher experiences a reform, such as his working conditions, the school management, his subject colleagues, and students. Furthermore, it shows how the interplay of situational demands and the cognitive-affective processes constitute or shape different emotions” (p. 931). This social constructive approach still positions emotions as a more passive physical response that is shaped by cognitive and environmental contingencies.

Social Developmental Summary

Dissatisfaction with the approaches to organizational learning and change taken in the Behavioral-Material and Individual Developmental Clusters led to an attempt to develop more holistic views of how organizational change should be studied. For some of the theorists, social-psychology took on an increasingly material or physics-like tenor. In Lewin’s theory, a more systemic account of development broadens the field to emphasize the logical structure of the material world. His depiction of social science as the study of topological and hodological interactions is an example of his attempt to make social science into a more positive, natural-material psychology. Katz and Kahn, building on Lewin’s theory, sought to broaden the material determinants even further. In the process, they explicitly demonstrate a logical, developmental approach to material systems seeking equilibrium. Though systems might reach this ideal state of equilibrium through different paths, their concept of equifinality continues to depict a logical end to a material dialectic. In both of these approaches, emotion is treated as a motivational, reactive energy that must be directed by higher psychological functions in the individual and/or organization. The
more mystical and passive aspects of knowing associated with knowing are deemed important, but must be brought under cognitive, scientific ways of knowing.

The socio-historical influence on some of the other authors seems to lead them to a more literary, textual, or cultural depiction of how change occurs within scientific communities and other organizations. In Kuhn and Gould’s work, mystical insight is a necessary part of how knowledge changes. Passive impression that occur to individuals in the middle of real problems cause them to perceive situations differently. They provide the material for constructing a view of reality that is different than prevailing and perhaps socially prejudiced perceptions. However, these muses are not caused by some ghost of time that is outside of the material world. The mystical can be seen as the intersection of the material and contingent problems where a more clear or accurate perception might occur. Even these passive ways of perceiving must be evaluated by higher, active mental processes because in the moment it is impossible to know if the revolutionary idea is brought on by higher or lower empirical perceptions. More accurate scientific facts would either affirm or debunk new, revolutionary ideas. Only time could tell if one has understood accurately (a clear and disinterested perception) or forwarded another socio-emotional prejudice (habitual or instinctual bias). Schein’s socio-cultural approach to organizations continues to give a preferential place for higher cognitive psychological functions and a motivational and group formation-maintenance role to emotions in organizational life. His depiction of group formation according to shared, passive emotional reactions to events is a very interesting way to think about group formation. His
depiction of the role of emotions in the stages of group formation can be seen as moving directly up the model provided in appendix C.

All of the theories explored in this chapter could be considered part of the Jamesian family. Even the more humble views of knowledge that acknowledge the potential for bias seem to present an empirical understanding of higher and lower forms of perception that maintains a distinction between cognitive and emotional aspects of experience. In the most contemporary examples, this continues to hold true. The dissatisfaction with dualistic treatment of cognition and emotion seems to be addressed by giving each their own value and place on a psychological continuum.

In the beginning of chapter 7, this continues to hold true. Several theories are presented that draw on pragmatic, natural conceptions of knowledge and seek to distance themselves from logical depictions of knowledge and linear stage models of organizational development. These theories might be seen as challenging some of the more dogmatic or foundational conceptions of knowledge, but they too fall short of challenging the hierarchical classification of psychological aspects of the human experience. At the end of chapter 7, Dewey’s critique and alternative to James’s theory of emotions is offered. Because of the extent to which the various theories treated in this project have held to the model provided in appendix C, Dewey’s theory might also be taken as a critique of much of the psychological research within organizational change and learning over the last 100 year. Gould’s writing raises the possibility that social prejudices, not problems with Dewey’s theory, could be responsible for the continued building on long standing
assumptions - perhaps no assumption being deeper rooted than the platonic dualism between mind and body and the distrust of emotions.
Chapter 7: Pragmatic Naturalism as an Alternative

Introduction

This chapter marks a turning point in the project. Chapters 2-3 described some of the undergirding philosophical and psychological ideas related to the way the theories in chapters 4-6 treat the relationship between cognition and emotion. Chapters 4-6 explore an emblematic sample of various approaches to organizational change and learning theory. Connections to philosophical and psychological assumptions about how humans come to know about the world are made. The theory in each of the chapters includes some identification of the strengths and weaknesses of the various approaches according to the unique vantage point that each offers.

This chapter also includes some critique, as theories that seem to associate more closely with pragmatism are offered as a way of moving towards an alternative way of conceiving of cognition and emotion in psychological research. Each of the four approaches described in the first section of the chapter primarily focus on the cognitive side of change, seeking to give a more pragmatic and naturalist answer to how conceptual change occurs. They only provide a small amount of material to help in reconsidering the role of emotion. Where emotion is given consideration, it does not appear to diverge significantly from the model in appendix C. In the second part of the chapter, Dewey’s philosophy is offered as an alternative way to conceive of the cognition, emotion, and their relationship as part of a total experience.
Towards a Pragmatic Natural Alternative

Quine

Quine is often categorized as a post-positivist (Bredo, 2006); however, he considered himself to be a pragmatist. Quine (1951) attributed much of the critique of the analyticity to his reading of essays in *John Dewey: Philosopher of Science and Freedom* (New York, 1950): “As an empiricist I continue to think of the conceptual scheme of science as a tool, ultimately, for predicting the future experience in light of past experiences…” (p. 50). He went on to say, “I espouse a more thorough pragmatism. Each man is given a scientific heritage plus a continuing barrage of sensory stimulation; and the considerations which guide him in warping his scientific heritage to fit his continuing sensory promptings are, where rational, pragmatic” (p. 53). The heritage of beliefs is depicted as a flexible web of retained ideas or associations that each person might warp or reshape to address contemporary problems.

According to Quine (1951), the body of science as a whole also exists as a web of beliefs. The vast network of beliefs makes it possible for some periphery experience to necessitate a change in beliefs; however, there are multiple beliefs that can be adjusted to restore equilibrium (Morton, 2003). The beliefs nearer the center are insulated, or less likely to be altered than more peripheral beliefs that had fewer connections within the web. Any logical connection or scientific theory could be viewed as true by adjusting other beliefs close to the experience. Therefore, no logical structure or analytic statement is immune to the possibility of amendment. While not immune, the difficulty in challenging theoretical statements about logic or rationality comes from their centrality to the network,
“meaning merely that little preferential connection with any particular sense data obtrudes itself” (Quine, 1951, p. 50). In this way he critiqued the idea that scientific laws could be verified or falsified based on experiences.

Quine (1951) stated that the, “totality of our so-called knowledge or beliefs… even pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges” (pp. 48-49). He specifically took on foundational, absolutist assumptions in science in *Two Dogmas*. He believed that under the influence of logical positivism, science *writ large* was subject to a double dose of absolutism through linguistic-logical analytical structures and empirical, factual observations. Quine indicated that the two dogmas are but two sides of the same coin. Accordingly, both formal logic and observable, empirical fact are different forms of practice used to address the purpose or problem at hand (Bredo, 2006).

Quine (1951) thought that by considering individual scientific statements one at a time, it was possible to overlook the values operating in the selection of germane statements and experiences to observe or measure. For instance, in multiple languages or in one dialect the classification of some object by a noun might refer to different aspects of the stimulus depending on the context of the interaction and the value attributed to it. In Quine’s epistemology, adjustments to any connections within an individual web of beliefs or the web of a social group involved a redistribution of *truth values* throughout some region of beliefs. In this way, Quine challenged the belief that science can reduce language to a value-free or value-neutral sense-fact datum. According to Solomon (2007):
Today there are many varieties of such “pragmatist” theories, but they all accept the view that reference is something complex and to a large degree contextual, not a simple “natural” connection between words and things… Now if this is true even when we are talking about… concrete objects… it is even more complicated when we are talking about such intangible mental entities as feelings. (Quine, a friend of Skinner’s at Harvard, dutifully refused to talk about such things at all.) (p. 134).

Even though he did not venture into a treatment of emotions, Quine (1951) did talk about the importance of truth values as part of the cognitive web of beliefs. Despite his mention of truth values and the way that Quine applied the web of beliefs to the total field of science as a body, subsequent research and critique often emphasized the individual, cognitive aspects of the web of belief metaphor (e.g., Kim, 1998; Morton, 2003). In the treatment of Quine, the emphasis sometimes falls on the centrality of some beliefs over others without acknowledging that in his model, the center is not a fixed state or a single line of continuity from one central belief to another. Instead the Quine’s (1951) woven web or fabric of belief is a contemporary and contextual snapshot of the cognitive schema that serves as a tool in addressing contingent problems.

Toulmin

Toulmin (1972) indicated that the union of “rationality with logicality… was never compulsory” (p. 44) in science. He asserted that over the last 100 years, the social sciences have often adopted a non-Darwinian model of evolution because of the use of logical language of dialectics. In part, he aims this critique towards Quine for occasionally using mathematical-logical language for describing the web of beliefs, but Toulmin also acknowledges Quine’s pragmatic approach in explaining how conceptual change occurs in relationship to the web. His critique can be seen as somewhat off the mark in light of
Quine’s more radically pragmatic claims that all of pure mathematics and logic are manmade fabrics.

Toulmin (1972) reacted even more strongly against the idea of discontinuity in conceptual change, specifically taking on Kuhn’s model of scientific revolutions. He argued for the continuity of rational ideas from one period to another:

“Intellectually…Man is born with the power of original thought, and everywhere this originality is constrained within a particular conceptual inheritance; yet, on closer inspection, these concepts too turn out to be the necessary instruments of effective thought” (Toulmin, 1972, p. 35). Here, his argument against Kuhn’s revolutions almost seems to be predicated on Quine or earlier pragmatists’ conceptions of institutionalized knowledge structures as both enabling and limiting. The paradox is that creative individual thought is facilitated and restrained by the collective history. Therefore, “The conceptual innovations of the individual… are judged in relation to communal ideas which he shares with the rest of his profession; and he thinks creatively when he makes his contribution to the improvement of his [community]” (p. 36). The conceptual ideas and language is made available by the community, the creativity comes from the individual, and the community ultimately is responsible for what ideological inventions get retained based on what is perceived as useful.

Toulmin (1972) used the words conceptual innovations and Darwin presented imagination as the individual power to combine various material and social associations. According to Toulmin, the new paradigm does not originate de novo. It is always building on and constricted by individual and social history. Furthermore, the adopting of such
revolutionary connections of previously unrelated associations is dependent on the judgment and revision of the community. The resolution of tension between associations in the individual (Kuhn’s man immersed in crisis) might seem to be an original, individual benefit, but the judgment of its ability to improve the community is essential to its socio-historical perpetuation. In this view, what is rational, logical, or factual must mean something other than an indifferent, objective, or factual scientific representation of biology or reality as depicted by Gould.

Toulmin asserted that neo-Darwinian evolutionary models based on natural selection and a population schema should be considered as an approach to all historical entities. Instead of asking, “How do permanent entities preserve their identity through all their apparent change?”, we must simply deny the validity of this question itself. In its place, we must substitute the question, ‘How do historical entities maintain their coherence and continuity, despite all the real changes they undergo?’” [italics original] (Toulmin, 1972, p. 356). Toulmin went on to suggest that even the development of Reason, language, and intellectual abstractions should be considered using a neo-Darwinian evolutionary model based on the “balance between variation and selection within a population of constituent elements” (p. 356). If philosophers are to take the implications of an evolutionary approach to our theoretical problems—in the sense of population, rather than a progressivist approach—can take us beyond the limits of a particular special sciences, and require us to reappraise our categories and patterns of analysis even on the most general philosophical level. Here again, our views about Human Understanding must keep in step with our views about the World which we have to understand; and our subsequent account of the concept of Reason, and the standards of rationality, must reflect the historically changing character of their interactions. (p. 356)
Toulmin’s interest is in human understanding and what is meant by rationality. Toulmin (1972) sought to escape: “the invidious choice between the arbitrariness of the absolutist and the defeatism of the relativist” (p. 495). His project was to conceive of a more contingent and yet continuous explanation for human understanding based on a natural evolutionary model:

What a populational sociology has to explain, is (i) the factors in any historical context favouring and/or hindering institutional and procedural innovation; (ii) the manner in which social or administrative innovations win acceptance, and establish themselves, within societies of different kinds; and (iii) the criteria by which one can legitimately judge how far any actual institutional change was genuinely ‘adaptive’, and effectively resolved outstanding social problems in a particular situation” (p. 350).

The first question is situational; the second is considered in the treatment above. Toulmin’s answer to the third concern is that the criterion by which to judge adaptiveness is the correspondence of ideas to an ecological rationality. Instead of linking rationality with a universal logic or universal laws (in a judicial sense), Toulmin links rationality to a universal, material human nature based on common problems and needs. These basic human needs become the basis for a common law or common rational measure to weigh situated human interactions against.

Toulmin (1972) ultimately adopted a constructive positivism for his treatment of relative rationality, which he calls “intellectual ecology” (p. 488). The development of language, methodological thought, and even rational enterprises or social forums of judgment are tools for solving problems related to what is really human *qua* human – universal needs and problems. Toulmin’s uses a socio-historical lens to determine how to address commonly held problems in order to move “towards solving the everyday
problems of dealing effectively and harmoniously with our fellow-men, animals, or inanimate objects” (p.493). An objective, rational perspective is not possible because of formalism or structural arguments, but because of the highly adapted cognitive mind and social judgments as tools that allow humans to discover their common values – their common human needs. In this quote, as in Darwin’s psychology (see chapter 3) the interests brought into balance in the quote above also seek to balance all material aspects of the system including other animals and inanimate objects. As in Lewin’s theory (see chapter 6) both inanimate and psychologically endowed beings must all be considered in the harmonious relationship because rationality is part of a more universal, material ecology. In Toulmin’s (1972) more pragmatic, natural approach to rationality, high cognitive and social development are tools that allow humans to address their common material condition and the harmony of the whole system.

Toulmin (1972) asserted: “historical understandings as some kind of trans-temporal telepathy, empathy, or clairvoyance—as though the historian had retrospectively to ‘re-experience’ the sensations and feelings, imagery and agitations, of the men whose story he is reconstructing” (p. 491). In defense of his historical holism, “the possibility of understanding the actions, customs and beliefs of men in other milieus rests on our sharing, not common ‘sensations’ or ‘mental images’, but rather common human needs and problems” (p. 491). His defense is similar to defense offered by James when his theory of emotions is challenged as being materialist. There are two differences: 1) As a philosopher of science he does not talk about the mental or sensational psychological systems – he talks about rationality and value; and basic needs or instinctual value gives the possibility for
identifying the basic, common human condition instead of providing a source of endless tension (see James chapter 3).

By focusing on the continuity of humans’ instinctual needs, Toulmin is able to keep the individual subjectivism of James at bay and continue to forward a positive constructive idealism. Toulmin ultimately proposes the use of rationality and the social process of evaluating the common value or good as the tools that could enable humans to decipher what is in interest of all instead of just the interest of the individual. The common good or happiness is thus upheld as the standard for conduct (see Darwin chapter 3). While in continuity, these naturally acquired tools give humans the technology needed to rise above the treachery of an emerging, population evolutionary process. The positive and constructive message is that by looking to the material/socio-historical past, humans can address contemporary problems to move towards a harmonious, ideal future. Progress and an ideal future are not guaranteed, but humans already have adapted the high mental functions needed to make it happen.

As in Kuhn and Gould’s theories in the previous chapter, progress does not seem to be guaranteed by a system being pulled into a predestined or necessary logical harmony. Furthermore, Toulmin is not given to an overt acceptance of empirical facts as the source of foundational knowledge. However, his treatment of basic values-survival needs in humans and other animated animals continues to emphasize the importance of a higher cognitive ability to evaluate and judge what these basic shared values. These higher cognitive and socio-emotional tools are still seen as higher adaptive tools that could be actively used to identify, address, and direct the more passive or reactive survival instinct-
values in all rational creatures. While Toulmin does not seem to say much explicitly about emotion in his theory, an awareness of James’s statement that lower, emotional psychological processes have a value of their own makes it easier to pick up on the classifications that remain in Toulmin’s writing. Though going part of the way in challenging absolutist views of knowledge, he nonetheless continues to espouse a Jamesian classification of the psychological processes as seen in appendix C.

Weick

Sensemaking.

Weick (1995) drew on critiques of Kuhn’s (1970) treatment of scientific revolutions which assert that cultural changes might be a better analogy for paradigmatic changes than philosophical systems. He pointed to the importance of artifacts that come to symbolize a culture and aid in its perpetuation but that separated from their initial situation, are able to be interpreted differently. Weick’s interest in artifacts is very similar to Schein’s (1978, 2004). According to Weick, this is a “wonderful foot-in-the-door to show why stories are so crucial to sensemaking” (p. 119). Seeking a richer, textual interpretation of knowledge, Weick (1995) was sharply critical of Gould’s pursuit of positive scientific facts. Weick also acknowledged the important contribution of Katz and Kahn (1966) to an open systems model of organizations. He drew on open systems theory to emphasize the constant flow in which organizing and sensemaking occur, but his literary approach provides a strong contrast to the more physics-like depiction in Katz and Kahn’s social psychology of organizations. Weick’s more emergent, problem based approach to organizing and sensemaking as processes of human experience does not as clearly depict a
specific foundation for knowledge or a single ultimate ideal. Even the stages of interaction are seen as recursive instead of linear.

Where Katz and Kahn focused on the interaction of material forces, role behaviors, and rational organizational structures, Weick focused on the interlocking behaviors cycles and the development of shared interests and meaning within a culture. In his seminal works the *Social Psychology of Organizing* (1969/1979) and *Sensemaking in Organizations* (1995), Weick drew heavily on hermeneutics and the psychology of James. Weick (1979) believed that the majority of organizational psychology focuses on criticism of organizations instead of appreciation of organizing from different perspectives. In order to see such rich patterns, Weick asserted that analysis of organizations should draw on the approach of rhetoric, literary criticism, and aesthetics. He asserted that a better balance between the dialectic of criticism and affirmation might provide some balance similar to that found in the critic of poetry or art which uncover artistic expression that go beyond the initial observation to more richly developed tension of attraction and repulsion (Weick, 1979).

Weick (1979, 1995) never cited Dewey in the works mentioned above, and his psychology seems to be largely consistent with James’s psychology. He also drew on other early pragmatists including Peirce and Mead. The result is a more contingent view of rationality that acknowledges the emerging nature of organizations and the role of tension and interaction in continuously seeking equilibrium with the environment. However, he ultimately switches evolutionary metaphors in order to discuss the development of language and rationality. His evolutionary model for the emergence of
organizations is usually natural selection and his attempt to keep idealism in tension is evident in his switch to a Lamarkian model to explain socio-culturally created meaning. Weick (1995) is clearly aware of his movement between evolutionary or metaphysical views of emerging existence, which he calls ontological oscillation. He seems to be less aware of how his bracketing off emotions from the flow of experience is continuous with James’s psychology. His description of the sensemaking process has clearly been influenced by pragmatism, but like Toulmin, he continues to forward a uniquely important role for human tools related to rationality. Like the description of Toulmin’s theory above, Weick’s treatment of emotions is somewhat anemic. However, he provides a little more material that helps to more explicitly link his thinking in this area to the Jamesian psychological family.

Weick (1995) intended to establish the uniqueness of sensemaking by comparing it to definitions of interpretation as discussed:

…in law (e.g., White, 1990) or the humanities (e.g., Collini, 1992) as it is in the social sciences (e.g., Rabinow & Sullivan, 1987), which suggests that sensemaking, of which interpretation is a component, has widespread applicability. Most descriptions of interpretation focus on some kind of text. What sensemaking does is address how the text is constructed as well as how it is read. Sensemaking is about authoring as well as reading. (pp. 6-7)

Weick seeks to recapture the process that Kuhn seems to overlook by looking at socio-historical artifacts as completed texts. It is a more interactive, process oriented interpretation.

The recipe that Weick used for sensemaking further emphasizes his emphasis on linguistic constructions and interpretations. He recounted a story of a girl who had the
potential to be a poet. When the girl was told to be sure she meant what she spoke, she said “How can I know what I think till I see what I say” (Weick, 1995, p. 12). Weick used this statement to illustrate his psychology of sensemaking, which in individuals and organizations, is portrayed as a process of enactment, selection, and retention (Weick, 1979). His model is not linear, instead multiple, iterative feedback loops are acknowledged. According to Weick, the phrase above indicates how an individual or an organization justifies belief by continually talking to itself (putting forth sentences), judging them retrospectively (evaluating or making sense of them), and storing the knowledge gained for future interpretation so that future problems can be met with similar ideas.

*Enactment.*

Enactment is the only stage in Weick’s (1979) structure that is not presumed to reduce equivocality, or multiple possible meanings. Instead, enactment increases the raw materials that can then be interpreted. The ongoing physical, interactive flow of experience is potential, but not yet directed information. The poet’s writing therefore can increases potential meaning, but it does not make it sensible until the completed activity is reflected upon, a mental-psychic activity. Drawing on *Webster’s Dictionary of Synonyms* (1951), Weick (1995) compared individual interpretation as a special knowledge, imaginative combination, or certain form of sympathy. To show that it is necessarily retrospective, he quoted the same source saying that, “in the person who would try to understand some text that ‘presents more than intellectual difficulties as in a poem, a dream’ (p. 318)” (p. 7). The intellectual tension of artistic process, experience or
expression is not enough, the retrospective evaluation of the work begins the process of selecting and constructing meaning that can then be retained. Quoting Mead (1956, p. 136), though it could just as easily have been based in James’s discharge theory of emotions, Weick (1979) asserted:

We are conscious always of what we have done, never of doing it. We are always conscious directly only of sensory processes, never of motor processes; hence we are conscious of motor processes only through sensory processes, which are there resultants. (p. 195)

The sensory processes are the subject of one’s conscious attention, and these felt sensations are the result of actions. The implication for Weick’s (1995) evolutionary theory is that, “Actions are known only when they have been completed, which means we are always a little behind or our actions are a little ahead of us. To anticipate the later point, if hindsight is a bias… then everyone is biased all the time. The nature of time and sensing guarantee that outcome” (p. 26).

Enactment shapes the environment, which makes more interpretations possible. Weick (1995) liked the term enactment because it “suggests that there are close parallels between what legislators do and what managers do. Both groups construct reality through authoritative acts. When people enact laws, they take undefined space, time and action and draw lines, establish categories and coin labels that create new features of the environment that did not exist before” (pp. 30-31). The process of classification is important because it shapes the material environment and redefines it as threats or opportunities.

Weick emphasized the difference between active and passive individuals in creating their own environments and the information that is available to them. In other
words, the individual need not be struck by the environment, they can also materially and psychically reorder it. Leaders, managers, and legislators are depicted as the ones that make the environment for others because they are more active (Weick, 1995). Unfortunately, many people fail to recognize that power and authority ascribed to such individuals depends on the alliance of a very few members of a given social group (Weick, 1979). As such, the rationality of a few dictates the potential meaning for others by limiting their activities and the form of social education. Here, the concept of rationality, “does not necessarily mean that organizational actions are logical or sensible, but rather that they are intended, thought about, planned, calculated, or designed for a purpose” (Weick, 1979, pp. 19-21). There is a sub-text that guides the socio-evolutionary process, a subtext authored by human interaction throughout history. For Weick, this interaction represented a break from natural selection as a process of evolution. There is an artificial, purposive action of legislating or authoritative executive decision that is trying to be rational, it is trying to get control of the situation. When seeking to explain the artificial, purposive direction imposed by sub-texts or meta-narratives, Weick (1979) used the domestication of animals and cultivation of plants as an evolutionary model of artificial selection.

The process of enactment is messy; it can be inconsistent, haphazard, disorderly, and turbulent. Drawing on Follett (1924), Weick (1979) argued against a radical empirical reductionism because one cannot catch the stimulus stimulating or the response responding. Therefore, a thorough metaphysics of original causes is not sufficient. The interaction and codetermining nature of the whole blurs the distinction between subject and
object. He builds on Follett who critiqued some approaches to behaviorism by saying, “Some writers… use the word result—the result of process—whereas there is no result of process but only a moment in process” (Follett, 1924, p. 60).

Follett’s concern with the treatment of **resistance to change** in behavioral research also found import in Weick’s own theorizing. She argued that classifying behavior as resistance to change reinforces social systems that prevent individuals from seeing their own agency in enacting the environment. Weick (1979) hoped that if her alternative way of classifying responses to change were talked about as “confronting the activity of the environment” (Follett, 1924, p. 120), the focus of attention would shift from opposing to considering the interests of different individuals such that they might be integrated. Weick seems to believe that voicing this interpretation might make room for different voices. His challenge to classifications of responses to change as resistance is important to this project, but the classifications that he challenges stops short of further questioning how James’s classification of psychological aspects of human experience might perpetuate such categories in behaviorism and other psychological approaches to change and learning *writ large*.

*Selection and retention.*

If enactment is the only stage in Weick’s structure that is not presumed to reduce equivocality, then the stages of selection and retention must fulfill these more rational portions of sensemaking. To clarify his approach to textual interpretation, Weick used definitions that point to the acceptability or usefulness of the translation of meaning by a community. This social dimension is needed to move the individually held interpretation
back to the social field. “In short, interpretation literally means a rendering in which one word is explained by another” (1995, p. 7). Weick (1979) asserted that “facts do not speak for themselves” and expresses camaraderie with researchers “who can think deeper than a fact” (p. 25). In Weick’s theorizing, the word of the individual is not as deep as the sentence formed by multiple voices in a community or inquiry using multiple methods.

While critical of Gould’s answer for how human understanding evolves, Weick reconstructs Darwinism in a similar way as Gould. Quoting Ghiselin (1969), Weick (1979) presents the essential argument of naturalism:

Organisms differ from one another. They produce more young than available resources can sustain. Those best suited to survive pass on expedient properties to their offspring, while inferior forms are eliminated. Subsequent generations therefore are more like the better adapted ancestors and the result is a gradual modification, or evolution. Thus the cause of the evolutionary adaptation is differential reproductive success. (p. 176)

According to Weick, social organizations do not fit within natural selection. He insisted that they are more appropriately conceived of as emerging via artificial selection. Here Weick opts for the language of rational design instead of Gould’s social-biological depiction of progressive scientific knowledge in terms of Lamarkian evolution.

In both cases, the active switch in evolutionary metaphor is made to support an argument for the unique function of rationality and the judicial role of social groups in selecting and perpetuating, and accelerating the growth of more adequate classification-factual knowledge of the world. Weick (1979) stated that, “natural implies that features of the environment differentially favor reproduction of some mutations and the destruction of others. All of this fitting, failing, mutating, and reproducing is said to be unguided,
essentially random, or at least underrationalized” (p. 176). Weick seems to confuse the difference between random and probable. Furthermore, he seems to fill the void left by his attempt to distance himself from both a logical dialectical model of necessary progress and an empirical foundation of inherent system rationality with a different source of artificial direction and selection of human understanding and associative living. Instead of a divine Artificer, the designers are highly evolved humans with some special tools for addressing common problems.

While intent sometimes fails and causes organizational behavior to appear haphazard, Weick (1979) maintained that organizations function much more like breeders or cultivators than like randomized nature:

...haphazard moments in organizations are byproducts of bounded rationality applied by fallible rationalizers. Ideas and interpretations as much as things exert selective forces in organizations... The enacted environment is artificial rather than natural in the sense that it is lace with preferences, purposes, idiosyncratic punctuations, desires, selective perceptions, and designs. (p. 176)

Here Weick can cause one to recall Kuhn’s revolutions and Gould’ punctuated equilibrium, except that Weick more explicitly emphasizes purpose and design as a characteristic of social development and human understanding.

Perhaps in response to the way that Kuhn (1970) ended his essay, questioning the essential quality of the world and humans as known and knower, Weick (1979) provides some answers. Rationality is uniquely essential to individuals and social organizations because they: 1) select among multiple structural options that can address environmental contingencies; 2) select the environment or niche in which it will exist; 3) reshape the environment; and 4) improve the accuracy of understanding the environment and thus
improve the ability to control it. Here, Weick has previously acknowledged the importance of appropriate classification of experience and here he can be seen also allowing for more accurate understanding and structuring according to the human capacity for rationality and the retention of more rational ways of classifying and ordering experience.

Retention, therefore, is “a reservoir of beliefs, and we assert that believing is seeing (I’ll see it/select it when I believe it/retain it). If believing is seeing, then retention… constrains selection and provides crucial inputs to it” (Weick, 1979, p. 187). Quoting James (1950, vol. 1, p. 654), Weick (1979) asserts that, “retention means liability to recall, and it means nothing more than such liability. The only proof of their being retention is that recall actually takes place. The retention of an experience is, in short, but another name for the possibility of thinking it again, or the tendency to think it again, with its past surroundings” (p. 207). In sensemaking, prior knowledge is only useful to higher cognitive structuring of the world if it is can be remembered and reflected upon. As knowledge retention theory suggests, organizational knowledge is only useful if it is accurate, available, and comprehensive (Levinson, 1972).

Balancing flexibility and stability.

The human psychological apparatus is itself a source of stability in Weick’s depiction of human understanding. As previously mentioned, Weick (1995) asserted that, “In matters of sensemaking, believing is seeing. To believe is to notice selectively. And to believe is to initiate actions capable of lending substance to the belief” (p. 133). Weick describes a feedback loop from retention to enactment. Weick’s writing echoes Dewey
(1965c) words, “that believed better is held to, asserted, affirmed, acted upon. The moment of its crucial fulfillment are the natural “transcendental”; the decisive, the critical, standards of further estimation, selection, and rejection” (pg. 172). Weick challenges the common aphorism, seeing is believing. Individuals see what they expect to see and act in a way that reinforces this expectation or belief – a self-fulfilling prophecy. Weick (1979) indicated expectations severely limit the number of inputs that are considered. Enactment (saying), a creative or innovative voice, can shape (seeing) up until the point when it becomes institutionalized and portrayed as an orderly, unified, and integrated artifact used to pass on knowledge (1979). Wrote or habitual knowledge is a source of stability but once incorporated into the structure, it ceases to be as flexible because it is disconnected from the original context.

Enactment is situational. Attempts to remove it from concrete experience rob it of its connection to problem solving. Using his pragmatic lens, Weick (1979) asserted that any problems related to the current situation are always recast according to particular purposes or private ends. This is comparable to James’s lower, more sensory-motor psychological process (see chapter 3). Citing Mead’s description of the individual as a parliament of selves constituted of their multiple interactions, Weick (1979) further introduced the possibility of multiple competing projects or problems that the individual is seeking to bring into balance at once. His treatment of the individual’s attempt to find the shortest and easiest way to restore equilibrium because of one or multiple peripheral problems seems to closely parallel Quine’s pragmatic theory of beliefs as part of a flexible web (see above) and inherent rationality of the material world in Lewin’s theory (see
chapter 6). Because of the limits of an individual’s rationality, “acting on the basis of sufficient knowledge rather than complete knowledge…of using simple, unlaborious rules to search for a solution when a problem arises… and of using shortcuts whenever possible” (Weick 1979, p. 20) is employed.

Weick (1979) identified the need for stability to be balanced with flexibility. He acknowledges the importance of doubt and discrediting existing beliefs. Weick proposed that organizations need to find ways to maintain flexibility and leave room for doubt and dissent. Weick (1979) forwards an emerging, evolutionary conception of organizations that is based on gerunds instead of nouns by challenging the reification of concepts:

Reification means to treat an abstract concept as if it referred to a thing. In the case of organization, if we read ‘an organization acts’ we could assume that because there is the single noun-word ‘organization,’ something in nature must correspond to it - something that is independent, unique, unchanging, and capable of entering subject-predicate relations with other things… what we want to do instead is look at behaviors that are eventful, process-like, and that possess some kind of distinctive quality that make it reasonable to call them organizational. [italics original] (p. 34)

Weick asserted that any organizational action is really the result of interactions between individuals; interactions that could be changed. The characteristic of a given leader or any other single individual is insufficient for determining the patterns of interaction that the organization perpetuates. Reified classifications, such as role behavior or resistance to change, can obscure the individual’s agency to shape their environment.

Emphasis and tempo.

In order to frame a psychology of organizations less prone to reification, Weick (1979) drew on Cohen, March, and Olsens’s (1972) depiction of organizations as garbage
receptacles: “An organization is a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work” (p. 2).

Cohen et al. (1972) presented organizations as existing in continuity and flows. According to Weick (1995), “Although they imply that people seldom confuse a problem stream with a choice or solution stream, students of sensemaking may be forgiven if they assume fluidity even in those specifications. The same portion of a flow might be labeled either a problem or a solution to justify some perceived choice… “ (p. 44).

Weick’s (1979) description of means and ends would not be foreign to Dewey (1916; 1930). Weick asserted that individuals organize based on diverse ends and interacting means to accomplish those ends. The organization then moves to institutionalize common or interactive means in order to formalize the interaction. Then the group may then come to identify common ends in addition to the ongoing individual ends. The emergence of common or social interests is presented as raising the potential for diverse means related to social ends. The reason is that social systems are most efficient when employing a compartmental division of labor. This specialization or compartmentalization ultimately leads individuals who are less aware of the connection of their work to a unified whole. This approach is more situational, ongoing, and according to Weick, it emphasizes timing.

Drawing on situational research related to social cognition or social knowledge, Weick (1995) asserted that: meaning changes with changes in projects or goals (Gioia & Chittipeddi, 1991); projects shape meaning (Lanir, Fiscoff, and Johnson (1988); position
in hierarchical organizations shape the meaning attributed to the *same* event (Gephart, 1992); and that goals can be divided in terms of speed (Fiske, 1992). In this last study, Fiske (1992) observed that confirmation of expected meaning either occurs quickly, or that more time might be allowed to elapse in order to examine complex aspects of experience and form more accurate representations. Drawing from Johnson et al.’s study (1988) Weick pointed out that in hierarchical command-and-control social systems, people at the top are expected to approach problems from a strategic, calculated, risk avoidance approach while people at the bottom are expected to act locally, entrepreneurially, and boldly to exploit novelty. Instead of a single answer, the focus should be on the “values, priorities, and clarity about preferences to help them be clear about which projects matter. Clarity on values clarifies what is important in elapsed experience, which finally gives some sense of what that elapsed experience means” (1995, pp. 27-28).

*Role of emotion.*

If life is an ongoing stream of experience, what causes certain aspects of the current to get dammed up? and why do some points in the flow of time to seem to be punctuated? While immersed in the flow of experience, people are not indifferent to its passing. Drawing on Eccles and Nohria (1992), Weick (1995) indicated that people manage the stream of experience by punctuating it with events, actions, and words. In a way, these moments serve as time markers. However, not all events, actions, and words are significant or seem to resemble time marking ceremonies. In other words, many actions do not break the ongoing physical flow of life. Weick’s (1995) treatment of emotions in this emergent evolutionary flow seems to draw directly on James’s theory:
An interruption to a flow typically induces an emotional response, which then paves the way for emotion to influence sensemaking. It is precisely because ongoing flows are subject to interruption that sensemaking is infused with feeling… a necessary condition for emotion is “arousal” or discharge of the autonomic nervous system. And arousal also has psychological significance. There perception of arousal triggers a rudimentary act of sensemaking…It makes good evolutionary sense to construct an organism that reacts significantly when the world is no longer the way it was. (p. 466)

In order to talk about the role of emotions, Weick returns to Darwin’s natural selection as an evolutionary model and James’s discharge theory of emotions. Instead of using the word *strike* as James does, Weick uses the word *induce*. Interruptions in the flow of experience may provoke or bring on a physiological response that can only be seen as rudimentary contribution to the mental or psychological sensemaking stages of the process.

Substituting emotion for James’s mental tension, Weick (1995) stated that, “Emotion is what happens between the time that an organized sequence is interrupted and the time at which the interruption is removed, or a substitute response is found that allows the sequence to be completed” (p. 46). The longer the period of disruption, the greater the level of arousal. Weick uses a hydraulic or electric metaphor in which emotions are commonly presented as building up and needing to be vented. Changes to more institutionalized habits of behavior and thinking generate particularly emotional experiences because alternative beliefs and behaviors have not been acceptable. Therefore, according to Weick (1995), change in newer social systems should be less likely because people have not yet become accustomed or socialized into certain expectations.

Weick (1995) categorized emotion as positive or negative: “negative emotions are likely to occur when an organized behavioral sequence is interrupted unexpectedly and the
interruption is interpreted as harmful or detrimental. If there is not means to remove or circumvent the interruption, the negative emotion should become more intense” (p. 47). He went on to say that there are two sources of positive emotions, “First, positive emotion occurs when there is the sudden and unexpected removal of interrupting stimulus, such as when a hassling boss is transferred…or the records of a collection agency are lost. Second, events that suddenly and unexpectedly accelerate completion of a plan or behavioral sequence can generate a positive emotion” (p. 46). In either case, tension or inhibition is seen as undesirable. Speeding active process up in the second case assumes that the process itself is not pleasurable because perception is always behind activity; only the completed activity is felt. Getting to the end faster means that you can reflect on and classify the creative act, saying, “It is good.” This representation sets the individual up for emotional problems in the social context. If emotions can only be positive if there is a quick and unexpected benefit, the stream cannot be a pleasurable experience if it is consistent. New plans or expectations must be made that depend on others or create the opportunity for unexpected positive results (Weick, 1995).

Ultimately, Weick (1995) portrays emotion as a non-response activity that persists during the inhibition to act. Emotions are passive, and as one might recall, Weick asserted that leaders are the ones that are able to achieve control of situations through their action. Weick (1995), however, opens the door slightly to a more functional approach to emotions with a backhanded compliment:

…recall and retrospect are mood congruent… People remember events that have the same emotional tone as what they currently feel. Past events are reconstructed in the present as explanations, not because they look the same but
because they feel the same. The resulting attempt to use a feeling-based memory to solve a current cognitive puzzle may make sensemaking more difficult because it tries to mate two very different forms of evidence. (p. 49)

The feeling of the event or object is the emotion, the affective reaction that is recalled, however does not come with the particulars of the situation. It is an artifact that is a symbolic artifact, not a clear rational or cognitive judgment. Disconnected from both the situation and a rational interpretation, the emotional disturbance can make sensemaking in a new situation problematic (Weick, 1995).

Weick presents the cognitive bracketing of experience as a way of socially constructing the world, but he depicts emotions as a felt bodily perturbation brought on by objects and events. This interpretation leaves little room for the social construction of emotions or a more pragmatic relationship to the coordinated whole of experience. In order to keep rationality in a high place and forward an evolutionary perspective based on natural selection, the certain aspects of experience are presented as good or favorable. Not surprisingly these positive moments are connected to the accelerated progress on projects, unexpected desirable freeing of inhibited activity in order to get moving, and cognitive dissonance-tension reduction. Weick’s critique of Kuhn’s bracketing of history seems appropriate in considering Weick’s bracketing of experience. The poet’s sentence is treated as a complete whole in retrospect. Weick is aware of the problems that can come from taking sentences out of the context of their creation or a larger text, but does not seem to be bothered by a similar division of experience into cognitive and emotion elements.
Oscillations.

Weick justified his own oscillation by focusing on the creative flows of organizational life and the tendency to “smuggle in realist assumptions that posit constraints and objects that exist independent of subjective constructions” (1995, p. 34). He continued to say that, “People who study sensemaking oscillate ontologically because that is what helps them understand the actions of people in everyday life who could care less about ontology” (p. 35). Why then do individuals from various research paradigms presented and chapters 3-6 oscillate between epistemological assumptions? Weick, specifically citing Isabella (1990), indicated that such theories are attempts to understand a moment in a process which represents a specific set of subject-object combinations as the nature of society.

Here, Weick’s defense is based on pragmatism. People are simultaneously constructing multiple selves, not one self. Depending on the problem or set of problems, Weick (1995) asserted that people might act like: interpretists, functionalists, radical humanists, and radical structuralists. He might as easily have used the categories: existentialists, pragmatist, behaviorists, individual developmentalists, or social developmentalists. His view of rationality in this sense is very close to Dewey’s. Weick (1995) stated that when people “confront activities, then actions, relationships, trust, faith experience, and presumptions are not just tools of sensemaking. They are also tools of epistemology and ontology. They create that which they interpret. To charge people who use them with ontological oscillation is to make too much of too few moments in the process of sensemaking” (p. 39). Thus, individuals and research strands do not behave like
distinct, continuous lines of inquiry because people do not operate based on singular, central beliefs. Instead the researcher, the subject, and the interaction of the dynamic whole cannot be clearly teased out in the experience of the whole. The oscillation itself may be functional or expedient, but the inability to acknowledge that one is jumping between philosophical assumptions might be more problematic.

Solomon

Solomon’s (2007) philosophy of emotions is briefly mentioned here, not because it helps much toward a pragmatic conception, but because it expands upon Weick’s mention of existentialism as one of the points of his ontological-epistemological oscillation. Like Toulmin, Solomon broke from James by treating the sensational or emotional apparatus as a point of human progress - a source of shared value, shared interests, and a way to achieve the good life. Where Toulmin’s treatment of human understanding depicted higher social-judicial structures and mental developments as the rational tools needed to bring about a greater harmony, Solomon’s project focused on the naturally developed socio-emotional contribution to rationality in bringing about the good life. Like James, Solomon asserted that emotions have a worth of their own, but he emphasized the positive force for ethical and moral living – not the lower self-preservation instinct. Solomon called for and developed an existential alternative to James’s treatment of emotions.

The phenomenological, existentialist positioning of emotion as central to the human experience has not been emphasized in this project up to this point because it does not appear to be a major influence on organizational change theory. The one presentation of emotion that may come the closest is Maslow’s treatment of regression into Being
Cognition. As Bredo (2006) indicates, most of psychology in the last 100 years has been focused on cognition while emotion was neglected. Solomon (2007) made the same assertion, although he does acknowledge some philosophical work that he found to be important related to the social construction of emotions since – mostly since the 1980s. While Solomon sets out to argue for the rationality of emotions, he does not cite DeSousa’s (1987) *The Rationality of Emotions*, as either an alternative theory for critique or for support. DeSousa’s (1987) theory of emotions was much more sympathetic to a neo-Darwinian evolutionary model based on natural selection, but it ultimately asserted that intentionality, “which is made possible by the resources of language and logic, provides for a uniquely human interpretation of attachment emotions” (p. 78). The decision to use Solomon here instead of others who argue for the rationality of emotions is for four reasons: 1) He clearly emphasizes existentialism; 2) It can be seen as looking at the same issue as Toulmin with an eye for emotion as an important tool; 3) Its argument closely parallels the prominent role and focus of rationality in Weick’s organizational sensemaking; and 4) It is more recent.

*Phenomenological and radical structuralism.*

Like Weick, Solomon (2007) did some epistemological and ontological oscillating between evolutionary metaphors, though he is not as quick to admit it. Solomon’s existential philosophy seeks to do for emotions what Weick’s social psychology of organizing was intended to do for cognitive aspects of sensemaking – he sets out to show what is good about emotion in organizational life. He argued that “emotions are more central to rationality than even reason and reasoning… reason has not point or focus.
Current psychiatric and neurological research confirms this” (p. 5). Though he argued for the accuracy of his classification of emotion based on scientific fact, his argument remains rooted in the marriage of his existential and structuralist philosophy. Existentialism serves as one epistemological foundation for Solomon’s philosophy of emotion:

…moods and emotions to be the key to phenomenology, as our ways of ‘being tuned’ into the world. Sartre [an existentialist] further suggests what I will take to be one of the most radical claims of this book, the idea that emotions are purposive. From him I will argue that our emotions are strategies through which we make ourselves happy or unhappy and give our lives meaning. By cultivating our emotions we determine the virtues and vices that make us good or not so good people. (p. 9)

Solomon found a certain richness in folk psychology and was skeptical of the pursuits of philosophers and scientists who speculated that a material, neurological explanation for emotions would completely replace it.

In response to scientific research aimed at reducing emotions to a physiological and biological base, Solomon (2007) said:

If anger is a basic emotion in that its manifestations and expressions are more or less automatic, is this what anger is, its essence?... no! No emotion, and especially anger, is just an evolved neurological response. There is no doubt that anger (and some other emotions) are part of our evolutionary heritage and include physiological responses that we share with other animals. But this is surely just a piece of the story. [italics original] (p. 14)

In his view, folk psychology is tied up with language, narrative, and storytelling; it is how even the hardest scientific symbols and languages get translated for use.

Like Weick, language receives a favored place in Solomon’s existential philosophy. The articulate use of language sets adult humans apart from immature humans and other animals. According to Solomon (2007):
Language permeates our experience in virtually every aspect. Animals and infants have emotions without language, but we do not. Even in adult human beings, brute sensations like pain are shot through with questions and concerns that come with language and the awareness or confusion of what is happening. Emotions, with their complex of judgments and engagements with the world, are by their very nature creatures of language just as much as they are products of biology, neurology, and psychology. That means the question of interpretation and reflection are involved even in something so seemingly straightforward as naming or identifying a particular emotion. (p. 124)

In treating emotions, Solomon focuses on linguistic reflection on and interpretation of emotions as a uniquely human (adult) attribute.

The linguistic element allows Solomon to depict the social construction of emotions as a social historical or cultural structuralism:

Emotional intelligence, in one of its most prominent meanings, requires that emotions are constituted or structured by judgments, and these judgments can be surprisingly precise so we can make a bewildering number of subtle distinctions as well as the rather ham-fisted distinctions among ‘emotional families.’ An understanding of emotions thus involves an understanding of the judgments that structure them, and the difference may be very fine-grained and even exquisite. It is the nature of these judgments that determines the type of emotions. (p. 209)

According to Solomon, his observations of the underlying structure of emotions is supported by more recent psychological treatment of appraisals in the development of multiple and diverse emotions (e.g., Lazarus).

Solomon’s evolutionary account of emotions deemphasized natural selection and emphasizes the uniqueness of socially constructed linguistic meta-narratives. Because he identifies James’s theory with radically reductive empirical naturalism, he sets out to frame an alternative view of emotions. He framed three alternative aspects of emotion those depicted in the hydraulic-discharge theory of emotions: 1) primitive emotions have to do with desires; 2) emotions as communicative or saying something; 3) and emotions as
narrative. Despite the change in language to describe the second and third aspect of emotions according to the linguistic tradition, it is not clear that Solomon’s model does not still fit the Darwin and James inspired model provided in appendix C.

Solomon quickly tries to set these drives apart from purely biological or human needs. He points out that, “Desires can be sharply directed… Desire draws us to things, actions, and situations. It is an important element in the intentionality of emotions” (p. 147). Of particular interest are second order emotions which involve reflection upon desires because of one’s alienation from one’s desires. To use the title of Scheffler’s (1991) text, Solomon’s theory of emotion appears to be In Praise of Cognitive Emotions. The approach is to consider emotions as symbolic interactions; that is, they say something. The active expression of emotion is a social tool used for communication. He indicated that the expression of emotions as in getting to have your say or voicing your opinion gives some level of relief. Finally, Solomon (2007) asserted that at the “highest level of sophistication, there is the ‘pressure’ of narrative. Narrative is used as the best linguistic metaphor because it represents process and the change of emotion over time. According to Solomon (2007), “The stories may differ—slightly and in detail—but the general narratives are more or less fixed… some such narrative is true of nearly all emotions, apart from those few… that are so short-lived that they have not time for narrative, only for causal explanation…But narratives, as we all know, have a logic” (p 148).

Problems with disembodied rationality.

Though Solomon (2007) did not mention Weick in his philosophical treatment of emotions, interjecting some comments about Weick can help to make some of Solomon’s
arguments and assumptions clearer by giving a theory context from this project as an object for his critic of James influenced organizational psychology. Solomon (2007), like Weick, identified naturalism as a passive materialism. It can be seen as pessimistic and agnostic. The role of positive, empirical science is to radically reduce natural phenomena to their origin. In regards to emotion, he asserts that it has been the approach to emotion in science at least since medieval physiological descriptions of animal spirits flowing in the blood as a cause of passion. The hydraulic metaphor gave way to the discharge theory after the discovery of the neuron in 1895 (Solomon, 2007).

James’s psychology was using the cutting edge language of technology related to electricity in his time to describe his theory of emotion instead of the older steam engine metaphor. In either metaphor, the inhibition of flow results in a build-up of motivational energy that is vented or discharged along an instinctual or worn pathway. (Recall that according to Darwin’s evolutionary model, habits could become physically inherited.) The concept of emotion remained connected to the body, while the mental operations came to be associated with another new technology, the computer. Even while challenging the information processing metaphor for cognition, Weick (1995) continued to use the language of hydraulic or discharge theory ala James as his primary way to discuss the role of emotions in sensemaking.

Weick’s social structuralist defense is that because of language, sensemaking is better described by artificial selection than by natural selection. In trying to argue against a mechanical computational model, he uses the terminology of a type of computational software called artificial intelligence. Solomon (2007) argued that machines, devoid of
feelings, cannot “move beyond calculations and strategic computations… to something so organic as emotion” (p. 146). Solomon was not convinced that computers are capable of experiencing emotions though they might be able to be programmed to immolate certain facial expressions and linguistic indicators. Weick was able to call himself a *functionalist* because he drew on a computer imagery of a material hardware and the development of artificial, human constructed soft-ware or operating systems that can drive the material computer through the use of language.

In order to critique this psychological approach, Solomon (2007) had to speak in scientific language. He had to challenge the evolutionary purity of psychological theories that opt for artificial selection as a mechanism cognitive change instead of remaining consistent in the use of natural selection as the *modus operandi*:

> what brains have in addition to their structure is an evolutionary history, and that history includes both their development in the individual and their evolution through the historical parade of species. What this means, I will suggest, is that the evolution of emotions is not just a chance combination of brain parts that survived the ordeal of natural selection but the successful ‘fit’ of creatures with emotions into an environment that codetermines what will count as their ‘success’ in life. In other words, the brain is not just a mechanism but part of an organism that evolves in an environment. And emotions are not just mechanisms but evolved and learned ways of coping, dealing, and engaging with the world. (pp. 146-147)

Therefore, the highest cognitive, lowest emotional, and all psychological aspects in between have been adaptive, rational ways of interacting with the world. As seen in the following quote, ultimately he opens himself up to Toulmin’s critique of socio-historical accounts that equate rationality and logic. Towards the beginning of the section Solomon, his alternative to discharge theory emphasized metanarratives as essential to forming an alternative to a radically reductive, empirical explanation for emotions. Instead, his socio-

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historical explanation for how emotions and cognitions are structured is connected to language, stories, and meta-narratives that contain some element of accurate appraisal. Solomon (2007) stated that: “narratives, as we all know, have a logic” (p 148). By avoiding an explicit declaration that his model is based on artificial selection or Lamarkian evolutionary mechanisms, Solomon appears to feel free to use an interpretation of Darwinian evolution by natural selection that leads to a human capacity to logically order experience through the articulate use of language. It does not mean that any one culture or perspective identifies a natural essence to an object, but instead that the logically extended meta-narrative might converge on common problems and ways to rationally address common interests.

Solomon’s (2007) purpose, intent, or desire is to dispel or debunk what he sees as myths surrounding emotions in order to show the rational and functional role that they should play in the meta-narrative of experience. Since many of them are addressed in Dewey’s alternative to discharge theory, perhaps in a more coherent way, they are only listed here: 1) Emotions are beyond words (ineffable); 2) Emotions are feelings; 3) the Hydraulic model; 4) Emotions are in the Mind; 5) Emotions have no intelligence; 6) Emotions are either positive or negative; 7) Emotions are irrational; 8) Emotions are passive.

Dewey’s Pragmatic Naturalism

Dewey is sometimes presented as a philosopher of via media, an intermediary between idealism and empiricism (Kloppenberg, 1985). The attempt to close the epistemological gap between a neo-Darwinian materialism and Hegelian idealism was
popular in philosophy around 1900 (Rorty, 1998, p. 291). His non-teleological, emergent, experiential conception of knowledge led Rorty (1998) to assert that his approach to cognition and emotion made his epistemological approach unconventional. A non-teleological, emergent view of psychology is, in a way, a different approach to metaphysics than the ancient Greek influences depicted in appendix B and described in chapter 2. It does not assume a sure foundation for knowledge or an ultimate ideal end to evolutionary history.

Some of the theories in chapter 6 and the beginning of chapter 7 sought to find a middle way that stays focused on the emerging present based on a neo-Hegelian material, socio-historical evolutionary model. However, in their social and systemic approaches to organizational change and learning, they continue to forward hierarchical if not dualistic classifications of cognition and emotions consistent with Darwin and James. Dewey drew on the evolutionary concepts of both Darwin and Hegel and applied a pragmatic interpretation of evolution drawing on Peirce in which nature and the human understanding are bound up in the same emerging existence. These influences led him to a different conclusion than James and the Jamesian family of psychology that followed.

Dewey (1896) argued that the reflex arc principle (i.e., stimulus-response) had not gone far enough as a unifying principle, because it upheld a platonic metaphysical dualism which mixed materialistic and spiritualistic assumptions about soul and body. Dewey (1965b) called for a new type of empiricism that did not contrast experience with reason or emotion. His psychological work on cognition and emotion calls into question whether it is appropriate to rigidly place one over the other. He called into question two approaches
that James (see chapter 3) indicates provides mental relief - universal knowledge and radical reductionist attempts to identify distinct classifications. Like James, Quine, and other pragmatists (Solomon, 2007), Dewey injects both universal knowledge and classifications with a dose of contextual or situational subjectivity. James even called into question the classification and scientific description of distinct emotions. However, in the treatment of the relationship between cognition and emotion as psychological processes, Dewey seems to stand alone in asserting that all of the categories with which we label and make distinctions between and roles of cognition and emotion are merely tools of human making. The reification of terms may serve some purposes or interests over others, e.g., the classification of certain behaviors as resistance to change (Follett, 1924; Weick, 1979).

*Knowledge?*

Dewey (1965c) noted that modern epistemology, as taught to college students pursuing all forms of science, saw the world as best understood through absolute, passionless detachment in order to rightly see the real, objective, universal, certain knowledge. Whether atoms, external impression of objects, or logical structures - ready-made reality:

must of course swallow and absorb belief... philosophy has the dream of knowledge which is other than the propitious growth of beliefs that shall develop aforetime their ulterior implication in order to recast them, to rectify their errors, cultivate their waste places, heal their diseases, fortify their feebleness; the dream of a knowledge that has to do with object having no nature save to be known. (Dewey, 1965c, pp. 172-173)

This disinterested approach to science and knowledge is inseparable from the quest for a single morality, single truth, and single social form.
Dewey (1965c) went on to say that this approach does not admit the impact of their belief on their scheme:

On contrary, the assertion of the absolute “Reality” of what is empirically unrealizable is a part of the scheme; the ideal of a universe of pure, Cognitional objects, fixed elements in fixed relations. Sensationalist and idealist, positivist and transcendentalist, materialist and spiritualist, defining this object in as many differing ways as they have different conception of the ideal and method of knowledge, are at one in their devotion to an identification of Reality with something that connects monopolistically with passionless knowledge, belief purged of all personal reference, origin and outlook. (pp. 173-174)

Each view of the human side of enterprise forwards some higher psychological mechanism for obtaining higher knowledge that is not sullied by emotional, biased interests.

It seemed apparent to Dewey that the philosopher and scientist had identified a human ideal in their own image. They stood above the common person in abstract reasoning and institutionally sanctioned methods of inquiry. These disciplines were not dispassionate and disinterested, they served certain people quite well. According to Dewey (1965c), the philosopher, had been largely occupied in a systematic effort to discredit the standpoint of the common man, that is, to disable belief as an ultimately valid principle. Philosophy is shocked at the frank, almost brutal evocation of beliefs by and in natural existence… at a mode of production which is neither logical, nor physical, nor psychological, but just natural, empirical” (p. 172).

Despite the positive, material idealism in some readings of Darwin’s theory of natural selection, the concept of natural selection also gave place for an interpretation of existence that gave no absolute foundation for certain knowledge. Instead, belief need
only be concerned with enough certainty to warrant further interaction within the emergent whole. Dewey (1965d) stated:

we are first of all desirous for something which is for itself, contemporaneously with its occurrence, a cognition, not something called knowledge by another and from without—whether this other be logician, psychologist, or epistemologist. The “knowledge” may turn out false, and hence no knowledge; but this is an after-affair; it may prove to be rich and in fruitage of wisdom, but if this outcome be only wisdom after the event, it does not concern us. What we want is just something which takes itself as knowledge, rightly or wrongly. (p.77)

One needs not to have certain knowledge that is true in all situations for all times, even if this is possible.

In contrast with traditional epistemological conceptions of knowledge, beliefs are not conceived of as a mechanical or logical progression towards some absolute, unchanging Truth or Idea. According to Dewey (1965c), belief:

moves, of itself, to varied incremental meaning, not to some far off event, whether divine or diabolic. Such movement constitutes conduct, for conduct is the working out of the commitments of belief. That believed better is held to, asserted, affirmed, acted upon. The moments of its crucial fulfillment are the natural “transcendental”; the decisive, the critical, standards of further estimation, selection, and rejection. (p. 172)

Dewey challenged the idea that the emergence of cognitive abilities results in the potential for universal knowledge or a rational interpretation of the world that can give the foundation for a universal morality or right way to live in the world. Logic, mathematics, and rationality might be seen as a human classification or form of inquiry conducted to work out the commitment to immediate ways of acting, not to arrive at an ultimate ideal harmonious end. In viewing logic as a form of inquiry instead of a progression towards an ideal, final synthesis, Dewey does not yet diverge significantly from James and some of
the theories presented towards the end of this project. It might also be worth noting that Dewey (1965a) reads this in Darwin too.

Like James, Dewey also found it impossible to forward a theory on emotion without addressing it in relationship to other psychological processes such as cognition and behavior. However, Dewey (1894/1971a) argued that any theory of the genesis or origin of emotion (e.g., Darwin and James) must become a theory of analysis or classification – that is, it must have functional import. Dewey (1971a) believed that James’s doctrine of emotion continued to prop up idealist depictions of feelings that went all the way back to Plato and Aristotle. He also thought that Hegel’s *Philosophie des Geistes* anticipated many aspects of James’s material-historical approach to emotions. The teleological, evolutionary assumptions in all of these approaches maintain an Absolute, Rational Ideal (see chapter 2). In James’s theory, individual variations in physical pathways - and to some extent their formation by personal history - results in passive, subjective emotional reactions generated by external objects.

Despite the problems Dewey (1971b) saw with James’s version of discharge theory, he nevertheless believed that the discharge theory of emotion could do for the psychology of emotion what Darwinian evolution did for biology by destroying subjective schemes of classification and forwarding a concept of emotion that is based on functional activity – differentiated according to environmental conditions: “The discharge theory does… give the *coup de grace* to the fixed pigeon-hole method of classification, but it opens the door for the genetic classification” [italics original] (p. 170). Here, Dewey was not saying that emotions are completely genetically predetermined. He was indicating that

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Darwinian can be used to forward an ecological, adaptive psychology instead of one that reifies words assigned to parts of a whole.

Dewey (1971b) asserted that despite James’s occasional attempts to separate instinct and emotion and avoid a deterministic, material idealism, he ultimately fell back on a foundational, empirical worldview in which the external object *strikes* the individual causing an instinctual reaction. Dewey reshaped James’s discharge theory of the nature of emotions in light of neo-Darwinian and neo-Hegelian interactionism that is not purposeful, externally directed, or necessarily drawn towards an ideal rational equilibrium. It is simply emerging. Dewey (1971b) set out to recast psychological naturalism in light of a non-teleological approach, asserting that if, “all emotions… are constituted by the reflexion of the teleological attitude, the motor and organic discharges, into consciousness, the same principle which explains the attitude must serve to analyze the emotion” (p. 169). James can be seen as viewing emotion as determined by some secondary *quale* or material sensation produced by an object. According to Dewey, this intellectual abstraction used for differentiation takes an element out of the whole of emotional experience as though it had some *a priori* existence outside of the full experience.

James forwarded a theory of emotions that held that emotion is the felt bodily perturbation or physical change in response to some objects antecedent *quale* (see chapter 3). Dewey (1971b) thought that this representation of emotion was clumsy because taking one element out of the whole experience is as meaningless as pronouncing one word and ignoring the sentence. Instead, the emotional experience is presented as a process that primarily includes an ethical judgment, and secondarily, a physical action: “Emotion in its
entirety is a mode of behavior which is purposive, or has an intellectual content, and which also reflects itself into feeling or Affects, as the subjective valuation of that which is objectively expressed in the idea or purpose” (pp. 170-171). Dewey (1971b) did not deny that emotions have an object. Ordinary language hinted at this as, “emotion is always ‘about’ or ‘toward’ something; it is ‘at’ or ‘on account of’ something, and this prepositional reference is an integral phase of the single pulse of emotion; for emotion, as well as the idea, comes as a whole carrying its distinctions of value within it” (p. 173). In other words, emotions are contingent or situational, not a priori forms that can be identified and classified any more than they are empirical facts or secondary innate material qualities.

The problem for Dewey is not the interaction with an object, but the absolutism that comes from taking classification of it in isolation from the situation in which it was useful. He takes issue with the a priori, empirical assumptions in James’s theory of emotions. According to Dewey (1971b), the separation of emotional feelings from the practical attitude or practical readiness to act was exactly what James was writing about when he described the sentimental working up of certain physical responses related to emotional experience and a whole, organic emotional experience. The induced sentiment, devoid of purpose or intent, both supported James’s presentation of discharge as a theory of emotion and at the same time calls into question the details of its presentation.

This being said, the emotional expression, no matter how distorted it may appear from the outside, must have an intelligent object or an aim. To Dewey, the physical and the mental are not detached body and soul. From the observer’s perspective, emotional
expression might seem irrational or pathological. In other words, emotion may look like an illness caused by the disconnection between right belief and the physical reaction. However the feeling and concomitant physical changes/behaviors represent some valuation of the environment as favorable or unfavorable. Valuation, whether it is deemed rational or pathological, represents an intellectual quality as it involves the directing of attention towards some aspect of the experience. Here Dewey (1971b) does not mean, “‘pathological’ emotion creates an intellectual delusion; but it does carry with it a changed intellectual coloring, a different direction of attention” (p. 174). Thus, emotion and cognition cannot be easily teased out.

Consciousness

In “Consciousness” and Experience, Dewey (1971e) employs a somewhat unconventional use of the philosophical tool *qua*. Instead of using *qua* to denote something that escapes the material to ascertain higher knowledge, *qua* consciousness to Dewey is bound up with the situated material-human interaction. Taking on Baldwin (see chapter 3) specifically for getting the primary and secondary perceptions mixed up, Dewey (1896) asserted that he, like James had gotten the empirical process out of order. James acknowledged that certain elements may strike the individual as vitally important (or important to survival), but this perception is passive as the verb *strike* might imply (James, 1884).

Dewey (1965b), in *The Postulate of Immediate Empiricism*, placed greater emphasis on the original direction of attention and the ascription of worth or value:
I start and am flustered by a noise heard. Empirically, that noise is fearsome; it really is, not merely phenomenally or subjectively so. That is what it is experienced as being. But, when I experience the noise as a known thing, I find it to be innocent of harm. It is the tapping of a shade against the window… The experience has changed; that is, the thing experienced has change not that an unreality has given place to a reality, nor that some transcendental (unexperienced) Reality has changed, not that truth has changed, but just and only the concrete reality of experience has changed. I now feel ashamed of my fright; and the noise as indifferent to my welfare. This is a change of experienced existence effected through the medium of cognition. [italics original] (p. 230)

The orientation of the senses towards something, the idea, the bodily change, the feeling, and the object (external or internal) are all part of one experience that has a cognitive psychological component. The essence of an external object does not strike the passive individual, triggering affective response prior to cognition imbued enactment or interaction with the environment through qua conscious direction of attention (Dewey, 1965e).

The human experience of change, motivation, emotion, cognition, and art are integrated in Dewey’s psychology and philosophy. His reconstruction of Darwin’s treatment of human development might help to address some of the inconsistencies that Carroll (2003) found with the logic of Descent, particularly regarding these aspects of the human experience. Beliefs, emotions, actions, and environmental changes exist together in an emerging whole. Thus, meaning and value cannot escape the complex dance. There is no high human development that lets humans break free from the material. There is no high art, only art. There is no high consciousness, only consciousness. There is no high morality, only situated human interactions.

Ultimately there is no identifiable a priori or socio-rational structure that will ever bring all interests into a harmonious equilibrium in Dewey’s philosophy. Dewey’s neo-
Darwinian pragmatic naturalism is not depicted as progressing towards an ideal rational harmony. To paraphrase Russell (1945), Darwinian competition does not prohibit hitting below the belt. Even the tools of rationality and socio-emotional instinct are not enough for humans to construct a perpetual harmony amongst their own kind, much less a harmony that takes into conscious consideration all of the interests of the ecological whole. Baring extinction, humans or some emergent offspring will always exist in a world of competition and tension. Yet, Dewey (1971c) retained a great deal of optimism that something could still be made of such a fierce system:

Reconstruction is a periodic need of life. It represents in history, the conflict between ideas and the institutions which embody those ideas. In animal life, it stands for the conflict between functions and the structure which exercises the function; in the life of the individual, it is the conflict between habits and ideals; in general, it is the conflict between ends or aims and the means or machinery through which these ends are realized. (p. 97)

According to Dewey (1930), such reconstructions are occasionally necessary because, while:

Concrete habits do all the perceiving, recognizing, imagining, recalling, judging, conceiving, and reasoning that is done. ‘Consciousness,’ whether as a stream or as special sensations and images, expresses functions of habits, phenomena of their formation, operations, their interruption and reorganization… Yet habit does not, of itself, know, for it does not of itself stop to think, observe or remember. (p. 177)

Given Dewey’s conception of knowledge and the place afforded to belief rendering warranted assert-ability for action, this not an indictment against habit or consciousness, it is to say that it is more often than not the way human action is directed. Dewey’s (1930) view of human nature and conduct is rooted in his reading of Darwin’s psychology of human development (2005b), but the emphasis is much different than that taken by James.
Can rationality or socio-emotional structuring lead to an ultimate organizational harmony? According to a Dewey-inspired pragmatic naturalism, this question can be seen as rooted in idealism, absolutism, and objectivism. It reifies processes and forgets that naming is a human endeavor – even ideal future states. Within the pursuit of progress and/or production, the classification of cognitive and emotional aspects of experience is merely a human tool that serves immediate interests. Discrete classifications and universal generalizations are abstractions, symbols, or instruments that necessarily simplify and underrepresented the complexity of the whole system. There will always be too much to figure out; there will always be more than humans can bring into balance. Nevertheless, the pursuit of better interactions in this immediate experience is the duty of humanity according to Dewey (1971).

Is life worth living in such a world? A Deweyan response might be, “Make of it what you can.” Life is not simply what you make of it with your mind, as in James’s (2007) response to this question. There is a difference between these two answers. James’s response could lead one to assume a rationalism that is able to envision and will any life into existence by directing the body and ordering the world. The Deweyan response gives greater emphasis to the present situation as a working material for what will emerge and at the as a limiting factor for what is possible. This approach is not conservative or seeking to discourage change, it just acknowledges the material and socially imposed limits to the emergence of creative alternatives coordinated interaction (Dewey, 1971c). Make of it what you can has an element of hope and uncertainty.
Because belief holds such an important place in human understanding in Dewey’s epistemology, it is not surprising that place is given for uncertainty in many areas of his psychology and philosophy. If there is too much to figure out in the complex whole at any moment and a thorough non-teleological position is taken in which everything is subject to change within the system (even the rules), from whence does the stability and hope come? Again, the answer for Dewey (1934, 2005) is much more immediate; stability and hope do not come from a fixed ideal, but “is arrived at whenever a stable, even though moving, equilibrium is reached… Order is not imposed from without but is made out of the relationships and harmonious interactions that energies bear to one another. Because it is active… order itself develops” (p. 13). The ability to establish some order, no matter how temporary, is advantageous in a world of disorder because the momentary sensibility facilitates further interaction or vitality. According to Dewey (2005), life is experienced in rhythmic, punctuated streams of living: “Life itself consists of phases in which the organism falls out of step with the march of surrounding things and then recovers unison with it – either through effort or by some happy chance” (p. 12). Thus, the limits of human understanding allow people to reconstruct events such that it appears that they have acted intelligently, consciously, or with intent when this may or may not have been the case in a traditional understanding of knowledge and consciousness. Here again, Dewey can be seen as drawing directly on Darwin (2005b) who was skeptical about how much of human activity is invented or intended.

James, Weick, Solomon, and many of the other theorists in this project seem to give individual/humanity too much credit for their ability to understand and direct the
coordinated activity of the whole. Dewey’s pragmatic naturalism claims that much of what happens to disrupt and to recover balance in the system will always remain an unpleasant or happy chance. Happy chance need not be a passive, sensory-motor reaction to the environment as in James’s theory. The environment may change independent of the conscious or qua conscious actions of humans. The stream may be marked by crisis, problems, and resolution – however it does not come about via an innate idea or reified object.

The quest for a single human nature is different than the desire to understand the human experience. It colors the questions asked, the attention given, and the aspects perceived. It is too easy for the guise of a unified foundation or a unified end to conceal the interests that perpetuate classifications that limit the means of interaction. By directing attention towards an end disconnected from the interests and means, it is possible to lose sight of the possibility to see an alternative way to live and work together (Dewey, 1916). Humanity is always emerging to Dewey. There is not a basic need or fundamental human problem that can provide stable foundation for rationally, artificially, or emotionally directing human interaction into a harmony wherein all interests are served.

The human experience is one of temporary harmony with the environment and the struggle to regain some equilibrium when it is lost. Inhibition for action occurs when the past experiences, viewed as complete, do not readily anticipate the future (Dewey, 1971b). Instead, at least temporarily, competing impulses or tendencies to act, jockey for position as a way to readjust and reduce the tension of the whole. Focusing on an end as a static object or ideal abandons the present experience of life in preference for some idealized-
formalized past or future state. Past acts are viewed as complete (Dewey, 1971b), former ends to be lived up to (Dewey, 2005). The quest for such a pure and certain answer from the past or for the future subjugates the present to that which is not; it breeds apprehension of what the future might bring (Dewey, 2005), as the individual is divided within themselves and unable to coordinate the concomitant activity and discharge of energy for action (Dewey, 1971b). Within individual and organizational life, the quest for certainty and objectified perfection may lead to an inability to see new possibilities.

*Emotion*

The coordination of action becomes the basis for Dewey’s alternative metaphysics of the present and his psychology of emotion. Instead of a dialectic or interaction moving towards an ideal end, the interaction is much more immediate and temporary. The coordination of these activities in a *certain* way to accomplish an end is an emerging evolutionary process, not a given stable fact (Dewey, 1971b). Here, *certain* must be taken to mean particular - not an absolute confidence. Given the environmental condition, the interaction may need to be adjusted. This adjustment might not be immediate, and thus, activity might be delayed as no immediate resolution of the tension between the parts has been reached. Inhibition and the corresponding emotional arousal is part of the process in the quest for any particular pathway. Emotional arousal includes both this temporary inhibition of action, the action, and the *posteriori* judgment of the action. In Dewey’s (Dewey, 1971a; 1971b) theory of emotions, the non-action or non-event is as crucial a part of the emotional experience as the physical changes, tendency to act, actions, and reflections are all part of the process. The time and level of consciousness, *qua*
Dewey (1934/2005) argued that the interaction of stability and flux involves a
difference of rhythmic experience that builds up and establishes both temporal and spatial.
The experience even of time and space is part of the ebb and flow of the struggle for
survival – the process of balance and counter balance. The “Contrast of lack and fullness,
of struggle and achievement, of adjustment after consummate irregularity, form the drama
in which action, feeling, and meaning are one” (p. 15). The natural motivation or impulse
to restore harmony converts emotion, consciousness, and cognition into one organic
interest in temporarily restoring equilibrium. This dynamic, immanent, and adaptive way
of interpreting time and space as emergent might be contrasted with Lewin’s hodological
and topological depiction of factual mathematical, natural, and social forces that provide a
path through the rational whole. The measure, classification, and interpretation of such
events, to use Quine’s language, is a human made activity that for the most part is only
questioned along the edges where it intersects with current problems makes the tight
associations become frayed.

So far Dewey (1965a) has challenged the directional force and high station of logic.
Dewey (2005) has also taken on innate mathematical or rational classification of causality,
time, and space. Furthermore, empirical classifications of objective origins as causes
independent of consideration of processes, contexts, and interests has also been challenged
(1965b). It is no wonder that individuals such as Rorty (1998) claim that Dewey’s
treatment of experience as a whole goes against what epistemology is traditionally
supposed to be about. His blurring of the distinction between sensations vs. higher perception and bodily perturbation vs. *a priori* mental structures flies in the face of conventional wisdom about how humans come to know. This may be one of the reasons that Dewey’s theory of emotion has been so hard for psychology to incorporate.

The dualisms of mind and body are well entrenched assumptions in western culture (Dewey, 1896). The strong division and preferential placement of cognition over emotion was perplexing to Dewey (2005): “The odd notion that an artist does not think and that scientific inquirer does nothing else is the result of converting a difference of tempo and emphasis into a difference in kind” (p. 14). Emotion/cognition; common-art/high-art; social-science/physical-science; applied-mathematics/pure-mathematics; public-discourse/pure-logic – At every point, the distinction to Dewey is arbitrary and potentially dangerous because it obscures the issue of interests. Each distinction is a human construction, not of mind, but of really experience (1965b). As human constructions, every once in a while they need to be evaluated and adjusted (1971c).

According to Dewey (2005), the intellectual still has an emotive or aesthetic moment corresponding to the meaning of objects as part of its full orchestration. The scientist, philosopher, and mathematician are generally seen as interacting with disinterested, abstract symbols: words and numbers. Whether quantitative or qualitative, the symbolic representation cannot be disinterested, i.e., the process retains an ethical and emotional undertone. These pursuits to describe or discover are ultimately tools used to help inform decisions about how to live in an emerging world of change and continuity. So too, the artist or creative individual utilizes cognition. In contrast, the practitioner, the
commonplace artist, the creative individual is distinguished by his/her intimate interaction with the object and the emerging process (Dewey, 2005). In attempt to compartmentalize life, this form of interaction is classified as emotional. Emotion is classified as the overtone instead of the undertone in the creative process. Thus, the former group is taken to provide more stable, accurate information, and the latter are perceived as given to wild ideas and physical distractions.

Dewey’s theory offers an alternative. The abstract and sharply split division between cognitive intelligence and affective emotion, “is simply a functional distinction within this one whole of action. We take a certain phase which serves a certain end, namely, giving us information, and call that intellectual; we take another phase, having another end or value, that of excitement, and call that emotional” [italics original] (Dewey, 1971b, p. 177). In the course of reflection, the abstracted idea is assigned with the veracity of concepts and the emotion is construed as an emotional seizure, an involuntary response. The mind is credited with volitional or will while the emotion is merely rational or irrational, logical or pathological, healthy or ill as it corresponds to the cognitive or material reality. According to Dewey, these aspects are not so clearly teased out within the actual experience but are instead a retrospective judgment of the situation - an abstraction that is necessarily an insufficient depiction of the actual, whole experience.

Dewey’s alternative acknowledges that the two approaches to problems are not so different after all. If his alternative was operant, there might be more room for appreciation and understanding between the approaches. Weick’s (see above) work owes a great debt to the Deweyan way of thinking about the reification of classifications through
the use of language. His depiction of emphasis, tempo, means, and ends calls many of the
distinctions into question that Dewey addressed decades earlier, but the classification of
cognitive and emotional parts of the sensemaking process promise to get in the way even
in his theory. Dewey (1896; 1971c) serves as reminder that reconsidering of habitual
classifications are necessary for promoting new, perhaps even better interactions.

Dewey’s (1965b) alternative epistemology and corresponding alternative
explanation of the relationship between emotion and cognition also called into question the
tempo associated with the two approaches. Traditional preferential option given to logic,
rationality, and other functions deemed to be highly developed mental abilities are often
associated with rapid resolution of problems (Weick, 1995). Based on habitual ways of
engaging the world that are deemed to be more intelligent or rational,
compartmentalization and classification of people within organizations allows for a clear
division of labor and chain of command. In this model, rapid growth becomes the measure
of success. Mechanical social education towards distant ends is a tool used for efficiency
and increased production (Dewey, 1916). By depicting the emergent, rational leaders of
the evolutionary movement as pulling the stragglers along towards an ideal, justification is
given to the status quo and a division of labor that divides workers from each other and the
inquiry, and confirms findings that the industrious classifications of work life are justified
according to a rational structure. Thus, preferential option is given to the fast, decisive,
and ruthlessly efficient.
Accordingly the executive, the scientist, or the intellectual is interested in solving problems, but phases involving tension are to be minimized in order to accelerate the process. The scientific person should not be concerned with interests but in collecting and analyzing the facts. Having found some results and offering some conclusions, “he does not rest in it; he passes on to another problem using an attained solution only as a stepping stone from which to set on foot further inquiries” (Dewey, 2005, p. 14). Thinkers and scientists “press forward toward some end dimly and imprecisely prefigured, groping their way as they are lured on by the identity of an aura in which their observations and reflections swim” (Dewey, 2005, p. 75). The people who make up organizations, including academia, are socialized towards a value for getting to the point of practical purchase. The contemplative or speculative inquiry that spends considerable time re-evaluating conventional wisdom is commonly seen as insufficient on its own if not something to be disparaged by people with an instrumental mindset (Burbules & Warnick, 2006).

If pragmatists are to make room for the poet and the prophet, they might also need to make room for people to slow down – whether it is in academia, other workplaces, or any organization of human interaction. In contrast with Darwin, Dewey celebrated the contribution of the activity and art of common people and used it as a model. Commonplace art has its own time, place, and ways of solving problems. The aesthetic experience is not rushed on towards a final, perfect product or object. The artful life does not pigeon hole the tension in the process, nor does it fail to rest in its resolution (Dewey, 2005). This non-teleological approach is also a tool that people within multiple forms of
organizations might use, an alternative lens for viewing the world. It can be used to shed light on different questions, such as: Is this the only way to divide up reality? Must resistance and acceptance; means and ends; cognition and emotion; stimulus and response be viewed as discrete and objective accounts of experience?

Because the artists are immediately involved with the object of their study, the messiness of the process is hard to avoid. Using some of Darwin (2005b) and Dewey’s (2005) common arts to make this more tangible, the gardener’s hands are dirty, the baker’s apron dusted with flour, and the home-brewer’s floor inevitably gets its share of the wort. Dewey (2005) asserted that this outward transformation or process of production is easy to see, but that the inward reconstruction is often overlooked. The artist’s act of meaning making is part of the one activity of the organization of internal and external. The assumption is often, as it is in discharge theory, that the pleasure is only in the final product not the process. The product – a sentence, dissertation, poem, pot of soup, or craft beer – does not embody a more mature, rational, or enjoyable form of some immature and unpleasant form that preceded it. They are moments in a process. In Darwin’s (2005e) own life, this might be seen in his love for shooting just as much as some further end related to his love for good food or the collection of specimens for scientific inquiry. A reified end taken in isolation misses the mark because it does not consider that it is also means to another enjoyable part in the process (Dewey, 1916).

The new experience is filled with new contexts, problems, and projects. Darwin (2005e) was greatly discouraged by his loss of happiness because of his inability to maintain an artful component to life. He thought that if he had just had a more highly
developed mind he might have been able to have the emotional components that might well have furthered his intellectual development. Dewey (2005) can be seen as offering an alternative explanation:

What most of us lack in order to be artists is not the inceptive emotion, nor yet merely technical skill in execution. It is capacity to work a vague idea and emotion over in terms of some definite medium. Were expression but a kind of decalcomania, or a conjuring of a rabbit out of the place where it lies hid, artistic expression would be a comparatively simple matter. But between conception and bringing to birth there lies a long period of gestation. During this period the inner material of emotion and idea is as much transformed through acting and being acted upon by objective material as the latter undergoes modification when it becomes a medium of expression. (pp. 78-79)

Why does Dewey want to make way for poets and prophets? The poet is intimately connected to the formative process and the beauty and tragedy along the way. While Dewey’s (1931) depiction of human conduct is somewhat sunny, it remains grounded in genuine problems.

Beauty is in the interaction with the material, not just the complete argument handed down in its publishable form. Citing Hume (p. 79) and Satanyana (p. 17) respectively, Dewey (2005) indicated that beauty marks its own time with stationary vibration and bursts of ecstasy and that richness in life is brought on by hushed reverberations. Thus, the creative association or coordination of past acts and the current environment, the continuity of past and present to inform future action, the ability to slow down and give space for gestational tension and the consequences of delivery is the gift of the poet, the prophet, and the everyday artist. Common art is a tool that allows for the transformational interaction of idea, emotion, and environment. Implications of Dewey’s
Pragmatic Naturalism

The sharp distinction of cognition and emotion from experience is essential to Dewey’s (2005) indictment against idealized, compartmentalized social life:

“Compartmentalization of occupations and interests brings about separation of that mode of activity commonly called “practice” from insight, of imagination from executive doing, of significant purpose from work, of emotion from thought and doing. Each of these has, too, its own place which it must abide” (p. 21). Setting rationality above a continuously emerging coordinated human-environment experience where both are changing and then construing emotion as a passive bodily perturbation is a way of disguising chaos and perpetuating social structures that favor some people-groups-interests over others. Plato recognized the power of social lies concerning semi-static class divisions intended to maintain some stable order, when setting up his ideal Republic. Aristotle believed that any government is better than no government at all because it allows for the coordination of activity. Social control in this way of thinking is an expedient way to get to an ideal teleological balance. Dewey can be seen as asking, Ideal for whom?

Peirce (1955a) emphasized the role of social education in disguising disorder and maintaining stability by fixing some beliefs, not because they are True but because some stability of belief is pragmatic. Western society has fixed some beliefs about the distinct roles of cognition and emotion; it has even used these classifications as a justification for a hierarchical division of labor (Carroll, 2007). The tendency towards fixed, certain compartments and a ranking order from low to high is a way to reduce open conflict and provide an orderly way to act in concert or as a corporation to resolve environmental
tensions. However, just because everyone “knows” how to act does not mean that everyone’s interests are served. Dewey (1916) can be seen as asserting that the platonic lies need to be exposed so that there can greater opportunity for social mobility so that people can not only be heard, but also so that they can reorganize the coordination of activity through a greater consciousness, *qua* consciousness. Beliefs and material conditions are not *a priori* rational of fixed objects, nor are they converging towards a distant ideal. Dewey’s depiction of belief admits the limits of consciousness and agency in order to make room for it. Cognition, emotion, and social organizations are parts of an emerging whole – make what you can of them; it is your duty (Dewey, 1971c).

Dewey (1929) cautioned against the rationalist’s idealization of ends as separate from and/or superior to the means – the whole process:

Regulation of conditions upon which results depend is possible only by doing, yet only by doing which has intelligent direction, which takes cognizance of conditions, observes relations of sequence, and which plans and executes in light of this knowledge. The notion that apart from action, can warrant complete certitude as to the status of the supreme good, makes no contribution to the central problem of development of intelligent methods of regulation. It rather depresses and deadens effort in that direction. That is the chief indictment brought against the classic philosophical tradition. Its import raises the question of the relationship which action sustains to knowledge in fact, and whether the quest for certainty by other means than those of intelligent action does not mark a baneful diversion of thought from its proper office. (p. 36)

Knowledge, achieved through cognitive processes, has taken on the high office of executive, judiciary, and legislator without check or balance. It has been the underlying assumption of Western philosophy, science, and theology. Such a perspective, according to Dewey is deadened, it lacks vitality. It is disconnected from contextual, human problems.
At the same time, Dewey is clearly not against philosophical projects or dwelling in contemplative or speculative phases of problem resolution. His critique of classic philosophy is in relationship to analyticity and logic aimed at an ideal future disconnected from material experience, not from philosophical projects that do not give a practical, implementable activity (Dewey, 1965). Likewise, his concern with science-psychology is the idea that it is disinterested or dispassionate – i.e., objective (Quine, 1951). This is the concern that he has with the confusion of ends as products instead of emphasizing them as part of an ongoing process (Dewey, 1916; 1930). The scientific urge for a testable treatment, organizational intervention, or other practical end is merely emphasizing on the importance of one part of the process over another (Dewey, 2005).

Is philosophical speculation over the way experience is broken up (phenomena are classified or broken up) in research and in organizations productive? Dewey (2005) seemed to think that this is the wrong question in science as much as it is in philosophy; speculative inquiry is a part of the process, a means to an end that will ultimately become another means:

Only occasionally in the lives of many are the senses fraught with the sentiment that comes from deep realization of intrinsic meanings. We undergo sensations as mechanical stimuli or as irritated stimulations, without having a sense of the reality that is in them and behind them: in much of our experience our different sense do not unite to tell a common and enlarged story. We see without feeling…We use the senses to arouse passion but not to fulfill the interest of insight, not because that interest is not potentially present in the exercise of sense but because we yield to conditions of living that force sense to remain an excitation on the surface. Prestige goes to those who use their minds without participation of the body and who act vicariously through control of the bodies and labor of others. (p. 21)
There needs to be some room for doubt, questioning the way things *are*. Dewey (1916) was also concerned that time is not spent seeking insight or understanding related to perceived problems with the *status quo*. The prestige of the psychological researcher, the philosopher, and the executive alike is in the ability to come up with an answer or activity to direct the labor of others to bring about a better, identifiable end. Dewey’s philosophical project and even his psychology of emotion do not just provide answers that can be contextualized; they also challenge rigid categories that mask interests.

Perhaps Dewey might be seen as bringing the circles in the figure provided in appendix C back together into a unified whole. An alternative, Deweyan diagram is not offered because even this unified circle should not be considered as a fixed alternative way of conceiving of cognition and emotion. Instead, it is a unifying principle that might allow for an explanation of why it is possible to oscillate between understandings of cognition, emotion, consciousness, *qua* consciousness, social consciousness, instinctual needs, etc. Depending on the problem, contexts, and interests involved there might be many different ways to draw the ways that the circles overlap, divide up experience, and emphasize-evaluate different contributions of phases in the emerging experience. The challenge is to keep from drawing the circles together into a unified whole only to immediately reestablish their hierarchical structure (e.g., Maslow). The longstanding dualistic assumptions will not be easily challenged. They are a likely reason that Dewey’s theory of emotions has been so difficult to implement over the last 100 years.

This alternative conception can still become a means to new forms of interaction in organizations. However, these contextual interactions represent their own sets of interests,
problems, and people seeking to make of them what they can. The next chapter provides a summary of the project thus far and seeks to provide a time marker of sorts to aid in the transition from this speculative, contemplative, and creative portion of the process and its becoming the means for ongoing research and immediately practical projects. Following a summary of the previous and current chapter, chapter 8 provides some additional tools to help the reader consider how this project can continue to make a difference in the flow or organizational experiences. The end of this phase of the project is thus marked as one point in an ongoing process of organizational change.
Chapter 8: Summary, Organizational Fable, Implications

Introduction

In the alternative conception of human experience depicted in the previous chapter, words are depicted as one of the tools used by people to punctuate the flow of human experience, problems, and ongoing projects. In this spirit, this chapter is offered as a way of marking time in the ongoing process of challenging the dualistic conception of cognition and emotion in organizational life. This project did not begin a few chapters ago; it is a continuation of a much older struggle to recognize the way that interests can remain unquestioned behind the reified classifications of terms such as resistance to change, cognition, emotion, and related constructs. Just as this project did not identify a new problem (Dewey identified the problem over 100 years ago, but it has been insufficiently addressed since then.), it also does not provide a simple treatment for it. Instead, it offers a sample of the ways that such classifications have continued to be used over the 100 years since Dewey identified a problem with the psychological treatment of cognition and emotion and the use of these labels as a tool to separate higher occupations from common people. The first part of this chapter summarizes some of the findings from the previous chapters which have explored and described how cognition and emotion have been treated within three dominant clusters of organizational change research. It draws attention to some of the assumptions that seem to continue to shape the way that human experience is
classified and the problems that Dewey sees with allowing these assumptions to go unquestioned.

Next, the chapter introduces a new part of the process that must be undertaken within the multiple contexts that the readers bring to the subject matter in this project. An organizational fable is offered as a tool to aid in the process of making sense of this project given the situated problems that the reader brings to the text. Weick (1995) provided a “wonderful foot-in-the-door to show why stories are so crucial to sensemaking” (p. 119). Symbolic representations of life allow listeners or readers to develop a richer understanding based on problem imbued perspective through which they interpret the text. Following the narrative, some cursory interpretations and potential uses of the fable are offered, but the more important work to be done is in the richer interpretation and application of this project in the real, common place interactions that the reader experiences. Some additional ways of thinking about the immediate benefit of this project are also offered along with some questions that invite readers to question whether they might be interested in joining in Dewey’s project wherever they live. Instead of a conclusion, this project seeks to recast this momentary end in an ongoing process as another means to future ends.

Summary

This project began with some genuine problems with the way that people seemed to be described and treated during organizational change. Having heard multiple stories about how employees’ responses to change where called resistance and emotional reactions, I set out to see if other people believed that this might be a problem. The
problem had been identified (e.g., Turner, 2007), and an alternative that might have been useful was even offered. As I began to read historical and contemporary research related to the two approaches Turner found problematic (Behavioral and Individual Developmental organizational change and learning theory), I too became uncomfortable with the idea of simply building on one of these research approaches. Then I began to look into his suggestion to consider a Vygotskyan approach as an alternative. However, instead of an alternative conception of cognition and emotion in relationship to organizational change, many of the same assumptions seemed to be operating in theories that already built on Vygotsky’s learning theory. At this point, I found other research that suggested that there might be a bigger problem related to the way cognition and change are treated (e.g., Bredo, 2006).

Antonacopoulou and Gabriel (2001) called for research considering the nature of emotion and how it related to cognition and learning so that organizational literature might better understand the assumptions behind its treatment of these constructs. The next stage of the project was to see how cognition and emotion had been treated within the field. Some of this work had already been done in trying to delimit a researchable problem for a more traditional quantitative or qualitative approach. However, the undertaking of a more systematic synthesis and analysis of how the concepts were treated in a sample of theory related to the three main approaches was a considerable project unto itself.

In chapter 4, I describe some of the historical and contemporary applications of a behavioral approach to cognition and emotion in organizational change literature. This psychological approach is built on beliefs about knowledge and learning related to the
association of qualities of objects and events with more clear or accurate perceptions that allow for more intelligent behaviors. I divided the research into two sub-groups. The first gives some consideration to individual differences and associative learning processes. Recent work in the area of emotional intelligence is based on this research tradition. Of particular interest was the way in which higher and lower “roads” psychological processes are described – a depiction consistent with the model provided in appendix C. The development of higher psychological abilities related to understanding and controlling emotional behavior was emphasized within and between individuals. Within the second subgroup, a stronger approach to material-behaviorism was taken. This research, based on Skinner’s behavioral approach to learning and change, treated cognitive and emotional psychological processes as outside the field of verifiable science. Instead of considering processes that could not be observed, the aim of theorists working in this area was to identify the environmental object or stimulus that would generate the desired result. This form of empiricism seeks to reduce the situation to a primary quality that, once identified, can be reproduced in other settings as a way to control or program interactions with the world. Interestingly, Skinner (1974) is the only person treated in this study who seems to indicate that there is no human agency. However, even his theory ultimately requires the natural emergence of some benevolent scientist to direct the material and social world into a utopian balance.

In chapter 5, I describe a group of theories that I named the Individual Developmental research approach. Research within this cluster emphasizes internal, individual psychological processes related to learning. What was deemed unknowable in
chapter 4 is found to be essential to understanding how humans learn and interact with the environment in this the theories in this tradition. Cognitive, mental processes and the development of these higher psychological adaptations into higher, more mature stages became a foundation for cognitive psychology (e.g., Piaget). These cognitive abilities were believed to be essential to the harnessing of motivational energies related to lower psychological developments. Asserting that human nature is essentially good, a way was found to depict the more primitive human capacity for emotion as good was developed by theorists such as Maslow. Depicting the lower, emotional psychological processes as juvenile, wild, and irrational, the voluntary return to these lower forms of interaction with the world was believed to be positive when it provided a source of energy and creativity that could then be brought under the direction and evaluation of the higher cognitive forms (Maslow, 2000b). While Maslow’s cognitive theory may not be as prominent in contemporary educational psychology as the motivational aspects of his theory (Woolford, 2007), the general idea that higher cognitive structuring is important to the ability to control or move through various emotional responses to change continues to be a used to depict the relationship between cognition and emotion during organizational change (e.g., Miller, 2003). As Turner (2007) indicated, some of the theory in this chapter seems to perpetuate the idea that changes in meaning and emotional response follow stages of development within an individual that can only be cultivated or encouraged by providing more information about the change, and individuals must construct their own understanding of the situation (e.g., Schmidt & Datnow, 2005). Thus, progress is
dependent on individual development that makes an ideal future possible (e.g., Maslow’s Eupsychia).

In chapter 6, the focus turns to a group of theories that I called the Social Developmental research approach. Instead of a progression towards more rational cognitive structuring of the world within the individual mind, the rational system as a whole is naturally moving towards a greater harmony or balance. As Turner (2007) hoped, Vygotsky’s learning theory did give a greater role for leaders of organizational change to shape situations that might make human understanding go in a different direction. Drawing directly on Vygotsky’s learning theory, Lewin sought to broaden what was considered to be part of the life space that influenced individual meaning creation. His theory considered multiple forces that might work together to shape the path of human development. By understanding and influencing these directional forces, people in social settings could move in a better direction. Lewin (1951b) seemed to attribute some rational quality to everything from inanimate objects, to emotional forces, and ultimately to higher social systems analysis. However, the need for higher cognitive abilities to direct the lower psychological forces was still the hope for progress. Katz and Kahn (1978) built on this theory, including more influences and asserting that multiple paths could lead to the same ultimate Ideal. Even when a future ideal is less clear, the depiction of the essential quality of human development is related to the scientific ability to identify more accurate, empirical facts (Gould, 1981). Other socio-developmental theories continued to depict cognitive psychological processes with evaluation and passive emotional reactions as related to a supportive role (Katz & Kahn, 1978) or as a source of group cohesion (Schein,
2004). Even in depictions of the social construction of emotions that seek to emphasize their practical importance, a distinction is made between emotions that have been “harnessed by learning” and others that are still “wild and unmanageable” (Antonacopoulou & Gabriel, 2001, p. 445). Despite Turner’s (2007) claim that research building on Vygotsky’s learning theory might provide an alternative, rational knowledge and the ability to control, direct, or harness emotional forces continued to influence the classification of psychological forces in this research cluster.

Instead of providing an alternative treatment of the relationship between cognition and emotion in learning and change, the third approach described in chapter 6 seemed to share many of the same assumptions as the other two clusters. At this point in the process, it became necessary to better understand why these assumptions were so broadly entrenched. Though these foundations needed to be presented early in this document to aid in the reading, much of the work was really done after early drafts of chapters 4-6 were completed. Chapter 2 was developed in an attempt to understand from whence some of the beliefs about knowledge were coming. At first, the intention was to use existing models to depict clear lines of epistemological continuity between various psychological research families (see appendix A). However, this model did not work well to explain the theory that had been described in what are now chapters 4-6. In order to represent the dynamic interactions and shared assumptions, I developed a new model. Building on Bredo’s (2006) model and his description of philosophical influences, some metaphysical influences are considered in this project. Furthermore, the transition to a modern approach to how people come to knowledge after Descartes is taken into consideration. Finally, the
description and model that I present in this project seeks to acknowledge additional connections between epistemological beliefs by depicting the underlying beliefs about how one comes to know as part of a web instead of a linear flow diagram (see appendix B). Though this diagram and chapter 2 do not capture all of the interactions and influences, it can be used to better understand the dynamic interaction and shared assumptions between similar clusters of psychological research. Addressing the philosophical assumptions that seemed to underlie the theory and practice described in chapters 4-6 directly addressed calls from the adult learning and human resource fields for a greater awareness of how western philosophy has shaped organizational studies and organizational practice (e.g., Merriam, 1995; Gilley, Dean, & Bierema, 2001).

The first body of literature that I hoped might provide an alternative found a different place in the project (research building on Vygotsky). The second area that promised to provide an alternative also took on a different role in this product. After a considerable amount of reading in Darwin’s psychology of human development and specific works related to emotion, I realized that the evolutionary depiction of cognition, emotion, and the relationship between these two constructs had built on different interpretations of Darwin’s theory. James, building on Darwin’s theory of emotion served as a foundation for the psychological assumptions held in chapters 4-6 (Solomon, 2007). As a result, the treatment of these theories which I, at first, thought might be part of the alternative that this study could offer ended up needing to be presented within a chapter that provided some of the scientific-psychological assumptions.
Darwin and James’s evolutionary approaches both described the emergence of higher psychological functions. Though their continuity made exact lines of distinction difficult, classifications were nonetheless made between instinctual bodily processes, individual and social habits that might be directed by consciousness, and higher cognitive forms related to learning and understanding. These higher psychological levels were the source of human agency and the lower, under-rationalized aspects provided habituated responses, motivational energies, and a source of undirected activity. Having synthesized and analyzed these theories and using secondary sources from the beginning of the twentieth century to corroborate the interpretation, I was able to construct a model for reading and conceptualizing the relationship between different psychological processes within organizational learning and change. Once the model was developed, I applied it to my own description and analysis of the research explored in this study and found considerable benefit in reaching a clearer understanding of the philosophical and psychological assumptions that seemed to be at work. Some of the depictions of emotions that had once seemed quite strange or out of place were able to be better connected to the epistemological and psychological traditions from which they emerged.

Finally, the process of moving towards an alternative conception of how cognition and emotion might be considered began to take shape. Several theories building on pragmatic conceptions of knowledge helped to move towards a pragmatic natural alternative to the way cognition and change are commonly depicted in change and learning literature. However, even here, the role of emotion was either underdeveloped because of prevailing social sentiments of the time (see Quine in chapter 7) or remained consistent
with the model provided in appendix C. Even Solomon’s (2007) recent philosophical
treatment of the value of emotions did not seem to diverge much from the basic
classification of the relationship between cognitive and emotional aspects of experience.
Dewey’s critique of James’s discharge theory ultimately provided a substantially different
way of thinking about how the human experience of change is divided.

Dewey’s theory of emotions can be taken as a reminder that the circles drawn and
the spaces created to divide experience are human tools, not fixed or necessarily accurate
representations of reality. While the empiricist cluster influenced all areas of psychology
and can be seen as grounding the disconnected rational mind and innate knowledge of
rationalism, it still left plenty of room for two unequal classifications of perception in the
process of human understanding. Dewey’s psychology is a unifying approach to human
experience that can be understood as bringing the circles together in a present,
contextualized experience without an ultimate goal or ultimate equilibrium.

Dewey’s approach to knowledge and how people come to know departs
significantly from traditional epistemological assumptions; the merging of experience,
cognition, and emotion is problematic even for some neo-pragmatist (e.g., Rorty, 1998).
By questioning whether knowledge can or needs to be anything more than beliefs vetted by
experience, Dewey also questions the distinction between high cognitive positions in
organizations-culture from the common person. At the same time that hierarchical
classifications of human contributions are called into question, the use of objectified
classifications such as cognition and emotion are also called into question as ways to keep
people in their place in the rational-organizational hierarchy. While such classifications
might be tools that let people know how to work together in a predictable way, it is not clear that these rational structures and the assumptions upon which they are based are disinterested. They seem to serve some people quite well and create an unquestionable distinction between their authoritative views and the perspectives of common people.

A secondary repercussion of the treatment of cognition and emotion in Dewey’s theory is its implications for speed and tempo within experience. In the absence of a distant ideal that can be brought on by an accelerated movement from one rational end to another, there might be time to rest, reflect upon, and even celebrate the temporary moments of harmony with the environment that come along by intent or by happy chance. By giving up a little bit of certainty, Dewey makes room for enough doubt to humbly enjoy some time to reflect either way. Furthermore, such reflection on means, ends, and interests also provides an additional level of agency wherein people might be able to shape future interactions – even if all of the consequences of the new interaction cannot be completely predicted.

Dewey’s alternative is not without hope, but it is also not unlimited or an attempt to escape the material interaction. Simply hoping for, imagining, or mentally constructing an alternative reality disconnected from contemporary problems is not the kind of hope that Dewey seeks. His contextual depiction of human understanding and the experience of life’s ongoing stream of change is much more grounded and messy than the clear perceptions or insights of some of his colleagues. Hope and agency are both connected to the potential to doubt whether existing classifications of experience and structures that keep them in place should be called into question, such that new interactions or
coordination of activity might emerge. Among the top of classifications that Dewey identified as perpetuating age old dualisms and hierarchical interests was the psychological distinction between cognition and emotion.

Now that a case has been made that psychological classifications of cognition and emotion have continued to emphasize fixed distinctions related to aspects of James’s psychology (and Darwin through his influence on James) of emotions and Dewey has offered an alternative way to address the multiplicity of experience, one might ask “What would the different approaches look like if brought together in one organizational narrative?” An organizational fable is offered as a way to juxtapose the various approaches to the relationship between cognition and emotion presented in the project. It is not intended to be a “scientific” description of a real situation, case, or even the synthesis of multiple observed settings. It is more like science fiction, weaving together stories, characters, and situations in order to bring seemingly distant concepts a little closer to home. One of the benefits of a fable is that the reader must interpret it in light of their own situations, problems, and perspectives. As Weick (1995) might say, it is a foot-in-the-door to believing and seeing a new way of acting and making sense of our experiences in organizations.

In this case, each individual symbolizes beliefs about how to understand human problems and how to go about solving them. They can be seen as caricatures, which are intentionally flat and underdeveloped in some respects while other aspects are dramatically and purposefully emphasized. The reader might interpret them as individual people, subgroups in an organization, the characteristic approach of whole organizations towards
the world, or as scientific research communities. Depending on the immediate or recent situations brought to the reading of this text, any of these applications could be appropriate. Different characters and their approaches might seem pleasant or unpleasant, rational or irrational, productive or unproductive based on the beliefs about knowledge and the personal experiences that readers bring to the fable. The aim of the story at the end of this chapter is not to convince people that one approach is right. Instead, it is offered as a tool to make sure that an alternative perspective of cognition and emotion has a chance to be heard and contextualized – thus, encouraging the possibility that a more insightful understanding might inform practice.

Organizational Fable

In a time not so long ago, there was a young woman named Esperanza who went to work for an organization not unlike most. Around town Esperanza was known as Hope. Dr. Upshawl, the Chief Executive Officer of the organization that hired her, was always looking out for new talent. Much of this story is about how Hope came to work at Upshawl’s. Dr. Upshawl had an eye on Hope long before she was hired. She was the granddaughter of one of the men from a professional association which met in the cafeteria of the local college. Hope had actually come to speak to the group twice over the last ten years. When she was the president of the affiliated, junior association in the county high school, she made a short presentation about a toy and clothing drive for the town’s community closet. While in college, she was invited to be the main speaker at one of the meetings to talk about a humanitarian trip that she had gone on with some financial assistance from the professional association. The group even awarded her a small
scholarship towards her continued education in the Masters of Public Administration program where she studied nonprofit leadership.

In professional associations and in other groups of his peers, people called Dr. Upshawl by his first name, Phillip. Some of them who knew him well would half jokingly – half enviously pronounce it Phill-up because of his success in recruiting the best employees in the town over the last thirty years. Phillip had heard from her proud grandfather that Hope graduated with her Masters of Public Administration about three years ago. He was not surprised when her name came up in other circles. Phillip also served as a board member Uptown Connects, a community organization that helped connect people around the greater metropolitan area with local nonprofits. One of the other board members, a pastor of a large local church, mentioned that some good things seemed to be happening in a small community center under the leadership of a new director named Hope.

At the next professional meeting, Phillip confirmed that this was the same Hope that the club had been supporting. Dr. Upshawl was curious and wanted to know what she was doing down at that community center. He thought that getting a few of his employees to go down there might provide him with some unique perspectives of Hope’s leadership. He frequently promoted opportunities for his employees to participate in projects to help local nonprofits and even gave them paid leave for up to ten, two-hour visits. He had created the nonprofit assistance program about twenty-five years ago because he thought it was good for public perception, it was an inexpensive way to motivate his employees to work for the organization, and it was one of his contributions to raising social
consciousness as a community leader. Over time he also found that it was a good way to get some ideas from other organizations around town that he and his employees could implement at *Upshawl’s*. It did not take much to drum up some support for doing a project at Hope’s nonprofit. One of *Upshawl’s* executive officers had a son that recently volunteered with Hope as part of a service learning class at the local university. Soon three employees, Peter, John, and Lucy were going to the community center weekly to work on different projects. As customary, the paid leave ran out after ten weeks, but each of them kept volunteering. This really caught Dr. Upshawl’s attention, so he scheduled separate times to meet with Peter, John, and Lucy to hear about their experience working with Hope.

Dr. Upshawl had Lucy, his office manager, schedule the meeting with Peter first because he ran down to the community center the very moment that Dr. Upshawl made the announcement. Peter arrived a few minutes early to the meeting, and Lucy let him know that Dr. Upshawl was coming straight from another emergency meeting. He was always busy solving problems. She told him to go ahead and have a seat in the office. Peter kind of fidgeted around uncomfortably as he entered into the room. The wall of books behind Dr. Upshawl’s big desk still struck him as intimidating even after working for him for ten years. So did the diplomas enshrined in wood and glass and the engraved plaques memorializing a career of distinguished leadership. Peter did not think that he had the brains to do such great things. Throughout his childhood he had always been told he was too wild and impulsive to know much of anything. At work, he was the joke of the office – though it was not clear if people were laughing with or at him when he daily knocked
things off his desk or spilled his coffee which was precariously placed on the piles of paper. He never seemed to learn from his mistakes even down to silly things like repeatedly getting his finger caught in the copy machine door and stapling his tie in the electronic stapler. He seemed to react differently to situations than everyone else and was given to what looked like irrational outbursts to his colleagues. Peter never seemed to be in control of his own life.

It came as a bit of a surprise to Dr. Upshawl that Peter actually made it to the meeting on time. Though Peter was a dedicated and hard worker, in the ten years of working in the copy room, he was hardly ever on time to anything. He just moved around whichever way the wind blew - sometimes in a whisper, but more often in a gust. After hanging up his suit-coat, Dr. Upshawl asked Peter to tell him about what he had learned down at the community center. Peter responded:

“I’m not certain that I know too much, but I can tell you that what I have seen down there feels pretty good. I usually just help to bag up groceries for the poor people in town, but sometimes events or things around the community center jump out at me as different. Even in the 15 weeks since I started, Hope seems to have made things more efficient. When I first started going, everyone just stuck whatever they liked in the bags. It confused the Hell out of me… uh sorry, I mean it really made me angry though I didn’t quite know why. We were always running out of something like canned meat or green vegetables. Hope’s been doing little things like making a list of how many items from each food group goes in a bag. She even realized that some of the people from the community who volunteer can’t read, so she gets me to set up a sample bag for folks to
look at. I even find that to be helpful when I forgot, though I don’t usually realize that I’m looking at it until someone points it out.

Hope also gets me to help sort some of the food donations that come. Each type of food goes on a different shelf, so it is really easy to look at and get a basic feel for what people are giving and where the gaps are so that she can buy that stuff with the money from United Way. The last few weeks, groups of high school students have helped to make the bags. She got me to put the food from different shelves on designated tables with a number in the center to let volunteers know how much to put in each bag. When the students got there, they just went down the line putting the food in the bags. They finished so quickly that we all went and organized the intake room where the donations are kept until they are sorted and straightened up the rest of the center too. Even that intake room was something she started to keep all the donations from piling up in the stairway, halls, and gathering rooms. She is really streamlining operations, making things more efficient.

Plus the place just feels better. You know, ‘cleaner and more organized. With the time that is getting saved, some of the volunteers have been able to do a little decorating. Instead of a drab old building, folks are putting a personal touch on it – a splash of color. Everyone seems to appreciate something different: the plants, pictures of volunteers from the community, the children’s artwork, curtains, or the volunteer break room with the donated couches and water cooler. I know the water cooler may seem to be a luxury in a little nonprofit, but it sure seems to makes those ladies from the community feel special when they are sipping on Diamond Quality spring water on a hot day. I don’t know, it just kind of feels like a different place to me than when I started going.
I guess maybe I’ve changed a little too. I acquired a few new habits while working with Hope. About seven weeks ago I gussied up the copy center, dusted the surfaces that I could find, brought in some plant, and hung big picture with a calming scene. That little room separated from the stock room by that big gate always made me feel like I was going to prison instead of work. About two weeks later, I had the motivation to ordered my work station and I’m not knocking stuff off my desk anymore, plus I know where to find stuff. By the next week I wasn’t spending so much time cleaning up my own messes and looking for stuff under piles of paper. I could actually find my calendar so that I could write down stuff like when I was going to the community center and this meeting you scheduled.

Last week when I went to volunteer, I took all of my old ties with the staples down at the end to donate to the clothes closet. I was going to buy some new ones, but Hope suggested that I try a bowtie. They even had one down there in the clothes closet that she gave me to try. It was a clip-on, which seems to be good… I still haven’t learned to tie a real one. I don’t appear to have the same problem with the stapler anymore. It probably sounds silly, but all these little changes give the impression that I have a little more control over my work-life and the way that people around here see me. Some of them even say that I am behaving more intelligently. Maybe if I keep these good associations up with Hope down at the center I will develop more good habits and instincts that will serve me and this company well.”

Dr. Upshawl had heard enough. Peter’s actions were speaking louder than his words. No one in the office had failed to notice the changes in the copy center. Plus, the time set aside for meeting with Peter was up and John, who was always punctual, would be
waiting for his turn. When the door opened and Peter started walking out, John immediately began scanning the book shelf to see if there was anything new that he had not read. He admired Phillip’s personal library and the conversations that they had about higher education, but had never really understood the time and money that he put into getting people volunteer around the community until recently. As the Chief Financial Officer of the organization, it did not seem like a very good investment of time or resources. John’s family had fallen on tough times when he was growing up, but his conservative financial approach, liberal arts education, and driven work ethic had helped him achieve a much more comfortable life than his parents could have dreamed. Once Peter was by him, John started talking immediately, “You asked to see me, Phillip.” Closing the door, Phillip said, “Yes, I wanted to hear what you learned while working with Hope.” Peter barely let him finish the statement because he was always ready to talk about learning:

“Where should I start, I mean that girl is sharp as a tack. We really ought to be keeping an eye on someone with a keen mind like that. You know that she has already finished her MPA. I hear that she did it in one year instead of two. When my son went down there to fulfill that service learning requirement, I really saw a difference in him. He had always been a strong student, going through one stage of learning to another without a hitch. But when he got to college, there just wasn’t any motivation anymore. We had always provided for all of his basic needs. Heck, we even bought him that little house down there near campus so that he wouldn’t have to live in the dorms. Even with all the investment that we had made, he just didn’t seem to care about learning anymore. I tried
to remind him that it would help fulfill his life’s purpose and land a good paying job, but I think that he was aware that his mother and I have done pretty well and that he didn’t really need to work. Frankly, we were kind of worried that he was going to be content with idleness or a life of leisure. We couldn’t bear the thought of him frittering away all that we had worked so hard for, including that sharp intellect of his.

After going down there and working with Hope, he found a new source of motivation. You know things really started looking up. He took his studies seriously and gave them the attention needed make a higher grade. I really went down there on a personal fact finding mission, I just couldn’t make sense of what had happened without seeing it myself. When I got down there I realized that there was something more to that girl than a nonprofit degree and a keen mind. She really cared about the development of other people – of all people. I mean it was really touching. She inspired me like, like some kind of saint or something. You know she could be making a lot more money working for us, but she’s down there helping other people pull themselves up out of the same type of situation that I was in growing up. It didn’t really come together for me until the fourth or fifth week working in the food pantry.

Each time I opened the cabinets, it took me back to my childhood. I felt just like I used to when I’d open the pantry while mom was at her second job. I was half ashamed and half relieved when I’d find it full of canned goods from every grocery chain in town and a whole different kind of upset when it was empty. The same feelings washed over me during those initial visits, and either way, I’d find myself paralyzed in food closet. I mean I’d just stand there feeling ashamed or anxious unable to do my job until I made the
connection back to those childhood memories. It was like working with her unlocked my own heart. Hope found me crying in the pantry that day – I can’t remember when that has happened. It must have really been building up because I just sobbed. As hard as it was, it was really a peak experience. Hope didn’t try to get me to stop blubbing as I sat on the deep freezer, she just brought me a pack of tissues and gave me the time that I needed to work through it. Hope listened as I told her my own life history of trying to make a better-more secure life for myself. I began to realize that I had lost something during my incessant quest for knowledge and higher stages of mental development. Apart from my quiet zest for learning, I had thrown away any warmth or affection for the people around me. I kept thinking about my life, my love for learning, and that community center for a couple of weeks until she suggested that I direct my passions to help others reach their potential.

I’ve been tutoring math down there since then, it was a natural progression. I can finally dip back into my softer side to see the world as more than numbers, have a little fun interacting with the folks down there, and still emerge to help evaluate what I can do to help encourage growth in those folks. This nonprofits assistance program has its own value, and I could never see it before I made the connection back to my own life history. Anyway, I recruited Lucy from here in the office to go down and help with reading proficiency. I know people thought you were crazy for recruiting Lucy when she was an English teacher at the local high school, but it might have been one of the best investments you made early in the life of the organization. She has saved my skin numerous times by helping me draft reports and proofing my documents in a way that has improved my
writing over the years. Once a teacher, always a teacher I guess. She seems to have a real natural way of helping others live up to their potential. The folks down at the center really respond to her as they prepare to get their GEDs. It is so exciting to see them getting more than just their basic needs met. This tutoring program takes it to a whole other level. The people in this program are developing into people who will be able to make a difference in that community.”

Knock... knock. Lucy cracked the door and asked if he wanted her to come back after a while. He told her to come on in and thanked John for coming by and sharing his story as he walked him out. Phillip had heard that John had been the one to recruit Lucy to go down to the community center, but now he had a better understanding of why he had changed his tune about the company’s nonprofit assistance program. There really was something special about Hope.

Before Dr. Upshawl could ask the question Lucy said, “I guess you want to see me about the work that I have been doing down at the community center since you had me schedule a meeting with Peter, then John, and now me.”

Upshawl smiled and said, “That predictable, huh?”

Smiling back at him Lucy agreed, “There are a lot of patterns around here if you care to pay attention to them. Actually, the patterns usually make things easier if you ask me – kind of like a worn path. They only seem to become a problem when they need changing. Steering clear of the rut seems to be the toughest part in this organization. I think sometimes we lose sight of them, and when some poor soul figures out that we are stuck, it isn’t always easy to find the courage to speak up.”
“Speaking of questions,” Upshaw said, “Why don’t you tell me a little about what you learned down there at the community center?”

“Well, if I may speak freely, I figured something big must be going on down at this community center if it made John grow a social conscience and Peter clean up his act. Both of those guys have been working for you for ten years and neither one of them has changed much in that time, but in going down to that community center, they have both learned some new role behaviors in a couple of weeks. No one breaks patterns that easily. You’ve been sending folks out to volunteer for almost all of the twenty-five years that I have been working for you but this is different than those little changes that sometimes happen in people. Plus, their stories just don’t add up. Peter talks about how some of Hope’s volunteer training and material changes in the environment down there are helping him develop new habits that are just carrying over into his work here, and there is a little group of people in the building who are going around saying that the intelligent behaviors that he has acquired are making him work more efficiently and get control of emotionality. I will say that it has been a while since I heard the copy door slam and Peter come running down the hall screaming and shaking his hand.

Now John is a different story. His heart seems to be beating for the first time since I have known him. He has always been locked up in his own head… all numbers. It’s like he thawed out or something. Don’t get me wrong, he is still reserved most of the time, but every once and a while he lets the kid in him come out a little. When he talks about going to help the folks down at the center, it actually sounds like he is having fun. Now he is recruiting people like there’s some kind of movement or something. You know,
[sarcastically] something contagious like this could take off and start a revolution in this community – a clean break with the way people usually think around here. Hey, maybe that’s exactly what it is - a little movement that all started with Hope. Yeah right, I thought. Esperanza’s just a little girl from the east side of the tracks. Her mother was a teacher’s aide back when I was a teacher at the high-school, and her father washed dishes and cooked in every kitchen in town before she was born. The people of this community practically raised that little girl.

John seems to think that I went down there with him as though it was the unfolding of some manifest destiny for my life. I really went down there to try to see the big picture. Both Peter and John seemed to be missing part of the story; the books just don’t balance so to speak. I always stayed later than John so that I could snoop around a bit. I wanted to hear the gossip from folks in the community and see what meaning different groups that came into that place were attributing to this enterprise with Hope. I was there one day when Peter set up the assembly line for the high-school students. Sure some of the people were talking about how efficient it was. Over in the corner, one or two of the parents who were chaperoning said that they hoped their child would be a little more mature because of learning activities like this. More than just book knowledge, this experience might also encourage some character development. I made a few bags too so that I could talk to the teachers who were working along-side of the students. The three teachers told me about how bringing the students down to the community center provided teachable moments that brought the past and a potential future into present reality. It sounded like the community center was just one of the sites that the civics, social studies, and history classes visited in
order to have a better understanding of how the whole system works and how a better knowledge of the system could help them bring different forces and interests into a better balance during their life. The teachers had received an educational grant for integrated education and community development. By integrating the curriculum across subjects and taking the students outside of their comfort zone, the teachers hoped to reshape the learning environment so that they might not only react to a stimulus or progress according to set stages, but alter the course of their own and the community’s development.

On another day I was talking to some of the volunteers from the community who were helping put some of the donations away. One of the ladies from the community told me that John’s son had come to the center with his high-school class the year before he graduated from high-school and he was the spitting image of his father. John only mentioned that his son came down as a college student. I don’t think he gives enough of a place for the influence of different forces that can change the direction of one’s life. His son might not have picked this community center for his service learning requirements during his second semester at college if those teachers had not exposed him to it towards the end of his senior year of high-school. Plus if it wasn’t for the community business grants, political pressure to incorporate service learning in higher education, and continued education opportunities for teachers that encourage collaboration and integrated teaching, John’s son and the rest of those students might still have their noses behind a textbook.

All of these stories came together to make my suspicion that John and Peter’s stories were incomplete on their own a little more than a gut feeling. Yet, I still wasn’t completely conscious of the bigger picture. To help me wrap my mind around the
problem, I installed some of our scheduling, inventory tracking, and facilities management software. Over the last couple of weeks I have been entering in all of the information from her paper calendar, volunteer/donation ledger, and asking Hope and others around the center what was going on. After a few weeks I reflected on the information I gathered and had some of the folks around the center including Esperanza make sure that I was interpreting it correctly.

Basically, Hope doesn’t see that center as a closed-door organization with one path of development that must be followed in order to arrive at the same ideal end. She has created a new bottom line by importing new energies from political, religious, corporate, and academic sources. A considerable part of her time is spent branding the nonprofit as a positive force in the community that serves mutual interests. According to her schedule, she speaks up at City Hall, makes presentations in religious communities, writes letters to organizations to solicit partnerships, and recruits student-learning volunteers from two local universities and local high schools. Many of the volunteers attested to their involvement being directly related to her speaking engagements or other volunteers who raised their consciousness and gave them courage to try to make a difference. Hope’s leadership role isn’t just her rational ability to organize, structure, and direct people’s experience down at the center, she also has to provide a socio-emotional role that helps people overcome their fears, motivates them to act, and gives them a sense of belonging.

Those supportive, socio-emotional characteristics are important parts of Hope’s leadership even if she needs to monitor, evaluate, and consciously direct them to achieve the organizational vision. Beyond a convincing story and charisma, Hope has the mind of
a systems thinker. She has established a division of labor. People get introduced to the work down there in positions that may challenge them some, but aren’t necessarily where they will end up in the long-run. Sooner or later she finds out what you are interested in and either helps you find your way to another organization or she gets people using their passions at the community center. Either way she is turning potential energy into positive energy in the community. While she doesn’t hold onto folks to tightly, she does have support structures in place that help to retain some emotional bonds. She does little things, like volunteer appreciation celebrations, where the whole community is invited and people are recognized for their contributions. Last time she gave out lapel pins that say, “I help Hope.” For the people who stick around, she encourages people to switch roles every once and awhile so that they don’t get stuck in a rut. The people down there are always learning from each other and the different situations, projects, and problems with which they are interacting as a body. What she is doing down there isn’t rocket science, it’s just social science. I learned that stuff in that social psychology courses you paid for me to take down at the college when I was getting my degree in administration.

You know, maybe she should be called Hope after all. Esperanza kind of embodies the higher consciousness of the community around here - everyone’s best qualities and desire to get things done for the common good. This town has had that little community center with benevolence services named Hope since the depression. Esperanza isn’t doing it alone. She just symbolizes a bigger development. That girl really seems to be able to keep the whole system together in a big orchestrated dance. She sees the big picture, helps others see it too, and gives others the courage to act differently and speak out for a more
ideal world. When I’m working with Esperanza, I don’t seem to get caught in the same ruts that I have been in around here. At the community center, sometimes I serve in a leadership role and at other times I support the work of others, but either way it isn’t just taken for granted.

Those opportunities made me see myself differently and have given me the courage to expect something more. Any time that I have asked to be given the opportunity to create something or help lead something around here I was told that I had my own value and that my responsibilities and contributions had steadily grown with the contribution. Even after I went and got my MPA you just changed my title from Support Staff Member to Administrative Assistant-Office Manager. I could never break through the glass ceiling and was left watching the new best thing get hired time after time. For years I haven’t had the courage to say what I really felt. I guess I was stuck in a rut and didn’t know how to get out of it. Maybe having the courage to speak my mind will finally make a difference.”

With tear welling up in her eyes, Lucy got up and went back to her desk. As she left, Dr. Upshawl thanked Lucy for her time and unique perspective on the situation. He convinced himself not to take her emotionality personally and moved on to rationally evaluate whether some action should be taken based on the various accounts of the situation down at the center. Upshaw weighed all that he learned from the different voices and what he knew of each of their situations. He tried to make sense of it by looking for common themes related to the basic needs that all employees have. He didn’t have any more certain knowledge than when he sent for them, but he expected this. He simply needed some points of continuity to draw a probable line through this moment in time
towards a little better future. It was only natural to see that Hope served the basic, common needs and problems faced by humanity. She had an emotional orientation towards the world that had its own value, even if it needed to be reined in and directed by some higher cognitive capacities. Fortunately, her past had also equipped her with these tools. She was able to impose structure on the world, classified it, and direct motivational energies in herself to raise consciousness of multiple interests and interactions. Phillip came to a decision based on the common judgment of his employees from the multiple visions of what was really going on down at that community center. His organization might be better if all of his employees worked with Hope.

It wasn’t long before Hope was hired, Phillip made her an offer that she could not refuse. Along with benefits and a significant raise, Hope was given the opportunity to make a difference in the community. She would split her time working at Upshawl’s coordinating the volunteer initiatives and working as the director of Uptown Connects, the small nonprofit on whose board Dr. Upshawl served. Phillip created a new position just for her in his own business and the board of Uptown Connects mysteriously found themselves needing to replace the existing part-time staff member at about the same time. Dr. Upshawl took care of her orientation for both organizations. Hope was told how the work world just kept speeding up, new technologies, social changes, threats, and opportunities being thrust upon organizations at an increasingly rapid pace. He told her that these conditions only seemed to be new and that leaders like her who could take all of that information and offer a vision for an ideal future had been an essential part of the community’s success generally and Upshawl’s continued growth more specifically for a
really long time. She also heard about how important social sentiments were in developing forums for different voices to be heard so that some rational judgments and coordination of activity could occur in the community. “Having developed these tools,” Upshawl said, “We not only survive, we thrive! There is no reason that everyone’s needs can’t be met at the same time.” At the end of the orientation, Dr. Upshawl proudly said,

“In this community, we build our future leaders up from within. We make a place for new talent and voices like yours even though they might not always be right. The community decides what seems to be the rational way to proceed. If you have an idea for how things should be different, the door to my office is always opened. You can tell me privately so that the whole community does not get upset unless it is absolutely necessary. In that case, I will help make things happen for you.

Each generation within this community has the potential to reach higher levels of development, though it is not guaranteed. One of the secrets to helping progress along is to keep identifying basic need and common means and ends that will hold the community together in the process of meeting them. Consciousness of these common problems and needs is possible when people have a warm heart and a cool head that can evaluate situations to identify the common threads. Our potential for rapid progress and failure cannot be separated from our ability to learn and pass on our understanding. That’s why we place the younger generation of leaders on our shoulders so that they can see things we could never have seen on our own. You have been hand selected and grafted into the organization because this community has invested in you and has seen the fruit of their
labor. We expect you will make a difference right away and will help bring about even greater things in the future.”

Hope was not sure of what to make of this introduction as she got started. However, it did not take long to realize that Dr. Upshawl and the people around the office expected many different things from her depending on stories with which they associated most closely. Peter, John, and Lucy’s stories percolated around the office and different people and units seemed to latch onto one more than the others. All of the stories seemed familiar to Hope, but they didn’t have much to do with the complex problems down at the center anymore. Each one focused on some part of an ongoing process that Hope thought was too large for even the whole community to understand with certainty. Many of their classifications of life seemed to boil it down into components of rational mind and bodily actions-reactions. Too much seemed to be made of mind and its potential to direct-control the body to speed up productivity and keep both problems and pleasure at bay.

Hope started to notice that people used Peter, John, and Lucy’s stories to forward different interests. Whether the stories were about Upshawl’s or working down at the center, the different groups seemed to paint different pictures of the situation. They could never agree about what was really happening and Hope was often at the center of the debate. Often the groups kept to themselves because it was easier to avoid the heated debates. The classifications seemed to weigh heavily on her and on the community, robbing people of the freedom to change and challenge entrenched interests. She wondered how Upshawl’s might be different if more interaction was encouraged and if different people understood the perspectives of others better. Hope did not face much
opposition as long as the initiative were directed outside of the organization and people
could go back to their corners of the building at the end of the ten weeks. For the first year
she was the talk of the town; she was being looked at for a fast track to leadership. After
observing the interactions within Upshawl’s for a little over a year, she thought that
perhaps some more contextual interactions might be needed to free people up to solve
problems. She selected Upshawl’s to be the service location. She selected people from
different backgrounds to work together in groups to solve problems that they saw within
the organization. Instead of ten weeks, these groups would work together until they were
able to solve the problem that they selected. Some of the people on the teams were even
from the community: clients, customers, neighbors, etc.

People started to talk about Hope differently, especially Dr. Upshawl. Some of the
people whose voices were usually not taken into account really liked what was happening.
Others did not like some of the changes that they were seeing. It was not as easy to predict
or control. This was not the Hope for which Dr. Upshawl had bargained. He tried to keep
her busy with her work for Uptown Connects so that she would not have time to stir up
distractions in his office. This did not work because she approached her work in both
organizations with the same unifying principle. She kept on creating opportunities for
interactions inside and outside of the organization. She planned celebrations and insisted
on informal opportunities for interaction and sharing ideas. Perhaps what led most quickly
to Hope’s departure from Upshawl’s was when some of the people who worked closely in
the local nonprofits and employees at Upshawl’s started questioning whether some of the
programs and products developed at Upshawl’s were part of the community’s problems
instead of the solutions. They came up with some creative ideas about how the community and organizations might work together. Suddenly, Hope’s innovative position could no longer be afforded at Upshawl’s and most people knew not to talk about her anymore. It was too dangerous to be associated with some of her more radical ideas that broke down the most basic divisions of life at Upshawl’s. Even still, the community is a little different because of Hope. She made of it what she could, rested, even celebrated a bit, and then moved onto the opportunities that emerged next.

Interpreting the Narrative

As stated before the narrative, the richness of interpretations comes from the situated perspectives from which it is viewed. Having read the previous chapters, it is likely that the reader may have made many connections with the various research traditions in this project as well as to personal experiences with organizational life. Yet, it might be helpful to make some connections between characters within the fable and specific aspects of the project.

Dr. Upshawl, and the organizations to which he is connected, serve as a foil for rational, institutional life and the guardians of progress. He can be seen as having good intentions and a desire to balance the interests of people within his organization and the community. At the same time, his focus on rationality makes it easier to seem personally disinterested and able to direct or control aspects of the environment, individual development, and social interactions for the common good. Paradoxically, he and his friends simultaneously create a system that provides a foundation for new and creative ways of thinking and acting within organizational life, while at the same time serving to
evaluate, limit, and constrict what gets to count as an acceptable deviation from the norm.
The importance of creativity and incorporating new ideas and behaviors is acknowledged,
but the great challenge making sure that there continues to be room for these voices even
after they start to make things a little uncomfortable. The greatest discomfort for Upshawl
was when the hierarchical classifications within organizational life started to get blurred
and it was not as easy to see how this new form of interaction would work.

Peter represents a behavioral approach to knowledge and learning. He believes that
there are individual differences in intelligence and is not completely sure what to make of
human agency. Peter seems to be at the mercy of his environment. His actions and even
his mental associations seem to be dependent on the impression of external objects and
events. His life can only change when the environment changes. Small environmental
changes in one area of his life had a domino effect into other areas of his life as the
response to one stimulus and the associations developed became the cause or
environmental condition necessary for triggering the next change. If his new actions were
more intelligent, he might be seen as attributing them to environmental controls and the
formation of an increasing number of clear or primary associations with more adaptive
understanding of the material world.

John symbolizes the individual developmental approach to learning. His emphasis
is on the natural movement through higher levels of mental development. In his own life,
these rational structures provided him with a way of dealing with real problems. His
liberal arts education and highly developed abstract reasoning and mathematical abilities
seemed to have given him the mental power needed to address his basic needs, yet

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something still seemed to be lacking. In keeping with some interpretations of stage theory, he could only come to a higher understanding by working out his new mental construction on his own to better balance some of his past experiences with his present situation. Like Maslow, John ultimately questions whether basic needs are sufficient motivators once they are fulfilled. In order to reach a higher level of development himself, he unlocks his lower psychological processes and voluntarily regresses in order to harness the creative and caring energy down below. Ultimately he returns to his original assumptions that higher mental development must still bring these lower functions under control in order to direct his own life and make a difference in the community one person at a time.

Lucy can be seen as representing the social developmental paradigm. She does not think that the behavioral (Peter) story or the individual developmental story (John) considered enough of the forces at work in the total system. She approaches her inquiry down at the center in a very different way than the other two. She tries to gather information about the total system from multiple different sources to get a big picture. A greater premium is placed on the social consciousness and a systems perspective to bring the forces into balance for the common good. Emotion had an important role to play in consciousness and group cohesion, but ultimately higher cognitive functions are still seen as needed to create a path towards a better balance of interests.

Hope helps in moving toward a pragmatic, natural conception of learning and change. The Hope that she wants people to see is a little more like Dewey’s optimistic blend of hope and doubt. She is concerned with making the differences that she can wherever she is. One of the main ways that she sets out to do this is freeing up
opportunities for different people to interact and see the world differently. Hope blurred many of the distinctions and classifications that were sacred to the rational institutional hierarchy. She can be interpreted as rending the veil or shawl that had upheld the division of labor and appropriate point of interaction for different interests within Upshawl’s and the community writ large. As long as these basic sources of stable interaction went undisturbed, she was given considerable latitude to implement creative opportunities for learning and change. However, when the rational classifications were questioned in a more central part of institutional life, her innovative approach to experience threatened the status quo. Upshawl tried to redirect her energies towards a less threatening part of whole system, but ultimately, Hope is moved to the periphery. Some of her ideas continued to influence the system, but the aspects that questioned the most fundamental classifications of experience were not to be mentioned again. Hope, however, would emerge again in some other context filled with different problems to address.

Project Implications

It may be tempting to think that so far this project has been completely bound up in theory or philosophical speculation distinctly separated from practice. However, to the pragmatist, “There is no deep split between theory and practice, because on a pragmatist view all so-called ‘theory’ which is not wordplay is always already practice” (Rorty, 1999, p. xxv). The fable and some of the material below help to make the practical implications of this project more tangible. Philosophical and theoretical activity ceases to be wordplay when it is connected to and seeks to inform the understanding of real problems for an individual and/or community. As described in chapter 1 and the summary above, this
project emerged from the stories of people facing real problems with the way organizational change, resistance, and emotion was treated in daily life. The research community had also identified that there was a problem with the reification of these concepts. This problem required a different set of tools than the quantitative and qualitative modes of inquiry that are more readily recognized within some research communities. In order to explore the nature of this problem, a different lens needed to be employed, one that could provide an alternative perspective instead of seeking to build on narrow strands of existing research. The resulting product, findings and implications look a little bit different because of the types of problems that were addressed. Yet, this study stands to contribute to multiple communities including academic communities and other forms of organizations.

A pervasive problem with the way that psychological research, particularly within educational studies, neglected the role of emotions was identified by several authors (Bredo, 2006; Antonacopoulou & Gabriel, 2001). In response to these concerns and problems that Turner (2007) identified with specific research approaches to resistance, emotion, and agency within organizational change studies, this study provides a foundation for understanding these concerns. It also positions a cluster of research that Turner identified as having the potential to aid in improving further research as sharing much in common with the approaches that he depicted as problematic. By providing this historical context, a better understanding of why cognition is preferentially treated by individuals building on existing research is made possible.
Describing and synthesizing the way important historical learning and change theories approached cognition and emotion is one contribution made in this project. Offering a way to group and talk about these theories in relationship to epistemological assumptions provides an even deeper understanding of how long current classification have been shaping the way that these concepts have been discussed within western society. Chapter 2 provides some of this history that helps to raise awareness of some of the tacit assumptions behind learning and organizational change theory. Of specific interest to this project was raising awareness of the deep-seated dualism of mind and body and its connection to psychological assumptions about how human knowledge is possible. This contribution is in direct response to a problem identified within an academic and professional community related to a lack of awareness of philosophical underpinnings (e.g., Merriam, 1995; Gilley, Dean, & Bierema, 2001).

In the process of exploring and describing some of the philosophical influences on contemporary psychology, I developed a new model for considering the influence of different epistemological beliefs on theory and practice (see appendix B). This model, along with the textual description of some of these philosophical influences, could be helpful beyond the reading of this project. Consumers of research as well as those seeking to engage in research could benefit from additional ways to understand the assumptions that are likely to accompany a specific approach to a problem, modes of inquiry, or ways or reporting the understanding the comes from research. The more dynamic web model might also make it easier to understand why, within a given study or between different studies undertaken by the same author, various theoretical assumptions might be drawn on
and different modes of inquiry could be engaged in depending on the situations. A web model makes it easier to see such oscillations as reflecting continuity between multiply held beliefs and situated practice instead of a disconnection between belief and practice. Furthermore, by seeing the connections between what are sometimes seen as very different research approaches, the diagram might also provide some opportunities for communication about the common elements of different psychological approaches that could facilitate better interactions and space for working together.

In addition to philosophical influences that seemed to have been perpetuated, at least to some extent tacitly, there also appeared to be some psychological assumptions that tied the two together. These influences are not always identified. On the year of Darwin’s 200th birthday, this project presents some interpretations of Darwin’s work that were more common 100 years ago and the influence that such readings seems to have had on early psychology. By expanding the way in which Darwinian evolutionary change might be conceived beyond the Darwinism of today, it is easier to understand why seemingly different approaches to evolution within learning and change theory can assert some claim as a Darwinian evolutionary model. This might cause consumers and producers of research to pause and seek some clarification as to what is meant by these labels in historical and contemporary research. One might ask: What assumptions about knowledge are supported by the depiction of evolution or naturalism used in these theories? Here, the epistemological model that I developed might prove useful.

Returning to the implications of this project for the treatment of cognition and emotion, the philosophical assumptions and psychological approaches of Darwin and
James left me in need of a model to give a visual way to understand and describe what was going on in this project. The model provided in appendix C could be useful for future research as well as for facilitating dialogue within organizational life. In regards to further research, this tool could be used to aid in understanding if not analyzing the treatment of cognition and emotion in other studies within and beyond organizational change and learning. The model, along with some of the textual descriptions in this study, could also be used by people seeking to engage in future psychological research to help create awareness of assumptions that they might be bringing to their study so that they can make conscious choices about how to talk about cognition and emotion.

Within organizations, my psychological model could be used on its own or in combination with the organizational fable to promote dialogue about how cognition and emotion are, and might be, talked about and classified within that context. Such a dialogue might promote a greater understanding of how different people approach problems, the tools that they think are important, and the answers that they are most willing to see as valuable sources of knowledge. A similar discussion might also focus on how cognition, emotion, and other terms are used within a community or culture in order to explore whether common or diverse interpretations are held. The psychological model could also be used with other facilitated activities to encourage people to consider the ways that other words and concepts become fixed within organizational life and prevent people from seeing alternatives. Combined with some discussion of idealized ends, a process consultant might also be able to use the diagram to help groups see how rigid classifications can stifle creative approaches to problems. The fable or an alternative
activity, coupled with the model, might also facilitate opportunities for asking other hard questions about classifications, values, and interests in organizational life. As Dewey’s work reminds us, these implications go far beyond the human made classifications of academic and work life into every corner of the human experience where social interactions take place.

In some ways the workplace and other social institutions have changed considerably since Dewey’s writing. Classifications and dualisms of unequal pairs have been challenged. For many of Dewey’s contemporaries, an African-American president in the United States or a female Chief Executive Officer of a fortune 500 company giving an analysis of global economic problems may have been unthinkable. However, the age-old dualism of mind and body that often provided the foundation for more readily observable discriminations seems to have remained as an underlying assumption. The hierarchical classification of rational cognitive and under-rationalized emotional functions seems to remain fixed in a similar way that it was conceptualized in James’s theory 100 years ago.

Once again, in the Deweyan spirit, it might be helpful to ask some questions about how experience is classified in the contexts of our own places of work and other social institutions. Here, readers will benefit from choosing a specific, contemporary organizational setting that is significant to their own experience as a context for considering the following questions. First, how is language used to describe cognitive and emotive aspects of life in your organization? Try to recall specific events, conversations, emails, documents, or other forms of linguistic interaction. Are people, ideas, behaviors, or events classified as rational or emotional? Are they treated differently? What role or
value is assigned to each within the group? What assumptions seem to come along with classifying something by its rationality vs. its emotionality? Is either cognition or emotion placed over the other as a more valuable source of understanding in those situations? Do you think that different people within the organization might answer these questions differently? Whose voices, actions, and ideas are marginalized by being labeled emotional or resistance? Whose interests are served by maintaining a sharp distinction between: cognition and emotion; mind and body; intelligence and instinct; theory and practice? Does reflecting on Dewey’s concern with the classification of cognition and emotion within the context of your own experience make his theory more vital? How could you use his approach to make room for different interactions in situations close to you?

One area to build on this project might be to look more closely at how the treatment of cognition vs. emotion and ends vs. means relates to the pressure to keep up with and keep accelerating the pace of change. The treatment of emotion and cognition in Dewey’s (1934/2005) depiction of human experience is interwoven with his treatment of tempo and emphasis given to different parts of a process. Dewey linked the value assigned to accelerating the movement from one end to another with an overly cognitive, idealist approach to problems. Dewey (2005) emphasized the value of slowing down, spending time with the questions, seeking alternative ways of defining and coordinating experience, and resting-celebrating throughout the emerging process. According to Dewey, these approaches to social life were often categorized as more emotional-bodily. The emphasis placed on an ascetic, rationalization, and efficient means of production still seems to be an
underlying assumption in much of western organizational life (Carroll, 2007). The following questions might be somewhat tangential to the main emphasis of the current project, but they are not easily disentangled the flow of projects and problems that people in organizations face (Weick, 1995). In light of this project, further questions might be asked: Why does change seem to be speeding up? Is accelerated change predestined, materially determined, or otherwise assured or could something different be made of the situation? What is lost in a life that is defined by objective ends and accelerating the process of producing and acquiring them? Could room be made for slowing down, reflecting, playing, and creatively interacting with problems? Whose interests are served by the reification of emotion, cognition, attitude, knowledge, means, ends, play, work, process, and product within rational organizational structures?

Benediction

It did not seem to be appropriate to end this project with a rigid conclusion given Dewey’s treatment of the ongoing flow of means and ends. A benediction can be defined as a blessing or as a sending forth. As a ceremonial time marker it is both a conclusion and new beginning in which people are sent out, and the process of living continues. It seems to be a fitting way to mark this point in the project, for I hope that is not just an end, but also a means for practice - coordination of activity yet to emerge. This immediate hope is not just for me, but also a humble hope that in some way this phase of the problem solving process might be beneficial to other individuals, groups, organizations, and the research community. Having journeyed to this end with me, I hope that you will take some time to
celebrate, rest, and dwell on the questions instead of rushing to the next point. Perhaps it might lead us to a different place.
References


Toronto: Multi-Health Systems.


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APPENDIX A

Bredo’s Epistemological Model

Figure 1: Bredo’s (2006) Model of Epistemological Families

APPENDIX B

Epistemic Web

*Figure 2:* Epistemic web model: A snapshot of potential assumptions and plausible connections.

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Note: The model is offered as a snapshot of the social web of epistemological beliefs about how one comes to know that can be seen as shaping the psychological research community in this study. The solid lines depict stronger influences. Dashed lines represent oscillations or interactions. Names and birth dates are provided for reference purposes only. The model does not depict differentiation in certainty attributed to human understanding.

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APPENDIX C

Natural Developmental Psychological Model

Figure 3. A Darwin and James inspired model of the hierarchical classification of cognition and emotion in psychological research.
## APPENDIX D

### Lifespan Reference

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VITA

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