

Towards a Unified Clinical Science: A Critical Analysis of
Henriques' Unified Theory of Psychology
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Dedication

This work is dedicated to those whose collective investments have fostered in me the capacity and desire to achieve. To my family: without your support, encouragement, and love, I couldn't imagine coming this far. To Jenna: our graduate school years together have honestly been the best of my life, and I can't wait for all the post-graduate years to come. To all faculty and staff associated with the C-I program: thank you for your obvious commitment to training future generations of well-rounded psychologists. And finally, to Gregg Henriques, Ph.D.: your unique outlook on life, the universe, and everything has inspired my clinical practice and personal life philosophy. Thank you everyone!

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Abstract

Modern psychotherapy research has moved away from the dominance of single school approaches and towards systems that consolidate and unify the key insights of various theories. This paper focuses on defining the composition and scope of a new wave of psychotherapy integration – a unified clinical science (UCS) – and analyzing a new proposal for such a system. To achieve this goal, a brief history of psychotherapy is reviewed with special attention given to the psychotherapy integration movement. Then, the call for a new wave of integration – a UCS – is presented along with five domains and ten criteria that define its scope and composition. The next two sections focus on reviewing a novel system of integration – Henriques’ Unified Theory of Psychology (HUTP) and conducting a preliminary analysis of its fit with a UCS. In order to better understand HUTP’s connection to psychotherapy, the next three sections review three integrative modalities – Schema Therapy, Cyclical Psychodynamics, & Dialectical Behavior Therapy – and focus on making connections between each with HUTP. In the final section, HUTP is again reviewed as a UCS proposal and future directions are offered. Ultimately, this paper will establish a framework for assessing UCS proposals and will use said criteria to assess the viability of a promising new system.

Chapter 1: History and Scope of the Psychotherapy Integration Movement

It has undoubtedly happened many times. Newly admitted psychology graduate students eager to develop their professional competencies and identities arrive to their first day of classes with open minds and heavy textbooks. As is often the case, their training begins with an introduction to psychotherapy class where many will have their first exposure to the diversity, complexity, and fragmentation of this field for the first time. Their undergraduate training may have taught them that psychotherapy was simply about going to a therapist and talking through one's problems, but as they dive deeper into the theoretical pool, they begin to realize that this tool, the "talking cure", is far more complex than that.

This first exposure to psychotherapy can be a confusing and overwhelming experience for any graduate student and, for many, unanswered questions will abound. How does one choose *the* theory they will adopt as their own? Why are some theories championed above others as being *the* theory that says the most about human functioning? After all, don't all of the major schools have something to contribute? How do therapists know that what they choose will actually work for their clients? Finally, with so many choices, can one just be eclectic and adopt them all?

I recall now, with dismay, my first day as a graduate student in an introduction to psychotherapy class, when my first exposure to the fragmentation of psychotherapy made itself uncomfortably present. Our professor declared that we had to choose a single approach for ourselves by the end of the semester, and that declaration elevated my anxiety and had my mind racing with questions for days to come. Why, with so many approaches to choose from, couldn't a student of psychotherapy sample from each like a

buffet at a restaurant? After all, aren't we all practicing the same discipline with the same training in the same field? Why is it that so many students in psychology are asked to pick a side to call their own and defend it at all costs? And, most importantly, is this how experienced therapists actually practice outside the havens of academia?

Answers to these questions require an understanding of the origins and development of psychotherapy as a profession and science. Although there are innumerable variants, by painting with broad brush strokes one can view psychotherapy as existing within five primary schools of thought: psychoanalysis/psychodynamic, behavioral, cognitive, humanistic, and family systems. Each of these schools operates from a distinct set of assumptions and appears to offer a relatively unique starting point to understand the complexities of human psychology. Of these schools of psychotherapy, the first four – psychodynamic, behavioral, cognitive and humanistic – are approaches that focus more on the individual levels of analysis. The fifth approach, systems theory, begins its analysis at the level of the group and takes a more “top-down” perspective, starting with relationships among people (e.g., families, dyads), and extending downwards into an individual's psychological structure. Although I will explore the role of systems theory in some detail at various points, most of the discussion will center primarily on the relationship and integration of the individual approaches to human psychology and psychotherapy.

The Single School Approaches to Psychotherapy

The emergence of psychotherapy is initially characterized by the development of individual schools of thought. Each of these schools offers a theory of human functioning that is largely influenced by underlying philosophical assumptions, the type

of mental or behavioral phenomena that it addresses, and its primary area of focus along the continuum of human functioning. Although many clinicians still pledge allegiance to a single school approach today, many theorists agree that each school has several key insights to offer about the human condition. These key insights will be discussed in the following sections.

Psychoanalytic/Psychodynamic Therapy

Psychoanalysis, the first major school of psychotherapy, focused on the primitive desires and urges of humans and how the mind develops over time to regulate these with respect to a social world. It began in the late 19th and early 20th century as Sigmund Freud, a neurologist by training, noticed that many of the patients that he worked with expressed a number of unusual psychological symptoms that were difficult to explain in physiological terms. The dynamic interplay between the physical and psychological formed the basis of psychoanalytic psychology, and Freud's interest in these phenomena led to his later formulations of a number of theories regarding the intrapsychic structure of human beings. It should be noted that although the terms "psychoanalysis" and "psychodynamic" are often used interchangeably in scholarly literature, "psychoanalysis" represents a unique system of therapy created by Freud and his followers, whereas "psychodynamic" reflects a field of inquiry and therapeutic methods interested in exploring a wide array of processes and phenomena, which include the role of early childhood in emotional development, unconscious or subconscious motives, emotions and needs, dreams, defense mechanisms and internal conflicts. While the two are separate in nature, both are often considered the same and "psychodynamic psychology" is commonly viewed as a modern update to classical psychoanalysis.

Although Freud is clearly identified as one of the primary *founders* of psychoanalysis, pinpointing a *date* at which this field definitively began is more difficult due to the constant revisions and multiple interpretations made by the leaders within this discipline. However, as suggested by Arlow (2005), the first written text on the subject of psychoanalysis may have been the 1895 work “Studies on Hysteria”. Authored by Freud and Josef Breuer, a fellow physician with an interest in hypnosis, it was argued that undischarged emotions resulting from traumatic events could lead to a number of maladaptive psychological symptoms, a condition they later termed “hysteria.”

As early psychoanalysis refined its form and function, a number of key insights emerged. Perhaps the most accessible insight of the psychoanalytic and dynamic theories is the role of early childhood on personality development. From the outset, Freud adopted a deterministic perspective on human development after recognizing that the biological predispositions of the person, compounded by their early developmental experiences, greatly influenced their overall psychological presentation in adulthood. He contended that the most powerful influence on one’s development were sexual tensions and proposed a developmental model that included five psychosexual stages of childhood. While many in the field today object to Freud’s emphasis on sex, there appears to be relative consensus in the assertion that early experiences do influence the developmental and psychological trajectory of an individual and contribute greatly to one’s personality and self-identity.

Another guiding construct for early psychoanalysis was that of the pleasure principle. Arlow (2005) summarizes the pleasure principle as

...the idea that human psychology is governed by a tendency to seek pleasure and avoid pain. Such responses derive from the biological inheritance of human beings and must have been of evolutionary significance in the struggle of the species to survive (p.17).

While Freud's knowledge of evolutionary theory was somewhat limited during his time, it can be argued that this fundamental drive served as a foundation from which to understand many of the complex self-environment processes championed by psychoanalysis. Freud himself viewed this drive, which is largely outside conscious awareness, as sort of an "economic" principle: that is, that the mind makes calculations designed to avoid future losses (and the experience of displeasure) and to maximize the potential for pleasurable gains. By his interpretation, displeasure referred to "an *increase* in the quantity of excitation" found in the mind (Freud, 1961, p.4). While Freud's meaning of "excitation" is unclear, it would later correspond to the state of psychophysiological arousal, known as anxiety, which became prominent in modern psychodynamic theory.

Another of Freud's seminal developments was the topographic theory of consciousness, which proposes that consciousness can be subdivided into three domains: 1) consciousness, which consists of stimuli and events that are immediately in one's awareness; 2) preconsciousness, which consists of mental events that are accessible when attention is diverted to them, and 3) unconsciousness, where primitive drives like those of the pleasure principle reside (Arlow, 2005). For Freud, it was the unconscious that harbored all of the primitive, instinctual processes that might lead to intrapsychic conflict and distress. Furthermore, he argued that the unconscious is inaccessible by traditional

means (e.g., talking), giving credence to the idea of having a trained analyst record and later interpret the meaning of a patient's free associations and dreams. This layering of mind helps provide a framework for understanding why mental events that operate somewhat outside of one's immediate awareness (preconsciousness) can be accessed with concerted effort (consciousness) or may influence one's thoughts, feelings, and behaviors without any recognition whatsoever (unconsciousness).

Related to the topographical model of consciousness is Freud's other major model of mental activity, the structural theory of the mind that consists of the ego, the id, and the superego. The id houses primitive, innate desires, most notably sexual and aggressive urges that seek discharge or expression, the technical term for which is cathexis. The ego is a more advanced portion of the mind that attempts to channel the impulses of the id in adaptive ways. Finally, the superego houses the rules and proscriptions for appropriate behavior from a societal perspective. Pain and pleasure impulses have been theorized to originate in the id and represent primitive, instinctual states that guide an animal's behavior. Humans, however, cannot simply submit to all of these primitive states as they also have to live in a social world full of laws, regulations, taboos and norms. As such, the ego evolved to mediate between the pleasure-seeking world of the id and the demands of one's social environment. The job of the ego, then, is to maintain a socially justifiable position (Swanson, 1988). The job of the superego, however, is the development of a moral conscience that functions less to maintain a socially justifiable position and more to answer "what kind of life *should* I lead?" Thus, in psychoanalysis, the connections between the ego, the id, and the superego represent a complex interplay of unconscious, instinctual impulses related to the pleasure principle (the id), preconscious reality testing

and the mediation of pain and pleasure impulses (the ego), and superimposed rules and societal principles that form a moral conscience (the superego) (Freud, 1960).

Understanding the connections between the topographical theory of consciousness, the structural theory of mind and the pleasure principle yields several important insights about human behavior, most notably that there will be conflicts between various portions of the human mind and that much of what is expressed overtly is a function of processes occurring beneath the surface. The following quote from Anna Freud (1992) captures how the analysts focus on these processes.

The defensive situation with which we have been longest familiar in analysis and of which our knowledge is most thorough is that which forms the basis of neurosis in adults. The position here is that some instinctual wish seeks to enter consciousness and with the help of the ego to attain gratification. The latter would not be averse to admitting it, but the superego protests. The ego submits to the higher institution and obediently enters into a struggle against the instinctual impulse, with all the consequences which such a struggle entails (p. 54-55).

To illustrate these dynamics, imagine a 15-year old boy, Gary, raging hormones and all, desiring to become sexually intimate with a similarly aged girl in his class. At a primitive level, fueled by testosterone and a burgeoning sexuality, he experiences a flood of graphic images related to becoming intimate with this girl and having his instinctual needs met. However, if he were to overtly act on these images, there would be quite serious social repercussions. Impulsive behaviors that lead to a violation of personal boundaries put him at serious risk for physical retaliation (e.g., a stern slap on the face),

which certainly can be seen as displeasing. Furthermore, the violation of social rules and values, like the failure to inhibit inappropriate sexual advances, may result in significant shame, loss of personal freedom, or even threat from authority figures. Fortunately for our young boy, his ego (although still developing) allows his mind to stay connected with this social reality and helps him to predict the negative consequences of acting on his impulses, thus, leading to an inhibition of his desires. His growing superego, full of moral rules like “do unto others as you would have done unto yourself” and “good boys act like gentlemen to girls” may also help assist his ego with the repression of his sexual urges.

For Gary, the sexual desire he experiences activates a tremendous amount of “libidinal energy” in him. His ego and superego quickly remind him that impulsively acting on his desire would be wrong and serious consequences may result from those behaviors. Possessing strong but unjustifiable sexual urges may lead Gary to feel a significant amount of anxiety, a psycho-physiological state that alerts people to potential threats. In the case of Gary, one potential threat may be that others may somehow see him as having these unacceptable thoughts and that he will be punished for it. His anxiety, therefore, directs him to inhibit or repress his desires.

Freud theorized that anxiety plays a crucial role for the ego’s mediation of the instinctual wishes of the id. As Wachtel (1993) explains, Freud initially viewed anxiety through what came to be known as the “hydraulic model.” In this model, the repression of unacceptable urges back into the id eventually led to the buildup of an immense pressure, and anxiety was seen as the consequence of this pressure, a form of residual energy discharge. Later in his career, however, he shifted his perspective to see anxiety

as the *cause* for repression and other defensive strategies. Specifically, anxiety serves as a warning signal of sorts indicating that an undesirable urge has been insufficiently inhibited and thus, poses the danger of being expressed to self and others.

Surely, the threat of having an unjustifiable desire will disturb one's intrapsychic equilibrium and raise the level of anxiety. In this light, anxiety can be adaptive. For example, imagine if Gary lacked the capacity for anxiety. For him to openly express his deepest desires without any signal (e.g., anxiety) indicating that doing so might be problematic would undoubtedly place him in many undesirable situations. While anxiety certainly is an effective attention-grabbing tool, it fails to offer guidance on how to respond to intrapsychic threats. What, then, do people do once they've been alerted to an unjustifiable desire?

In searching for an answer to this question, Freud theorized the existence of strategies for anxiety control that he called defense mechanisms. Defense mechanisms, such as repression, come in a variety of forms, yet all function to inhibit, separate oneself from, or channel into other areas, anxiety laden impulses and feelings. It should be noted that these strategies can be either adaptive or maladaptive depending on the circumstances for defensive responding. For example, Magnavita (2005) highlights four classes of defensive responding that have been identified in psychoanalytic research: the maladaptive classes of psychotic, immature, and neurotic responses and a healthier, more adaptive class of mature responses.

In modern psychodynamic theory, the Malan Triangle of Defense (see Figure 1.1) helps to illustrate the interplay between undesirable wishes, anxiety, and the use of defensive responding. Unlike the "hydraulic model" initially proposed by Freud, the

Triangle of Defense views anxiety as a signal of threat that undesirable wishes or desires have somehow leaked from one's unconscious mind. As these desires enter consciousness, anxiety alerts the ego and calls it into action. The ego, then, employs any number of defensive strategies with the intent of repressing, distancing oneself from, recasting, or rechanneling the undesirable wishes. If these strategies are successful, then the anxiety diminishes and the ego can return to a state of rest. However, if the defense mechanisms do not work, then the person remains activated by the anxiety and has to live with its uncomfortable presence until other defensive strategies work or the threat of the undesirable wish fades (Malan, 1999).

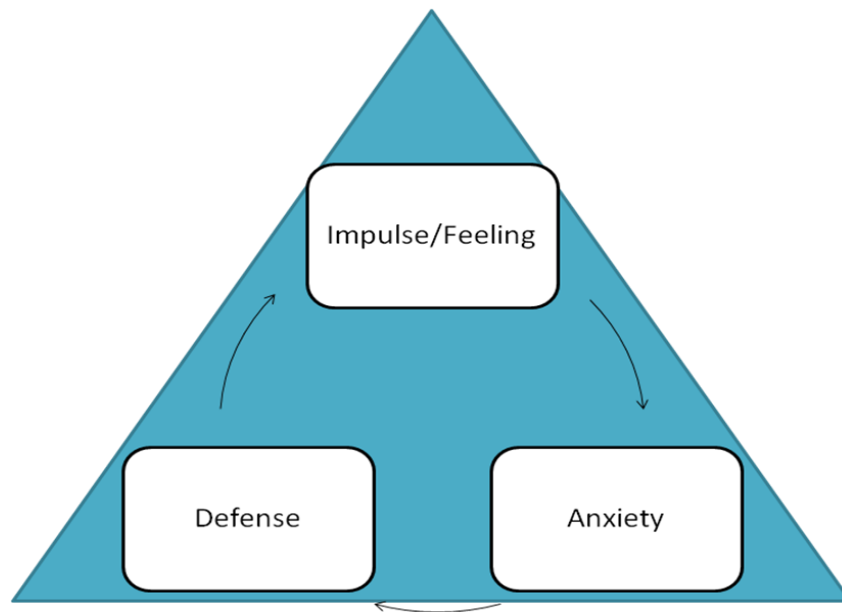


Figure 1.1: Malan (1999) Triangle of Defense

Consolidating across these perspectives, the key insights of the psychoanalytic and psychodynamic therapies can be summarized as follows:

1. The human mind is organized topographically into three strata of awareness: unconsciousness, preconsciousness, and consciousness.

2. The unconscious harbors many primitive and instinctual impulses that emerged from evolutionary pressures for survival and adaptation, including those related to sex and aggression.
3. Because society values (to varying degrees) the inhibition of some of our most primitive impulses (e.g., sex and aggression), these social demands necessitated the emergence of a cognitive structure that calculates the risks and rewards of expressing certain desires and helps to inhibit these impulses when the risk for loss is great.
4. Though humans are motivated to seek out pleasurable experiences (as indicated by the pleasure principle), the human mind is designed to compute risk vs. reward calculations before acting due to the demands of the external social environment (as indicated by the reality principle). Because people are motivated to avoid personal loss, the calculation of greater risk than reward leads to an experience of displeasure. Conversely, when rewards are greater than risk, one is compelled to act and feels pleasure when achieving their goal state.
5. When unjustifiable impulses, thoughts or images enter into one's awareness, they trigger signal anxiety. This anxiety serves alerts the ego to employ specific defense mechanisms, which are strategies for managing any threatening cognitive stimuli.
6. Personality and identity are tempered by the strategies that one learns for the management of threatening impulses and feelings (the ego), their developmental trajectory, and unique childhood experiences.

Behaviorism

Behaviorism began in the early 1900's and grew in the early part of the 20th century in American academic psychology as psychoanalysis became increasingly popular in psychiatric practice. Unlike its psychoanalytic counterpart, the behaviorist approach was fueled by a desire to focus primarily on the objective, measurable study of human behavior. By the 1950's, a growing discord with psychoanalysis' inadequacies provided the spark necessary for behavioral principles to be delivered in a therapeutic fashion. Adopting a third-person perspective of the world, behaviorism deemphasizes the focus on subjective, inner mental states and calls for attention to observable and measurable human behaviors. In essence, behaviorists promote an attitude of experimental, rather than theoretical, analysis of human (and animal) psychology.

Although behavioral therapy as an applied science didn't gain momentum until the 1950's, behaviorism, as a philosophy of scientific inquiry, has thrived since modern psychology's beginnings in the early twentieth century. John Watson, who is considered by many to be the father of behavioral psychology, pioneered early research of animal behavior and helped to establish the attitude of researching only that which could be measured: behavioral responses. This attitude diverged from typical methods for psychological investigations at the time (e.g., introspection) and sought to establish an objective, empirical system of measurement similar to that of other scientific disciplines like physics and biology. Other early researchers in behavioral science include E.L. Thorndike, whose "Law of Effect" findings highlighted the role of pleasure and displeasure for learning processes, and Dollard and Miller (1950), whose work on the

relationship between conditioning and psychoanalytic theory helped provide an initial linkage between Freud's emphasis on internal drives and learning principles.

In 1904, the Russian physiologist Ivan Pavlov won the Nobel Prize for his research in a field later termed classical conditioning. Originally conducting research on the gastric functioning of dogs, Pavlov observed that when a neutral stimulus (e.g., a bell) was paired with stimulus that induced a natural response (e.g., meat and salivation) over a period of time, that neutral stimulus could be shaped to produce a response through principles of learning (e.g., salivation to a bell tone). After many trials and extensive record keeping, Pavlov began his formulation of classical conditioning. These groundbreaking observations had large clinical implications for the field of psychology as they provided a unique framework to understand the etiology of many mental illnesses. For example, phobias, which involve an intense and irrational fear of a particular stimulus like rats, spiders, or social situations, could be explained in classical conditioning terms. When stimuli that do not naturally produce a fear response, like the presentation of a rat, are frequently paired with stimuli that do produce a fear response, like mother shrieking in terror, classical conditioning principles of learning can produce a fear response towards the neutral stimulus. Over time, with reinforcement and the expectancy of displeasure, a phobic reaction is learned. To illustrate, consider the groundbreaking, yet controversial experiment in which psychologist John Watson used classical conditioning principles to induce a fear of furry mammals in a young child known as Little Albert. In this experiment, he paired a loud noise, which naturally produced a fear reaction, with the presentation of a white rat to the infant. Over

successive trials, Little Albert learned to fear not only rats, but any small, white animals that were similar to the rat (Hock, 2005).

In the 1930's, B.F. Skinner spearheaded a movement that became known as radical behaviorism. This form of behaviorism began the move away from the basic principles of stimulus-response conditioning and towards an understanding that many behaviors are the product of a dynamic animal-environment relationship. Unlike other models of behaviorism, mental events (e.g., thoughts and imagery) were addressed by this system, but were seen as private forms of behavior.

Stemming from Thorndike's "Law of Effect" research, Skinner observed that the behavior of all animals, humans included, is influenced by what he called operants, or stimuli that actively influence the likelihood that a behavior will occur again. These operants are the environmental effects that occur as a result of certain animal behaviors and reciprocally influence future behavioral outputs. From this perspective, animal behaviors that produce certain effects are selected for (reinforced), whereas those that fail to produce certain effects are selected against (extinguished). These processes compound across the lifespan of the animal (ontogenetically). On this topic, Henriques (2003) remarked that "Skinner's brilliance was that he realized that the ontogenetic evolution of behavioral complexity could be conceptually modeled in precisely the manner in which Darwin explained the evolution of biological complexity" (p.158).

In the late 1950's, Albert Bandura began his work developing the principles of observational learning, or learning through the observation of other's behaviors. Bandura noticed that many individuals, in particular children, learn by watching others and observing the consequences of their behaviors. Specifically, Bandura noted that

observational learning occurs through four stages: attention to another person's behavior and the consequences, retention and storage of a mental model of the behaviors, reproduction of the behaviors stored in the mental model, and motivation to exhibit or inhibit the observed behavioral responses. Similar to Skinner's principles of behavioral selection, those observed behaviors that produce a satisfactory outcome are most likely to be replicated and reinforced, and those that produce an unsatisfactory outcome are more likely to be extinguished before replication ever takes place (Evans, 1989).

As an expansion of Bandura's observational learning, social cognitive theory posits that people are not shaped by the observation of their environment alone but are also guided by cognitive mediational processes that influence the role of observational learning. It is argued that one's morality, as determined by exposure to moral behaviors, intrapsychic development and existing belief systems, helps guide the cognitive selection of behaviors to replicate. Additionally, identification with the role models who exhibit specific behaviors and the perception of the degree to which one is able to reach their goal influences (known as self-efficacy) influence the expression or extinction of observed behavioral responses. On self-efficacy, Bandura (1989) writes:

People tend to avoid activities and situations they believe exceed their coping capabilities, but they readily undertake challenging activities and select social environments they judge themselves capable of handling (p. 1178).

Influenced largely by Pavlovian, Watsonian, and Skinnerian principles of behaviorism, behavioral therapy attempts to offer improvement through the restructuring of many maladaptive behavioral patterns that patients engage in. At the core of this

therapy is the belief that when client's experience an array of negative symptoms, the cure comes in the form of behavioral modification; in essence, that maladaptive behavioral patterns and "habits" underlie negative symptoms. Wilson (2005) argues that the "three main approaches in contemporary behavior therapy include (1) applied behavior analysis, (2) a neobehavioristic mediational stimulus-response model, and (3) social-cognitive theory" (p. 203).

Applied behavior analysis is a direct extension of Skinner's work on operant conditioning and involves the analysis and altering of the relationships between overt behaviors and their consequences. Fundamental to applied behavior analysis is the assumption that all behavior is a function of its consequences. Typical applications of applied behavior analysis have occurred in school systems, hospitals, and in the context of outpatient therapy and consultation, particularly with regard to parenting issues.

The neobehavioristic mediational stimulus-response model emphasizes that stimuli first go through an organism's cognitive mediational system *before* a response is elicited. This model has been most associated with the treatment of anxiety disorders and assumes that many current fears have been established through principles of classical conditioning. Specific approaches that have emerged from this model include systematic desensitization, which involves the gradual exposure to a feared stimulus to extinguish the fear response, and flooding, which involves the automatic exposure to a feared stimulus and assistance with coping. These approaches have been empirically-validated for the treatment of several anxiety disorders, especially phobias.

Social cognitive theory assumes that people do not simply respond to their environment with behavioral responses alone, but that they filter their environment

through a complex cognitive system and make behavioral choices based on their *expectations* of the outcomes. To contrast with the other theories of behaviorism, an assumption was made that when an organism interacts with its environment, the behaviors that are expressed are responses to the environmental stimuli. Later, behavioral responses are either selected for (reinforced) or selected against (extinguished) depending on their consequences. Thus, in classical behaviorism, learning and behavioral modification are seen as largely mediated by the external environment and consequences.

In social learning theory, a shift is made to implicate the importance of an organism's cognitive system and it is assumed that behaviors are *determined* by the organism before they are expressed because of outcome *expectancies*. In other words, the organism is an active agent of change and makes determinations about the outcomes of its behaviors before those behaviors are actually expressed. Because of its emphasis on the role of cognition, social learning theory became the lynchpin that tied together classical behavior therapies and cognitive therapy. The merger of these two systems, known as cognitive-behavioral therapy, has become one of the most researched and empirically-validated systems in modern day psychotherapy.

Vicious circles, a construct often used in cognitive-behavioral therapies, are considered to be self-reinforcing patterns of behavior and thought that lead to maladaptive outcomes. From a behavioral standpoint, these circles often begin as an individual experiences a failure in a particular situation that leads to a significant amount of discomfort. Because of these experiences, that same individual, when anticipating a similar encounter in the future, may choose to avoid the situation altogether. This

avoidance behavior, in the short-term, is very reinforcing as the client does not have to encounter their fears. However, in the long run, such avoidance behavior leads to impairment in the client's ability to cope with similar circumstances and makes future encounters more anxiety-producing and feared (Wachtel, 2008).

To illustrate the role of vicious circles, imagine a young couple, Bill and Wendy, who have difficulties in communicating with one another. On their Monday ride home from work, Wendy suggests to Bill that they visit with their in-laws that weekend instead of staying at home. Internally, Bill feels unhappy with this choice: it will be a hard week, visiting the in-laws requires a lot of patience on his part, and he would like to do nothing else than lounge around in the comfort of his own home next weekend. However, he is also afraid that if he says no, Wendy will be disappointed and see him as selfish. Thus, he tells Wendy "yes" while internally feeling furious that she would even come up with such an idea.

All throughout the week, Bill's anger towards Wendy increases as the demands at work are loaded on. "How dare she decide my weekend for me? I work hard, and I deserve to do whatever I want on the weekend!" he says privately. On their Thursday ride home, Bill decides to let Wendy know about his growing discontent with their weekend plans, hopeful that she will allow for the last-minute change. Wendy lashes back, angry that Bill would harbor his resentment for so long without telling her and for being so self-centered; after all, planning the trip to the in-laws required work on her behalf and this is just another example of Bill placing his own needs above the relationship. Bill, seeing the error of his ways experiences a significant amount of shame for his behaviors and thinks "if only I just sucked it up and went along with the plans, we

wouldn't have any problem here. My mistake was that I told her about my feelings in the first place.” An important lesson has been learned here, and Bill is paying the price.

A few weeks later, Wendy again suggests plans for the weekend that are unsuitable to Bill. This time, Bill is afraid to tell Wendy no because she may see him as self-centered and uninvolved in their relationship and Bill decides to “suck it up” and go along with her plans. Although he is unhappy, his anticipation of the negative consequences he might experience outweighs the desire to voice his true feelings on the matter and thus, a vicious behavioral cycle has developed. Bill feels trapped and that he can't say no to Wendy; however, it is because he won't say no and harbor negative feelings instead that Wendy becomes upset with him. For Bill, the fear of Wendy's disappointment and the short-term consequences that follow leads to an avoidance strategy that ultimately maintains his distress.

In sum, the key insights of behavioral theories may be stated as the following:

1. An individual's development is guided by learning processes like classical conditioning (stimulus-response), operant conditioning and social learning.
2. The expression of behavioral responses, over time, can directly influence one's beliefs about self and the world. Additionally, the observation of behaviors in role models can be adopted by the individual and become a part of their belief system.
3. In a process similar to that of natural selection, behavioral patterns that are commensurate with ancestral inclusive fitness are selected for, whereas those behaviors that are not are selected against.

4. Much of pathology stems from maladaptive behavioral patterns that the client develops in response to challenging situations. Behavioral patterns that were once adaptive in nature (i.e. dissociation when sexually abused) can become maladaptive if they fail to adjust to changing circumstances in life (i.e. dissociative patterns in adulthood).
5. Maladaptive behavioral patterns known as vicious cycles appear when the anticipation of negative outcomes, based in past experiences, leads to coping strategies that alleviate stress and anxiety in the short-term but add to it in the long-term.
6. Behavioral therapies seek to alleviate the distress caused by maladaptive behavioral patterns through reconditioning with such techniques as systematic desensitization, flooding, and aversive conditioning.

Cognitive Therapies

For many classically-trained clinicians, it became apparent that humans weren't simply beings driven by their unconscious desires and goal-states, nor were they simply "mindless-machines" whose behaviors were driven by shaping and learning principles alone. Rather, it is obvious that when clinicians engage in talk-therapy with their clients, they achieve access into a complex inner world of justifications, rationalizations, self-dialogue and belief systems. It was this refocusing on the ways that people actively seek to make meaning of their various experiences through the construction of thoughts and belief systems that fueled the cognitive psychotherapy movement.

The cognitive therapy movement didn't formally emerge as a dominant school of psychotherapy until the 1980's. This movement is marked by three prominent and

influential systems. First is Aaron T. Beck's cognitive therapy, which includes a complex model for understanding how people actively think about and make meaning of their life experiences. A second and perhaps earlier model was Albert Ellis' rational therapy (later termed rational-emotive behavioral therapy, or REBT). Finally, the recent blending of insights from cognitive and behavioral systems represents the third major force of cognitive-behavioral therapy.

Ellis' first article on REBT addressed a divergence away from typical psychoanalytic and behavioral methods and a push towards actively challenging individual cognitions and belief systems (Ellis, 1957). Later formulations of Ellis' system included the development of a reciprocal feedback system by which activating events, such as trauma, are judged and analyzed by a person's cognitive belief systems and later influence the behaviors of the individual as a response. This model is often presented using the simple acronym of ABC, where A refers to the activating event, B refers to one's belief system and cognitive processes, and C refers to the consequences as a result of the activating event. Ellis proposed that because one's cognitive belief system mediated their behavioral response to activating events, intervention should occur by actively analyzing and correcting one's thought processes about the event.

Aaron T. Beck was trained in psychoanalytic methods and had an interest in researching the course of treatment for patients with clinical depression using a psychoanalytic framework. What he noticed, however, was that these individuals presented with a negative bias in their cognitive framework and that, in many ways, this negative bias seemed to create and exacerbate their depressive symptoms. Armed with

his own unique insights, Beck formulated a cognitive model of depression that served as a foundation for cognitive psychotherapy (Beck & Weishaar, 2005).

Cognitive therapists believe that the way one thinks about the world largely defines their existence. Put differently, how one thinks about their world and self influences their behaviors and emotions which reciprocally shape their worldview and future behaviors. With this premise, cognitive therapy focuses on analyzing one's thoughts to determine the degree to which they are adaptive or maladaptive. This is done first by helping the client to gain awareness of their thoughts through self-reflection and structured therapeutic exercises, and then by assessing those thoughts by asking two fundamental questions: are these thoughts helpful for my current situation and are these thoughts an accurate reflection of reality? For thoughts that are deemed maladaptive or unrealistic, the therapist offers restructuring exercises to change the client's thought patterns to help them better adapt to their current context (Beck, 1995).

Somewhat analogous to the topographical theory of psychoanalysis, cognitive therapy possesses a hierarchical arrangement of deepening layers of thoughts about self and the world. According to this framework, automatic thoughts are the most shallow and immediate when encountering a problematic situation. These thoughts are often the most accessible in cognitive therapy and are assessed according to their validity and utility. At a deeper level of a person's psychological experience reside intermediate beliefs. These beliefs are composed of rules, attitudes and assumptions about self and the world in general. In cognitive therapy, these beliefs are often identified as "if, then" statements. For example, in response to obtaining a "C" on an exam, an overachieving

student may think “if I don’t earn an A on my exam, then I am a failure as a student” (Beck, 1995).

At the deepest level of one’s cognitive experience reside core beliefs, which are defined as those that are “...one’s most central ideas about the self. Some authors refer to these beliefs as schemas” (Beck, 1995, p.166). These belief systems are described as formulated during the earliest stages of childhood, reinforced throughout one’s development, and often existing outside of the conscious awareness of an individual. In a sense, core beliefs compose the self-identity of the client and remain largely unexplored outside of cognitive therapy.

According to the cognitive framework, core beliefs serve as the primary driving forces behind adaptive and maladaptive beliefs, emotions and actions. It is the primarily unconscious core beliefs that fuel the development of intermediate beliefs and the activation of automatic thoughts, and this process in turn influences the emotional experience and behavioral patterns that a person engages in. For many individuals, this process is cyclical in nature, as one’s thoughts influence their emotions and behaviors, which reciprocally reinforce their existing beliefs and thoughts about self and the world. Because of this, cognitive therapy is conducted using three stages, commonly presented as “catch it, check it, and change it.” “Catch it” refers to gaining awareness of one’s automatic thoughts and intermediate beliefs. Because this is difficult for many clients to accomplish, homework activities like thought journals are often assigned to deepen the client’s awareness of their cognitive world. “Check it” refers to assessing one’s thoughts along two dimensions: validity, or how accurately the thought reflects reality, and utility, or the degree to which a thought promotes the client’s desired goal-state. Finally,

“change it” refers to the restructuring of maladaptive thoughts and beliefs into those that are more valid and/or useful.

To illustrate cognitive therapy in action, consider the case of Jane, a 21-year old Caucasian female with an extreme dissociative coping response. Throughout her childhood, Jane had endured a pathological mother with an authoritarian parenting style who emphasized, to an extreme degree, values such as self-sufficiency and the inhibition of emotions that signaled weakness or vulnerability. As an individual with a labile temperament, Jane was predisposed to be particularly vulnerable to negative emotions and reported that she would cry every day throughout her childhood. As a result, her authoritarian mother would dismiss her emotionality as a character flaw and scold her for her vulnerability, often using such statements as “suck it up.” As a primitive way of coping, Jane developed a dissociative response to emotionally-charged events in order to numb herself and avoid further punishment and agony from her mother.

Jane had been seen for a period of approximately one year in therapy using a cognitive approach. During this time, Jane exhibited a maladaptive thinking style that was characterized by an inflexible and rigid processing style. It became apparent during the course of therapy that when activated by problematic situations, Jane’s automatic thoughts were either black and white (e.g., “my roommate asked me to wash the dishes, she’s an unreasonable bitch!”) or catastrophic (e.g., “I got an F on my last exam, I’m never going to graduate and I’ll have to live at home for the rest of my life”) in nature. A further analysis of her cognitive structure revealed maladaptive intermediate beliefs about self-other relationships (e.g., “If I try to hang out with others, then they’ll see what a failure I am”) that were fueled by core beliefs that spoke to her beliefs of unlovability and

unattractiveness to others because of her perceived defectiveness. These beliefs and thoughts, in turn, led to a significant degree of interpersonal impairment characterized by the avoidance of others, increasing isolation and a profound social awkwardness.

Furthermore, these thoughts and behaviors reinforced her core beliefs of defectiveness and triggered an immense amount of shame and anger, which only served to isolate her more and reinforce her negative belief system.

In the course of cognitive therapy with Jane, a significant amount of time was spent helping her logically analyze the automatic thoughts and intermediate beliefs that followed distressing events in the past week. The situation would be explained and she would then describe her emotional state, accompanying behaviors and the outcome of the situation. Then, her automatic thoughts and intermediate beliefs would be recorded and analyzed with regard to their validity (accurate reflection of reality) and utility (usefulness to promote a desired outcome). Those thoughts and beliefs that were decided to be inaccurate or useless would then be reformulated to be more accurate and useful. Over time, this systematic process in the therapy room was somewhat internalized by Jane and served as a useful framework to guide her thinking, feeling and acting during emotionally-charged situations. An exploration of Jane's core beliefs of defectiveness also proved useful to guide Jane's understanding of herself and the developmental challenges that she continued to face.

To review, the key insights that can be derived from cognitive theories may be described as the following:

1. All events are processed through a cognitive mediational system that interprets situational variables and informs future behavioral responses. The thoughts that

one develops in response to an event directly influences the behaviors they choose to exhibit. The degrees to which those thoughts are accurate and useful interpretations of the world have significant impacts on the client's functioning and are the focus for cognitive restructuring.

2. Cognition, behavior, and life experiences combine developmentally to form complex belief systems that guide the actions of the individual. These belief systems are often self-sustaining in the sense that they filter out information that is inconsistent with the belief system and encode information that affirms existing beliefs.
3. Errors in thinking can be implicated for some types of psychological distress. These errors in thinking can be evaluated across two domains: (1) the degree to which one's thoughts are an accurate reflection of reality and (2) the degree to which one's thoughts are adaptive for their current context.
4. In contrast to the emphases on unconscious drives or the role of learning principles, cognitive psychotherapy focuses on the active processes of the mind involved with developing beliefs about the relationship between self and environment. Of particular interest to cognitive therapists are the rationalizations, justifications, and belief systems that clients have and how these inform and shape their personality, worldview, and overall functioning.
5. Cognitive therapy operates on a "catch it, check it, change it" model, where the client's awareness of their thoughts is emphasized (catch it), these thoughts are assessed relative to accuracy and utility (check it), and maladaptive thoughts are replaced with adaptive ones (change it).

Humanistic/Client-Centered Therapies

Humanistic psychotherapy, which is grounded in the existentialist philosophies of the nineteenth and twentieth centuries, emerged in the 1950's as a counter-movement to both psychoanalysis and behaviorism. Although both of these schools offered significant insights about the human condition, humanists felt that conditions that were uniquely human, like self-actualization, creativity, and existential issues, were often neglected in psychological science. Furthermore, humanistic therapists rejected the systematic and impersonal nature of psychoanalytic and behavioral therapists and sought to develop techniques that injected the client-therapist with more warmth, nonjudgmental caring, genuineness and empathy. Finally, humanists felt that the directive, professional stances of previous systems of psychotherapy were not conducive for real change and believed that clients possessed the capacity for self growth.

Prior to the development of client-centered approaches, Abraham Maslow presented a hierarchy of human motivations and needs in his 1943 paper "A Theory of Human Motivation." Maslow's hierarchy of needs, as it would later be termed, outlined those needs that would activate motivational states, beginning with the most basic (such as food and water) and ending with the highest attainable state: self-actualization. In his model, self-actualization would refer to a number of existential-like traits, including acceptance, creativity, a lack of prejudice and morality. The human need to move towards self-actualization would later serve as a fundamental tenet of the humanistic therapies (Maslow, 1943).

At the core of the humanistic approach to therapy are three concepts: congruence, unconditional positive regard, and empathy. These three concepts underlie the formation

of an effective therapeutic alliance that is based on trust and respect and honors the autonomy of any given client. Congruence refers to a genuine connection between therapist and client. Unlike other forms of psychotherapy, where the therapist's personal thoughts and feelings may be masked, client-centered therapies promote the revealing of this private world to the client in order to provide the reciprocity found in most healthy human relationships. This does not mean that the humanistic therapist must reveal intimate details to his or her client; rather, the therapist models appropriate boundaries while refraining from hiding behind a professional façade (Raskin & Rogers, 2005).

A nonjudgmental attitude is also a central concept in humanistic therapy. Unlike psychoanalytic and behavioral therapies, where the emphasis is on the correction of pathology (and thus, a value on human functioning is affixed), humanistic therapists promote *unconditional positive regard*. Raskin and Rogers (2005) elaborate on this concept by stating:

This means that the therapist accepts the client's moment-to-moment thoughts, feelings, wishes, intentions, and descriptions of him- or herself and others as unique, human, and appropriate to the present experience (i.e. the relationship with the therapist). The client may be reserved or talkative, address any issue of choice, and come to whatever insights and resolutions are personally meaningful. The therapist's regard for the client will not be affected by these particular choices, characteristics, or outcomes (pp. 131-132).

Empathy, unlike sympathy, involves an accurate reflection of the client's emotions and worldview with a commitment to truly understand their point of view. In

client-centered therapy, this is exhibited through thoughtful questioning, reflection of the client's spoken words, non-verbal gestures, and seeking clarification when one is confused. In addition, techniques such as paraphrasing and summation help the therapist to truly understand their client's unique perspective and show a genuine, warm regard for their client (Raskin & Rogers, 2005).

Also central to client-centered therapies is the concept of an actualizing tendency, which refers to an innate capacity in humans to move towards their full potential. This belief differed significantly from classical psychoanalytic and behavioral philosophies, both of which posited that humans were largely influenced by their external environments and that personality traits were predetermined. Because of the belief in the actualizing tendency, humanistic therapists seek to establish a working relationship with their client that is grounded in principles of trust, honesty, empathy, unconditional positive regard and congruence. These factors are considered crucial to help a client develop trust in their therapist and become open enough for the self-directed process of change to occur.

The key insights of the client-centered therapies may be stated as follows:

1. People are driven by basic motivations (i.e. need for food, water, sex) but have the capacity for self-actualization, or the ability to reach their fullest potential.
2. Humans do not necessarily need the guidance of a professional to work towards self-actualization; rather, if a therapist can provide an environment that is warm, empathic, honest and non-judgmental, the client can fulfill their potential independently.
3. Human growth and change is a natural, self-directed process. This process can be obstructed if there is a large discrepancy between the actual self and the ideal self,

if basic needs fail to be adequately met, or if the client is not in a position for optimal development.

The Integrative Psychotherapy Movement

The psychotherapy integration movement was empowered by the recognition that no single-school approach to psychotherapy could completely encompass the totality of an individual client. This movement has made significant gains in the past three decades due to a number of developments. In their comprehensive book on the subject, Norcross and Goldfried (2005) identified eight factors that have contributed to the gaining momentum of the psychotherapy integration movement: (1) a proliferation of therapies, (2) the inadequacy of single theories and treatments, (3) multiple external socioeconomic contingencies, (4) the ascendancy of short-term, problem-focused treatments, (5) an opportunity to observe various treatments due to advances in video technology, (6) the recognition of common factors in therapy, (7) growing research in evidenced-based treatments, and (8) the development of a professional network dedicated to psychotherapy integration.

As an illustration of the proliferation of therapies, Omer & London (1988) showed that the number of recognized psychotherapies rose from 130 in 1976 to 460 in 1986. The sheer multitude of so many approaches leaves the average therapist with a number of difficult decisions to make, such as the selection of a therapeutic approach that provides “the most bang for the buck” in terms of utility, makes the most theoretical sense, and fits best with the therapist’s existing beliefs and values. Second, the authors reference a growing belief among clinicians that the single-school theories of psychotherapy are inadequate in the sense that that no single therapeutic approach has the

capacity to fully conceptualize an individual client's functioning and overall psychology. Evidence for this belief comes from the recognition that some therapeutic approaches are inappropriate and perhaps even damaging for clients who show certain psychological characteristics (Norcross & Goldfried, 2005).

Third, the emergence of external socioeconomic contingencies in the early 1970's, such as the legal licensure of psychotherapists and the development of third-party reimbursement (such as that found with insurance companies), was a major sociopolitical force for psychotherapy integration. These contingencies meant that for the first time, psychotherapists became legally and economically liable for practicing their form of therapy with clients. An increased demand on clinicians from the public at-large to show the efficacy of their work placed pressure on psychotherapists to use techniques that showed strong empirical evidence for facilitating change. This demand was followed by a growing pressure to offer clients the opportunity for growth in the least amount of time, which ultimately led to the development of short-term, problem-focused treatments.

The rapid advancement of video technology also influenced the call for integration as, for the first time in history, therapy sessions were recorded and clinicians were able to watch their peers practice their art. Before the introduction of video technology in the therapy room, case examples were often presented through the shading of the clinician's home school of psychotherapy and important details of the therapeutic process may have been biased if not excluded altogether. Video recordings of actual therapy sessions helped professionals observe that regardless of the school that any one therapist subscribed to, some techniques were practiced universally and single-school therapists often borrowed from other orientations.

Increased research into psychotherapy efficacy, along with the technological advance of video recordings, led to a growing interest in the research of the common factors found among all practices of psychotherapy. These factors were considered to be those present in the therapeutic alliance that helped to facilitate change and are largely separate from the therapist's theoretical orientation. Research on the common factors revealed that client outcome was far more related to variables of the therapeutic relationship than as a result of identification with any one theoretical orientation. Some of these factors, like warmth, congruence, accurate empathy, and trust, related more to the therapist's personality and fit with the client than to any particular techniques that were used (Norcross & Goldfried, 2005).

As previously mentioned, the external socioeconomic pressures on clinicians led to an increase in the interest of increased specificity for unique symptom sets and research that identified what works best for whom. This research showed that some therapies, like cognitive-behavioral for major depressive disorder, yielded greater results than other therapies. Finally, the development of a professional network dedicated to psychotherapy integration, the Society for the Exploration of Psychotherapy Integration, helped to organize the efforts of clinicians interested in integration and provided a home for scholarly research in this domain.

Although proponents of integration mutually agree on its advantages, the methods by which to achieve such a feat vary widely. Opinions on how to combine, cut across, or merge disparate schools of psychotherapy have led to a number of systems for integration. However, four primary routes to integration have been identified by

Norcross (2005): common factors research, technical eclecticism, assimilative integration and theoretical integration.

The common factors approach to psychotherapy integration emerges from research that highlights the core themes that underlie change in multiple psychotherapeutic models and uses those themes as a foundation for practice. This approach, simply put, posits that it is not so much the techniques used, but factors common to the client-therapist relationship that promote true growth and change. Indeed, researchers (e.g., Wampold, Mondin, Moody, Stich, Benson & Ahn, 1997) have shown that when treatments intended to be therapeutic are compared, the true difference between those treatments is approximately zero. Some of the common factors for change that have been identified include warmth, accurate empathy, congruence, and honesty.

Technical eclecticism, an atheoretical form of psychotherapy integration, pulls together empirically-supported techniques for intervention using a meta-framework for clinical decision making. The techniques that a technical eclectic may use are often customized to address the unique needs and symptoms of the individual client. Technical eclecticism often finds its niche in actual therapeutic practice as clinicians work to fill their toolbox with the most effective techniques possible. One prominent example, Lazarus' multimodal theory, provides clinicians with an operational framework by which to make a systematic and comprehensive assessment of a client's functioning and unique needs. This framework seeks to assess the techniques that will work for a client's unique symptom set and conditions (Lazarus, 2005).

Assimilative integration involves using one of the major schools of psychotherapy as a theoretical foundation (i.e. psychodynamic, cognitive) and incorporating useful

therapeutic techniques and key insights from other theories to compliment and refine it. Many proponents of this approach view this as the most realistic route to integration as researchers who have been trained in a single-school approach can experiment with integration while maintaining a theoretical base to stem from. However, opponents to this route argue that although it moves the clinician closer to an integrated psychotherapeutic modality, it fails to be truly integrative in nature as it ultimately involves selecting therapeutic interventions in an eclectic-like manner to support an existing single-school theoretical approach.

Theoretical integration, which involves the complete blending of multiple schools of psychotherapy, may be best summarized by the following from Norcross & Goldfried (2005):

[Theoretical] Integration aspires to more than a simple combination; it seeks an emergent theory that is more than the sum of its parts and that leads to new directions for practice and research (p. 9).

In essence, theoretical integration isn't just about tying together two separate schools of psychotherapy. Rather, it is about using existing schools to develop a system that is holistically greater than and other than the systems used to create it. A truly theoretically integrative psychotherapy should lead to the development of new key insights on human functioning and new techniques for treating complex populations of individuals.

A number of clinicians have made attempts at such a theoretically integrative approach. In one of the first attempts at theoretical integration, Paul Wachtel (2008) blended the previously disparate schools of psychoanalysis and behaviorism into a comprehensive system that he named cyclical psychodynamics. Stemming from

psychoanalytic thoughts on the ideas of fixation and defense mechanisms, cyclical psychodynamics identifies how these reciprocally determine each other over the course of an individual's development and leads to patterned, maladaptive behavioral responses. These maladaptive behavioral response patterns, known as vicious cycles, emerge as a result of this theoretical blending and help to explain some of the repetitive, yet seriously problematic interpersonal cycles that clinicians often see their clients become "stuck" in (Wachtel, 1998).

Other systems of theoretical integration, such as schema therapy (Young, Weishaar, and Klosko, 2003), emerged because of the understanding that some forms of psychological distress, such as that found with personality disorders, remained relatively unchanged as a result of treatment through a single-school approach. Cyclical psychodynamics, schema therapy and dialectical behavior therapy will all be examined in more detail in later sections of this thesis.

Towards a Unified Clinical Science: The Next Frontier?

The search for a "theory of everything" that ties together the seemingly incompatible theories of general relativity (or, the physics of large bodies) and quantum mechanics (or, the physics of the very small) has been characterized as a quest for the holy grail of physics by many prominent researchers in the field. Such attempts have yielded prominent theories like quantum gravity and string theory. These theories, although successful in uniting some aspects of general relativity and quantum mechanics, have still been unable to reach the coveted status of "Theory of Everything."

Despite its shortcomings, string theory has made significant progress in the past decade towards becoming a major contender for a unified theory of physics. However, in

the early 1990's, string theory was nearly abandoned as increased fragmentation of the underlying mathematical principles led to five distinct and viable alternatives of the same theory (Greene, 2004). The predicament faced by proponents of string theory was this: if string theory, a competitor to be the ultimate “theory of everything” yielded five different, yet mathematically sound interpretations, then how could it possibly be considered *the* unified theory of physics?

In his book “The Fabric of the Cosmos”, physicist Brian Greene offers the following depiction of the problem behind multiple versions of string theory and why this could have been a major setback for the unified theory. Greene (2004) writes:

But the fact that there are five versions of string theory, superficially similar yet distinct in detail, would seem to mean that string theory fails the uniqueness test. Even if the optimists are some day vindicated and only one of the five string theories is confirmed experimentally, we would still be vexed by the nagging question of why there are four other consistent formulations (p. 378).

As suggested by Greene's reflections, a unified theory of physics would require the emergence of only one mathematically consistent, empirically validated theory that successfully tied together general relativity and quantum mechanics. If string theory could not satisfy these requirements, it would have significant difficulty laying claim as “the theory of everything.” However, in 1995, physicist Edward Witten provided a unique insight that showed promise of solving the problem of multiple versions of the same theory. Greene (2004) writes:

Witten showed that rather than being distinct, the five theories are actually just five different ways of mathematically analyzing a *single* theory.

Much as the translations of a book into five different languages might seem, to a monolingual reader, to be five distinct texts, the five string formulations appeared distinct only because Witten had yet to write the dictionary for translating among them. But once revealed, the dictionary provided a convincing demonstration that – like a single master text from which five translations have been made – a single master theory links all five string formulations (p. 379).

In essence, what Witten was able to do was to show that the five interpretations of string theory were actually five different perspectives of the same construct. This example illustrates a key point about the process of unification in general. Attempts at unification tend to be pursued when none of the competing theories within a discipline are able to fully account for all of the observed phenomena encountered by that discipline. In other words, if multiple versions of reality seem to be getting close to explaining the observed phenomena, but no single version is completely adding up, the assumption is made that something even more central and fundamental must exist to help explain the discrepancies. That something is a unified theory.

As discussed, the discipline of psychotherapy and the field of psychology as a whole have suffered from fragmentation. Proliferations of theories and philosophically different value systems have created a culture defined by rigid dogmatism and competing interests. But what if, as many in the field of

psychotherapy integration believe, the many theories that advocates claim as absolute were merely different perspectives of the same construct? Might it be possible that each of the single school theories possess an equal piece of the same psychological pie? And, most importantly, is there a common thread linking these various theories that can be discovered by a unified theory of psychology?

In a roundtable discussion article on the future of psychotherapy integration, Beitman, Soth & Bumby (in Norcross & Goldfried, 2005) stated:

Theories of psychotherapy integration should avoid developing into different schools of psychotherapy integration and aim instead for a metarole. In doing so, psychotherapy integration needs a more formal way to evaluate and select new ideas while continuing to support the evolution of old schools and accelerate the interchange among orientations. Most of all, psychotherapy must be defined as an entity that exists beyond the schools (p.426).

In the same article, Burckell & Carter (in Norcross & Goldfried, 2005) add:

The first step is to translate our current theories into jargon-free language for the purpose of communicating clearly with colleagues from other orientations. This translation would help us to make our implicit views explicit. We could then identify exactly where we agree and disagree and where the field is lacking in theories with sufficient explanatory power (p.427).

In essence, these contributors forward the idea that for true psychotherapy integration to occur, one must develop a meta-theory that ties together the existing schools of

psychotherapy, offers a foundation by which to understand human functioning and personality, and clarify the terminology used by competing theories to explain the same psychological phenomena.

In his 2008 article on the subject, Jeffrey Magnavita calls for the development of a “unified clinical science”, which he defines as

...a theoretical, clinical, and research movement, which attempts to identify the structures, processes and mechanisms that interconnect the major domains of human functioning. Included within the domain of unified clinical science are personality theory, developmental psychopathology, and psychotherapy, which include the processes and mechanisms of change that are initiated in relationship with a professional psychotherapist (pp. 265-266).

Furthermore, Magnavita summarizes some of the crucial differences between a theoretically integrative psychotherapy and a unified clinical approach. In sum, he argues that *theoretically integrative psychotherapies* are characterized by (1) the melding of “pure form” therapies, (2) the limited coverage of human functioning, (3) the assimilation and accommodation of theoretical elements, (4) a major focus on psychotherapy and less on personality and psychopathology, (5) limited connections with human personality theories and (6) limited paradigms for knowing. In contrast, a *unified clinical science* is characterized by (1) a focus on discovering the essential elements of human systems, (2) interconnectedness of all domains of human functioning, (3) a shift to a metatheoretical model, (4) an explanatory framework for all human conditions (including psychotherapy, personality and psychopathology), (5) the capacity for explaining human personality and

(6) the use of multiple paradigms for knowing (e.g., empirical research, case examples, theory) (Magnavita, 2008).

To summarize, a truly unified clinical science would require the creation of a framework that has no significant ties to existing theories of psychotherapy and could serve as a solitary foundation for conceptualizing human functioning and personality. Such a theory would need to be able to offer a coherent framework by which to accurately identify psychological processes, be flexible enough to show differences in functioning across an individual's development, and be consistent with the major paradigms in psychology. Furthermore, the creation of such a meta-theory should be able to address the confusion created by the use of competing terms that describe the same fundamental psychological processes.

So, if a model emerged that claimed to be a "unified clinical science", what criteria might be used to evaluate it? Several researchers have weighed in on the issue and there appears to be some agreement across the board. Wolfe (2008) argues that a unified theory will (1) describe different layers of human functioning, (2) describe the role of action-oriented (e.g., cognitive-behavioral) versus insight-oriented (e.g., psychodynamic) and when they should be applied to different types of patients and problems, (3) account for the kinds of dysfunctions and change processes that involve the client's behavior, cognition, and affect and their interrelationships as well as the interpersonal consequences of the client's thoughts, feelings, and behavior, (4) provide a sequence by which to make clinical decisions on the depth of problems to focus treatment on, (5) include the insights from interpersonal and family systems perspectives in a

wholly neutral language, and (6) integrate insights from the biomedical and psychological (e.g., neuroscience) perspectives.

Allen (2007) offered three characteristics common to psychological meta-theories. First, he notes that meta-theories tend to have multiple, interacting levels of complexity. The interaction between these levels may result in the development of new emergent phenomena. As a simplistic exemplar of this, he references the biopsychosocial model, which provides a holistic analysis of humans across multiple domains. Allen notes that most systems of psychotherapy work to promote change at one or two levels of analysis but often fail to address human functioning at all levels of existence. Secondly, the author states that meta-theories are driven by active agency; that is, that humans actively make decisions that influence their psychology at multiple levels of analysis. This concept is opposed to reductionist models that often posit a deterministic philosophy of existence. Stated differently, some medical models see human functioning as wholly influenced by genes and biology, levels that humans are unable to directly influence. Finally, he notes that most meta-theories are influenced by two types of dynamic pressures: the pressure between stability and change and pressure between individuality and togetherness.

Consolidating across these arguments, the following domains and associated criteria are proposed to be used to critically evaluate meta-theoretical systems that seek to become a unified clinical science.

Domain 1 - Multi-levels of human functioning:

1. *The meta-theory should span all levels of analysis of human functioning and show the interrelationships between distinct domains.*

Virtually all approaches that attempt to grapple scientifically with human functioning recognize that there are multiple levels of complexity that dynamically influence one's behaviors. For example, the biopsychosocial model has become almost institutionalized as a system that helps delineate the various sources attributed to particular behavioral sets (Anchin, 2008). Thus, a unified clinical science should be able to effectively attend to all of these levels and show how they interact dynamically to influence the client's behavioral expressions, characterological structure, and symptoms of psychopathology.

For example, consider a client with borderline personality disorder. A unified clinical science might show that this individual has a strong genetic predisposition for mental illness. Secondly, it might show that she was born with an anxious temperament that made her less able to tolerate emotional frustration than most. Finally, it could show that her parents exacerbated this emotional regulatory deficit by providing a distant, cold, and demeaning early environment. A unified clinical science would then set these various levels into motion by showing their dynamic interrelationships across the developmental lifespan. For example, it might show that the early frustration of her emotional needs by her parents led to her to believe that she was defective, which later in life meant that, at the first sign of perceived rejection by others, she behaved in ways that confirmed this initial impression, thereby enhancing her misery and suffering.

2. *The interactions between multiple levels of analysis should explain and connect existing psychological phenomena or create new phenomena for further exploration and research.*

The discipline of psychology, writ-large, functions to understand the totality of the human condition. As it stands, many single-school approaches and sub-disciplines attend to some, but not all, levels of analysis along the continuum of human functioning. While much can be derived from intense focus on one level, a narrow scope like this increases the risk of missing out on the bigger picture. Thus, in the interest of true unification, any legitimate proposal for a unified clinical science should be able to show how phenomena explored by the various sub-disciplines of psychology connect to the greater whole of the human condition.

As areas of research in single levels of analysis become consolidated with the others, it is likely that their overlap will yield new insights that may open lines of research for phenomena previously unattended to. The diathesis-stress model, which shows how genetic predispositions for mental illness may become expressed after one is exposed to intolerable levels of environmental stress, is but one example of new principles that can be derived from the convergence of multiple levels of analysis.

Domain 2 - Define the field of psychology and connect with other sciences:

3. *The meta-theory should be able to connect with other major scientific domains (e.g., physics, medicine, sociology) and effectively define the scope of psychological science.*

While psychology certainly has flourished in the past century as a viable scientific discipline, many in the field argue that it is suffering from an identity crisis. The lack of crisp, well-defined boundaries around the subject matter of interest to psychologists has led some leaders (see Koch, 1993; Staats, 1999; Yanchar & Slife, 1997) to offer pessimism about the future of the discipline as a whole. To help solidify its place as a

viable scientific domain, psychology would benefit from the crisp definitional boundaries that a unified clinical science could provide. With a firm definition, a unified clinical science could also help define psychology's place among and show its interrelationships with other major systems of human knowledge (e.g. biology and physics).

4. *The meta-theory should be able to merge and address all forms of human psychology, including personality, cognitive science, neuropsychology, systems theory, etc.*

As mentioned above, part of psychology's identity crisis is due in part to the lack of a consistent operational definition. Because of this, the field has suffered from fragmentation as many sub-disciplines have evolved to study particular areas of human functioning without much regard for separate, but related disciplines. For example, as illustrated earlier, the applied science of psychotherapy has suffered from the emergence of competing schools, each of which make claims that it has captured a larger piece of the human puzzle than others. Even among these schools, identical phenomena (e.g. thoughts, emotions) are conceptualized in wholly different ways. While an argument can be made that the diversity of opinions on these phenomena enhance the field as a whole, a similar argument can be made that such diversity impedes, rather than enhances, ultimate progress.

Domain 3 - Account for human change and development:

5. *The meta-theory should be able to describe the phylogenic (evolutionary) and ontogenetic (lifespan) development of human beings and account for changing dynamics across these two domains. Furthermore, the meta-theory should be able to accommodate to future developments in human psychology.*

Any system designed to unite all knowledge of the human condition would be wholly inadequate without paying service to how environmental pressures have shaped the human mind via evolutionary processes. Without adequate attention to evolutionary processes, though one could be able to describe *how* the human mind works, it would be nearly impossible to explain *why* it works the way it does. That being said, because humans are involved in a constant state of evolution, a unified clinical science should be able to demonstrate the flexibility necessary to account for any future developments. Similarly, considering the immense changes that occur across one's developmental lifetime, any theory that failed to account for these ontogenetic changes would be missing crucial information that describes both *how* and *why* one has become the person they are.

6. *The meta-theory should account for the dynamic pressures of change versus stability and individuality versus togetherness.*

As expressed by Allen (2007), as any system develops, it encounters dual pressures to both maintain some kind of homeostatic equilibrium while also reflexively responding to environmental demands. This type of principle is central to many systems that attempt to describe human development. For example, in Piaget's system of schema development, people consolidate broad beliefs about their self-environment relationship (stability) while also leaving these schemas open to future change via accommodation (change). Likewise, any unified clinical science should be able to account for similar processes in human functioning, especially when considering a developmental context.

Allen (2007) also notes that because all humans are embedded in a social-emotional context, they must simultaneously attend to and regulate individual needs versus the needs of others. Insufficient attention to either of these domains could lead to

significant problems for a person. For example, if a person were to substantially attend to their own needs over those of others, they may be labeled as selfish and be at risk for loss of social influence. Likewise, if a person were to over-attend to the needs of others, they run the risk of insufficiently attending to their own. Thus, a unified clinical science ought to help explain how humans dynamically regulate the needs of these competing systems.

Domain 4 - Provide a universal language for uniting disparate schools of psychology:

7. *The meta-theory should be able to provide a universal language for describing complex psychological phenomena among competing disciplines of psychotherapy.*

The increasing disparity between sub-disciplines of psychology has arguably led to a “reinventing of the wheel” when it comes to psychological research. One of the primary reasons this has occurred is because the same psychological phenomena may be called defined differently depending on which perspective one takes. For example, Henriques (2003) critiqued Skinnerian behaviorism along these lines, noting that Skinner’s use of the term “behavior” was often used inconsistently and was ill-defined. Henriques pointed out that the term “behavior” is problematic in the sense that it is over-inclusive: many other fields of human knowledge, like physics, also study “behavior”, just not of the human kind. As another example, consider social psychology research where a seemingly simple term like “emotion” yields a multitude of definitions that often do not agree (Gross, 1998).

Arguably, when the same phenomena are defined differently by competing schools of psychotherapy, the field as a whole suffers. To refer back to the opening statements of this chapter, competing definitions only add to the confusion that students

of psychotherapy experience when they first begin to explore the field. For experienced clinicians with allegiances to one school over others, the lack of well-defined phenomena may lead to an outright dismissal of other systems, even if those other systems focus on the same phenomena of interest to that clinician. Ultimately, a unified clinical science can help bring order to the definitional chaos by showing how overlapping principles across systems may actually be one and the same.

Domain 5 - Evaluate and assimilate existing psychotherapies:

Before an explanation of this domain is offered, it should be noted that psychotherapy reflects but one type of intervention that modern psychologists employ for treating various psychological issues. Arguably, many other forms of psychological intervention (e.g., parent-child interaction studies, psychopharmacology, consultation with family) offer the opportunity for meaningful change in a variety of contexts. However, considering that the field of psychology has largely developed in-tandem with the major schools of psychotherapy, a UCS proposal should be able to critically evaluate and assimilate these systems into its folds.

8. *The meta-theory should be able to define the scope of existing psychotherapies, show how they work in relation to one another, and provide a framework for further integration.*

Ultimately, though a unified clinical science is charged with unifying the science of psychology as a whole, it is also charged with unifying the modality that clinicians use the most for therapeutic work: psychotherapy. As presented earlier in this chapter, psychotherapy has historically developed into five competing schools of thought. Only recently have efforts been made to unify these disparate schools, and even then, most

attempts at integration only accommodate two or three of these schools at a time. A unified clinical science is more ambitious in scope as it seeks to unify *all major* schools of psychotherapy by identifying the scope of existing systems and demonstrating how they interrelate with one another. Another way to think about this criterion is to visualize the creation of meta-map of psychotherapy where each existing modality occupies a specific niche. With such a map, areas of convergence or overlap could help identify similarities between systems and areas of divergence could identify areas in need of further exploration.

9. *The meta-theory should be able to assimilate existing schools of psychotherapy and evaluate the degree to which concepts in these schools are consistent with human functioning. Furthermore, this evaluation process should be grounded in empirical research.*

In describing the form and function of a unified clinical science, Magnavita (2008) argued that

...in the attempts at unified modeling, all domains that have been empirically and clinically documented must have a place in the model. This is not say that reductionistic forms of knowing are irrelevant, they certainly add to knowledge and understanding and are necessary but not sufficient (p. 276).

In other words, while a unified clinical science does include *all* empirically-validated findings relevant to human functioning, its reductionist nature also makes value claims about findings that have not held up under scrutiny. Accordingly, any theory or insight that is not empirically or clinically consistent would come under intense scrutiny in such a system. In a sense, the function of a unified clinical science is both that of chairman

and sentinel, where the former seeks to organize those at the meeting and the latter keeps watch over unruly guests.

As an example, consider primal scream therapy, a modality based on psychoanalytic views that neurosis is caused by suppressed pains resulting from early childhood traumas. This form of therapy advocates for clients to reawaken these early traumas in a therapeutic context so that they can better deal with them, often through the venue of “screaming groups”. Unfortunately, this therapy has suffered from a lack of empirical validation and clinical support (Starker & Pankratz, 1996). Therapies like this, even if theoretically sound or plausible, risk exclusion from a unified clinical science because of their lack of empirical validation.

10. *The meta-theory should be able to provide a working template by which psychotherapists can make clinical decisions for various clients.*

As the ultimate goal for a unified clinical science is to inform a clinician’s delivery of psychological services, any legitimate proposal would be remiss if it did not include templates designed to help guide clinical decision-making. In order to do so, however, such a system would need several components, including a comprehensive, empirically-guided model of human mind, the capacity to address all domains of human functioning, and other models that could aid in conceptualization. Many integrative or meta-theoretical systems already address one or two of these components. The biopsychosocial model, for example, is quite effective at helping the clinician conceptualize various contributions to client distress. This model, however, has little if anything to say about the structure of the human mind, meaning its advocate has to seek out information elsewhere to address that component.

In sum, the call for a unified clinical science is an ambitious one. Any such system must be able to demonstrate a satisfaction of all the aforementioned criteria and not only be empirically grounded, but also show a great deal of clinical utility. The criteria presented are demanding and scrutinizing, but necessarily so. In the coming chapters, a potential candidate for a unified clinical science – Henriques' Unified Theory of Psychology – will be presented and assessed using these criteria.

Chapter 2: An Introduction to Henriques' Unified Theory of Psychology

Arguably, one of the greatest limitations for modern psychology is the absence of a strong, coherent system that binds together the knowledge gained over the course of a century. Sarason (1989) summarized it as follows:

We have a surfeit of facts. What we do not have, and most of us in the quiet of our nights know it, is an overarching conception of context in which we can put these facts and, having done so, the truth then stands a chance of emerging (p. 279).

Henriques (2004) pointed out that the field of psychology currently suffers from 1) a proliferation of overlapping, yet contradictory concepts; 2) no agreed upon definition; 3) no agreed upon subject matter; and 4) fundamentally different epistemological assumptions. These shortcomings, and the absence of a generally agreed-upon conceptual framework, have led some leaders to describe psychology as a “would be” science at best (e.g. Staats, 1999).

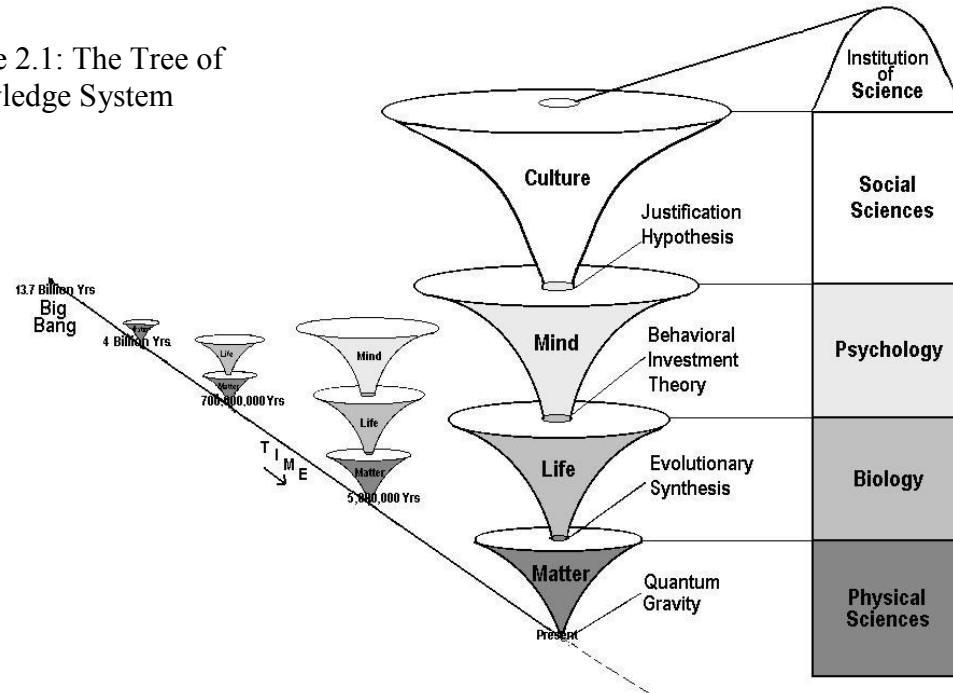
Over the past decade, Henriques (e.g., 2000, 2002, 2003, 2004, 2005, 2008) has introduced a new set of ideas that he has argued can theoretically unify the field of psychology, by which he means creating a broad conceptual framework that can assimilate and integrate key insights from various perspectives into a coherent whole, clearly define the field of psychology and its relationship to biology and the social sciences, and resolve longstanding philosophical conundrums and differences that have divided the field since its inception and led to the proliferation of various schools of thought.

Henriques' Unified Theory of Psychology (from now on referred to as HUTP) is directly relevant to psychotherapy integration because of its claim as a system that can resolve the historical fragmentation of psychology and offer a unified framework that can assimilate and unify competing psychotherapy paradigms. In the sections that follow, the four components of HUTP – the Tree of Knowledge (ToK), Behavioral Investment Theory (BIT), the Justification Hypothesis (JH), and the Influence Matrix (IM) – will be elaborated from the vantage point of clinical practice. This will set the stage for a detailed discussion in chapter three on HUTP as a viable proposal for a unified clinical science.

The Tree of Knowledge System (ToK)

In his first article on the subject, Henriques (2003) introduced the Tree of Knowledge (ToK) System, which offers a novel depiction and conception of emergent evolution that seeks to provide a framework for organizing scientific knowledge and to define psychology in relation to the other major systems of scientific inquiry (Figure 2.1). Emergent evolution refers to the evolution of complexity since the beginning of time. Some researchers refer to this as cosmic evolution (e.g., Chaisson, 2001). The ToK is not the first attempt at a broad system of thought that attempts to integrate human knowledge (e.g., Reiser, 1958). The founder of sociobiology, E. O. Wilson recently proposed a new framework for unifying knowledge that received a substantial amount of attention (Wilson, 1998), some positive, some negative. However, Henriques (2008) argued that although valuable, Wilson's system failed because it does not address one of the central

Figure 2.1: The Tree of Knowledge System



issues that confront any attempt to unify the three great branches of learning (the natural sciences, the social sciences and the humanities). That problem, Henriques argued, is the problem of psychology, which is the fact that the field is conceptually muddled, resists clear definition, and yet connects to each of the three great branches more than any other discipline.

What makes the ToK System unique when compared to theoretical systems like Wilson's is the argument that nature exists as four interrelated yet distinct dimensions of complexity. In other models, cosmic evolution is viewed as existing within a single dimension of complexity. Stated differently, in a single-dimension system, such as Wilson's (1998; see also Reiser, 1958), the universe as we know it begins with the Big Bang and simply continues its evolution into the complex human civilizations that we live in today. Ultimately, these systems propose a rather materialistic worldview in the sense that *all* complex systems can be traced back to the energy singularity. While this

perspective helps show the interrelatedness of everything, it also raises a number of difficult questions for psychologists, such as when does the mind evolve, what separates humans from other animals, and how is psychology separated from biology from below and the social sciences from above (Henriques, 2003).

The ToK, however, argues that as time unfolded, nature evolved into four distinct dimensions of emergent complexity: Matter, Life, Mind, and Culture. In this model, each dimension is the function of a new information processing system fundamentally different than those that preceded them. Life, for example, is a function of genetic information processing; Mind is a function of neuronal information processing; and Culture is a function of symbolic information processing. Using its four dimensions of complexity as a guide, the ToK offers a meta-perspective look at all of human knowledge and helps to define different systems of scientific inquiry in relationship to one another. As depicted in Figure 2.1, carving the known world into four dimensions of complexity may help address confusion regarding the subject matter of many disciplines (psychology included). Relative to psychology, the clear delineations offered by these dimensions may help better define some psychological phenomena (e.g. consciousness) relative to other forms of information processing.

To appreciate how the four dimensions of the ToK are segmented, one must first understand a key component of this system: joint points. In simplified terms, joint points represent the critical processes that occurred at different moments in time that gave rise to new forms of information processing and complexity. Within each dimension, as strategies for processing information become increasingly complex and varied, new methods emerge that give rise to new and fundamentally distinct dimensions of

information processing. For example, consider the differences between the dimensions of matter and life. In the matter dimension, pure energy is processed at a quantum level, as governed by the laws of physics. In contrast, information in the life domain is processed through genes, which are self-replicating codes that give rise to unique properties and characteristics (Dawkins, 1989). The fundamental difference in information processing between these two dimensions is that the complex variations of matter in the matter dimension is *limited by the laws of physics alone*; genes, on the other hand, can *self-replicate and interact* to an extent with the environment around it. In a system with limited energy resources, the ability to acquire and retain energy in novel ways is a necessary requirement for complexity to evolve (Henriques, 2003).

Although concepts like dimensions of emergent complexity and joint points may stimulate one's intellectual curiosity, such a discussion may leave the psychotherapist confused as to how this information can provide a basis for a unified meta-theory of human functioning, personality and psychotherapy. There are three primary ways that the ToK System can help the integrative practitioner and the move toward a unified clinical science. First, the ToK System provides a much needed macro-level view (Gilbert, 2004) from which to consider the biopsychosocial layers of human functioning. Second, the ToK System provides a new way to conceptualize this layering that leads to a clear definition of psychology, something the field has been lacking since its inception (Henriques, 2004). Third, the structure of the ToK System points to the need to articulate two broad, unifying models of Mind and Culture.

The ToK System: A New BioPsychoSocial Model

Virtually every student of psychology learns to use the biopsychosocial model as a tool for conceptualizing the various contributions to their clients' functioning. This model is a useful heuristic that depicts the interrelationships between three domains of human functioning: biological influences (e.g., evolution, genetics, and neurophysiology), psychological influences (e.g., past experiences, and feelings, thoughts, and actions of the individual), and social influences (e.g., interpersonal relationships and cultural beliefs). Using this model, a clinician can quickly identify and organize relevant information to the client's overall functioning and systemic issues (Engel, 1977).

Despite its obvious utility, the biopsychosocial model demonstrates a number of inadequacies, including generalizations that may be too broad, a lack of resolution regarding problems of reduction and emergence, and the absence of explanations for *how* and *why* certain domains of human functioning are separate from others. The ToK, however, offers a new view of the biopsychosocial model that helps to amend these deficiencies. First, it begins by segmenting reality into dimensions of information – Matter, Life, Mind and Culture – which results in a Physico-Bio-Psycho-Social view of human functioning (Henriques, 2003). Most would assume that the physical is included within the biological. However, the ToK system views the material dimension of complexity as theoretically separable from the organic dimension. The addition of a fourth dimension speaks to the new way that the ToK system organizes reality and how it offers a new way to understand issues of reductionism and emergence.

Reductionism is the doctrine that higher, more complex phenomena can be completely understood by understanding their parts and their interactions. A reductionist

would be inclined to view cells as complexes of chemicals, minds as complexes of neural cells and societies as collections of individuals. Although historically many scientists were hard reductionists and advocated for a position that everything was just energy and matter, many scientists advocate for a view called emergence, a position best summed up by the old Gestalt truism that "the whole is greater than the sum of its parts." The ToK System provides a new way to understand the tensions between reduction and emergence and graphically shows why everything emerges from energy and matter, but as separable dimensions of complexity, Life, Mind, and Culture cannot be reduced to Matter.

Furthermore, the ToK adds a much-needed level of conceptual depth by explaining both how and why separate dimensions of functioning emerged from an evolutionary standpoint. In doing so, it allows the clinician to more accurately and concisely attend to individual influences on a person's life. In this model, the Matter dimension entails material classes of objects which emerge as a result of the Big Bang and laws of Physics. The Life dimension includes genetic and physiological systems that emerged as a result of self-replication. The Mind dimension spans neurobehavioral investment processes that emerged as a result of the development of a nervous system. Finally, the Culture dimension spans the development of cultural belief systems and human self-consciousness that resulted from the adaptive problem of justification (Henriques, 2003; 2008).

Defining Psychology with the ToK System

In his 2004 article "Psychology Defined", Henriques argued that while psychology appears to be a unified institution on the surface, a deeper look reveals a field marked by fractionation, epistemological woes, and contentious debate. These conflicts

were argued to be due in part to the lack of a clear and concise definition for psychology as a whole. The ToK System can help better define some psychological phenomena and bridge gaps between disparate schools of psychology. Henriques (2004) uses the joint points of BIT and the JH to argue that these theories help define “psychology” by essentially showing that traditional psychology is represented by two domains: psychological formalism and human psychology. Psychological formalism, defined as the formal science of psychology, corresponds to behavioral investigations of animals and the mind dimension of the ToK. Disciplines that fall under the umbrella of this greater domain include cognitive science, behavioral science, evolutionary theory, neuroscience, and systems theory.

Human psychology, defined as a hybrid of psychological formalism and the social sciences, concerns itself with the human behavior mediated by language in the larger context of society. The subject matter of this field - including personality, developmental, social, and cultural psychology – directly aligns with the interests of most psychotherapists. A third domain of “psychology”, known as professional psychology, was offered by Henriques and Sternberg (2004) to highlight the epistemological differences between the science and practice of human psychology. They argue that human psychology is largely descriptive and concerns itself with understanding human functioning. Professional psychology, however, is prescriptive, and its adherents concern themselves more with using science to better the lives of their clients. Henriques (in press) argues that this analysis yields the following definition of the field: *Psychology is the institution devoted to the science of mental behavior, human consciousness, and the application of such knowledge toward the greater good.*

Behavioral Investment Theory: A Bio-Physical, Cognitive-Behavioral Systems Theoretic
Approach to the Science of Mind

Behavioral Investment Theory (BIT) is the joint point between Life and Mind, which means that, according to HUTP, it serves as the unifying conceptual framework for understanding the evolution of Mind. Henriques (2003; 2004) argued that BIT can foster the amalgamation of five broad domains of thought: evolutionary theory and genetics, behavioral science, cognitive science, cybernetics/control theory, and neuroscience. Specifically, he argues that all five of these systems have behavioral investment features implicitly or explicitly guiding their conceptual frameworks. For example, he notes that one form of control theory – perceptual control theory – offers a “negative feedback loop model, [where] animals work to reduce discrepancies between current states and computationally referenced goal states” (Henriques, 2003, p.162). Most importantly, BIT may serve as a link between the sciences of biology and psychological formalism. By incorporating principles of natural selection, this theory effectively bridges the gap between these broad domains by explaining both how and why the nervous system emerged.

It is important here to be clear about what is exactly meant by Mind in HUTP. Mind refers to the set of mental behaviors, which are technically defined as behaviors of the animal as a whole, mediated by the nervous system that produce a functional effect on the animal-environment relationship. There are four broad component domains of mental behaviors. First, there is the nervous system, which mediates mental behavior, and is the primary domain of focus of neuroscientists. Second, there are the observable, overt actions of animal, the traditional focus of behaviorists. Third, there is the information

instantiated in and processed by the nervous system, the focus of cognitive scientists. And, fourth, there is conscious experience, which refers to the capacity to mentally experience the world. There is much debate about the place and need for conscious experience in animal behavioral science, but the important point here with the focus on psychotherapy is that BIT provides a framework to understand "experiential" consciousness, which will be elaborated upon below.

BIT, which serves as the Life to Mind joint point, is a theory that describes *why* and *how* the animalistic nervous system evolved and responds to the pressures of a dynamic, changing environment. In short, this theory is one of energy management. All organisms require energy to live, and for basic organisms without a nervous system (which helps organize reflexive and purposeful movements), the capacity to obtain that life-giving energy is wholly dependent on environmental conditions. For example, consider an ordinary house plant, a multicellular organism that possesses no nervous system. While a plant does have *some* abilities to reflexively respond to its environment (e.g., growing towards a new source of sunlight), these responses are by no means automatic or fast. Thus, if environmental conditions change too quickly (such as moving it permanently to a dark room), the plant has few abilities to adapt and obtain the energy necessary for survival.

Animals, on the other hand, possess a powerful tool for better responding to environmental changes: the nervous system. This type of system helps coordinate the animal as-a-whole, meaning that all parts of the organism can communicate and work together in ways that increase the chances of survival in changing environmental contexts. For example, consider the benefits afforded by *movement*: unlike the plant,

having this ability allows one to relocate from an environment that may be energy impoverished (e.g., a desert) to one that may have more abundant energy resources (e.g., a lush oasis), thus increasing the chances for survival. But the ability to move, as adaptive as that may be, brings with it a whole new set of problems: namely, determining when it's in the best interest of the animal to act (and expend energy) and when it's best to stay put (and conserve energy) (Henriques, 2003; 2008; in press; La Cerra & Bingham, 2002). BIT consists of a number of components. First, it consists of six fundamental principles. Second, it introduces a new heuristic for information processing that combines operant theory, with computational control theory, and modern theories of motivation and emotion. Third it introduces a layered model of mental processing. I briefly review each of these aspects below.

The Six Foundational Principles of BIT

The first principle of BIT – *energy economics* – sets the stage for the theory's development. Consistent with the second law of thermodynamics, which states that the availability of useful energy in any closed system will always decrease, it suggests that the nervous system emerged to compute the behavioral investments, or energy expenditures, of the animal. Stated differently, all living organisms must meet an energy baseline in order to survive. If an animal expends more energy than it takes it, it will eventually perish. Thus, one of the most basic goals for any organism is to acquire more energy resources than it expends. For organisms without nervous systems (see the plant example above), energy acquisition is wholly dependent on environmental conditions. However, for animals, possessing a nervous system allows the capacity for movement, meaning that the animal can access more potential energy resources than ever before.

Unfortunately, this type of access doesn't come without a price, and animals must decide when to expend energy and when to conserve. According to the first postulate of BIT, the nervous emerged to make these cost-benefit calculations and to direct the behavioral investments of the animal in ways that correlate with survival success (Henriques, 2003; 2004; in press).

Henriques (2003) described the second principle of BIT, the *evolutionary principle*, as follows:

Genes that tended to build neurobehavioral selectors that expended behavioral energy in a manner that positively covaried with inclusive fitness were selected for, and genes that failed to do so were selected against. Thus, inherited tendencies toward the behavioral expenditure of energy are a function of ancestral inclusive fitness (p. 160).

In other words, BIT suggests that animals have evolved specific structures that most effectively regulate behavioral investments via the processes of natural selection. To illustrate this point, consider the following analogy. If you had a limited supply of gas and needed to travel a very long distance, which would you prefer: a gas-guzzling truck or a fuel-efficient hybrid car? In this example, while both vehicles function in similar ways (helping to move a person across long distances), a savvy consumer would choose the hybrid car because it would make the *best* use of limited resources for the task at hand. Similarly, BIT suggests that because useful energy is a valued resource that is often difficult to attain, it makes sense that the cognitive or physiological structures that make obtaining it the easiest will be the most likely to be genetically encoded and passed on to future generations.

The third principle of BIT, *the principle of genetics*, focuses on the hereditary influences that result in differences among behavioral investment systems. As previously stated, the evolutionary principle suggests that environmental pressures for adaptation result in cognitive and physiological structures that best make use of or help with obtaining future energy resources. It is important to note that the evolutionary principle focuses on *phylogeny*, or how certain traits are passed on across multiple generations via genetic processes. Conversely, the principle of genetics focuses on *ontogeny*, or how inherited genetic combinations influence the development of an individual's unique behavioral investment system within their own lifetime. In other words, the genetic predispositions that a person inherits (e.g., susceptibility to mental illness, intelligence, temperament, etc.) will greatly influence their life trajectory and the ways in which their nervous system computes behavioral investments.

The fourth principle of BIT – the *computational control principle* – argues that the nervous system functions as an information processing system designed to coordinate the behavioral investments of the animal. This principle reflects the central insight of cognitive and computational neuroscience, which argues that the nervous system compiles information from both external and internal environments to form representations of reality that are used to compute behavioral investments (Pinker, 1997). In other words, the nervous system functions like a computer simulator where particular behaviors can be tested without taking the risk of actually trying them out in real-life. This evolutionary design saves a tremendous amount of precious energy resources and minimizes the risk involved by utilizing a trial and error approach to learning.

The fifth principle, or the *learning principle*, reflects some of the fundamental insights from behaviorism, specifically with regard to processes of learning. Unlike organisms that are guided by genetics alone, the possession of a nervous system allows animals to flexibly try out and change their behavioral patterns in response to environmental stressors that occur within the animal's lifetime. The nervous system accomplishes this by using processes of natural selection to select for behavioral investment patterns that correlate with some adaptive advantages and extinguishing behavioral investments that fail to do so. It is important to note that while a person's genetic code comes with some primary reinforcers that help guide a person's behaviors (e.g., orgasm, sweet foods, pleasure), the nervous system expands upon this to move a person towards things that are pleasurable and away from things that are unpleasant. Indeed, this is a foundational insight of most behavioral paradigms (e.g., reinforcement and punishment) and shows how the consequences of behavior shape the behavioral investment patterns that people use.

The sixth and final principle of BIT is the *developmental principle*, which broadly states that different stages of life require different behavioral investment strategies. As humans develop across the lifespan, the needs of any one stage (e.g., adolescence) will vary widely from those in another (e.g., later adulthood). Thus, the behavioral investment patterns that are used to meet these needs will change as the person continues to develop. Erik Erikson's stages of psychosocial development are a good representation of this principle. For example, the developmental task of infancy, trust vs. mistrust, requires wholly different behavioral investment patterns than the developmental task of early adulthood, intimacy vs. isolation (Erikson, 1968).

From $S \rightarrow R$ and $Input \rightarrow Output$ to $P-M \Rightarrow E$

Using BIT principles as a guide, Henriques (2003; 2008; in press) has developed a useful framework for understanding the architecture of the human mind (for a pictorial representation, see Figure 2.2). This model dissects mind into four levels of information processing: sensory-motor, operant, cognitive, and self-consciousness. For the purposes of this discussion, only the first three levels – sensory-motor, operant, and cognitive – will be focused on in this section.

Sensory-motor processes represent the most basic forms of learning and are found in all organisms with nervous systems and even some without. These processes involve rigid, fixed, and automatic responses to the presence of aversive stimuli (Henriques, in press). A good example of this is the automatic reflex that occurs when one places their hand on a hot stove. The nerve endings in the hand send an automatic pain impulse to the spinal cord which automatically fires back a command to the muscles of the arm to pull away from the source of heat. Unfortunately, these processes only help an animal reflexively respond to their environment and cannot account for how decisions regarding behavioral investment patterns are made. To better understand that requires an analysis of the operant level of information processing.

Operant level information processing, which is represented by the equation $P-M \Rightarrow E$, is the “pre-installed software” designed to make automatic decisions about behavioral investments. Slightly more complex nervous systems use the basic algorithm of BIT to mentally compute options and then decide on future courses of action. In any situation where decisions need to be made, an animal references input (or P, which stands for perception) against a valued goal state (M, which stands for motivation), which

results in some output (E, which stands for both experiential and emotional content) designed to move the animal towards a particular goal. It is important to note that this process is often quite rapid, though not nearly as automatic as sensory-motor processes (Henriques, 2003; 2008; in press).

Unfortunately, basic operant level processes can only take an animal so far. For example, consider what might happen when an animal is faced with a number of equally advantageous options that need to be mentally computed. At an operant level, choosing the “best” option from a field of very similar options requires significantly more time and energy than can be afforded by operant level processes alone.

Fortunately for higher animals with a well-developed cortex, the P-M=>E equation of the *operant* level advanced significantly to form *cognitive* “software” that functions like an advanced computer simulation program: it allows such animals to “play out” a number of scenarios without actually having to expend the energy to do so in real life. This simulation process begins similarly to the P-M=>E equation. First, sensory information from a variety of internal and external sources is compiled and then forms an internal representation of external reality, or a perceptual state. Though this perceptual state is supposed to be accurate representation of reality, it is somewhat dependent on past learning. For example, consider a woman who was sexually assaulted by an uncle as a child and sees a male therapist for the first time. In such a case, she may perceive her therapist to be threatening, even if he were docile, warm, and empathic. Thus, one’s various life experiences can influence their perceptions of reality in both adaptive and maladaptive ways.

The Architecture of the Human Mind

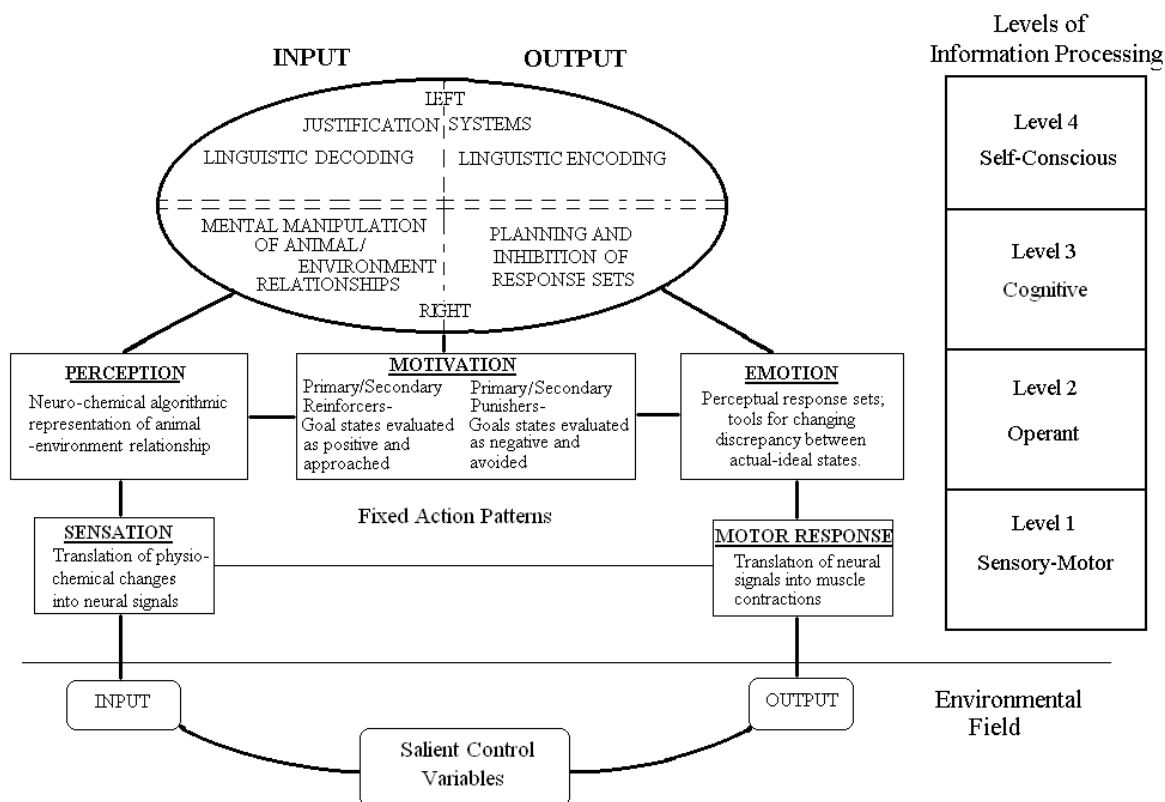


Figure 2.2: Layered Model of Mind

Next, a valued goal state is then referenced against the perceptual state. These can reflect desired outcomes (like having everyone laugh when you tell a humorous joke) or the aversion of negative consequences (such as being embarrassed at a social gathering). Because these reflect the most desirable outcomes of a situation, a person is often quite motivated to achieve them. Finally, the outcome of this simulation yields some type of experiential (e.g., autonomic arousal) or emotional (e.g., anger) state, both of which are designed to move a person towards their desired goal.

To illustrate BIT principles in action, consider the following example. John, a middle-aged computer engineer, reluctantly agrees to go to an upscale wine party with his

well-to-do girlfriend. Beforehand, while putting on a rather cheap suit, an image from early childhood leaks into his mind. He recalls a middle school dance where he was forced to wear a similar cheap suit because his family could not afford anything else. At that dance, he was heckled by his peers and ran out embarrassed and ashamed. His thoughts then turn to the party that he is about to attend, and he imagines walking through the door only to receive judgmental glances by socialites with evening gowns and tuxedos. This image activates his arousal, he feels a lump in his throat, and becomes so anxious that his hands tremble. When his girlfriend asks if he is ready to go, he snaps back at her in anger and accuses her of wanting to embarrass him.

The previous example illustrates many of the principles of BIT. First, though he agrees to go to the party, John is reluctant to do so because of his past experiences in similar situations. His flashbacks to childhood prime his cognitive set to be fearful of social gatherings and thus, when he plays out what might happen at the wine party, his perceptual set is overly sensitive to threat. When he references his ideal state (being liked and desired) against this backdrop, his calculations warn of failure and he begins to become quite physically and emotionally anxious (signaling that he should avoid such a situation). Unfortunately, he misinterprets his anxiety as indicating that his girlfriend wanted to embarrass him and thus, he snaps at her in anger.

Applications of BIT to a Unified Clinical Science

So, how might BIT inform clinical work? To begin, this theory can provide a rudimentary framework that helps explain what constitutes adaptive or maladaptive behaving. This framework begins with a number of basic assumptions. First, BIT views all humans as investors attempting to control the flow of resources. While the types of

resources that humans attempt to control can vary widely (e.g., food to social influence), they all relate back to a drive to gain or maintain the energy necessary for survival. The “attempts”, or behavioral investments, that people make also vary widely and some are more adaptive than others. This leads to an important point for clinicians to remember: ultimately, all human behaviors, no matter how “dysfunctional” they may be, represent attempts at controlling the flow of resources. For clinicians, this is a humble reminder that people will often behave in erratic, dysfunctional ways to meet their basic needs and that one goal of therapy is to provide newer, more adaptive ways of responding that achieve the same goal.

Second, the six principles that underlie BIT provide a rich conceptualization and explanation of human functioning that is solidly based in evolutionary theory. Several of these principles – most notably the principles of energy economics, evolution, genetics, and computational control – allow the clinician to make connections to other domains of scientific inquiry (e.g., biology, evolutionary genetics) to better understand the adaptive pressures that led to the emergence of the nervous system and human brain. The principle of learning makes direct connections to the fundamental insights of most behavioral paradigms, and the developmental principle reminds clinicians that behavioral investment patterns *should* differ depending on the developmental stage of life that a client is in.

From these principles, it is assumed that meeting one’s energy “baseline” is a sign of adaptation and health. This concept is quite similar to the biological concept of homeostasis. Much as biological processes are internally regulated by a hypothetical “set point” (where homeostasis is achieved), behavioral investment processes too seem driven

to achieve a “behavioral homeostasis” (Gazzaniga, Heatherton, & Halpern, 2010). Using this concept, it can be assumed that engagement in behaviors that put one at risk for falling short of or greatly exceeding their energy baseline is maladaptive and unhealthy. One needn’t look further than eating disorders to appreciate this concept. If one falls too short of “behavioral homeostasis” by consistently depriving themselves of nutrition, working out excessively, or purging, the consequences of such can be, in some instances, deadly. Conversely, if one greatly exceeds “behavioral homeostasis” by consuming far too many calories daily, perhaps to compensate for some emotional distress, the physical, emotional, and social consequences can also be quite severe. Not surprisingly, clinical interventions for these types of eating disorders often involve some form of nutritional education and management designed to help achieve a healthy balance.

Third, the framework of BIT also provides a template for making clinical decisions regarding the treatment of various signs and symptoms. For example, consider what happens when a client expresses what appear to be unrealistic expectations for themselves, others, or the world in general. While the inclination of most clinicians might be to simply address the unrealistic expectations, doing so alone fails to account for where these unrealistic expectations reside. By using the P-M=>E model of BIT, clinicians have three areas of investigation. Are the unrealistic expectations the result of distorted perceptions of the world (P), motivational states that are perhaps too optimistic and demanding (M), or failures of one’s emotions or mental experiences to effectively guide their behaviors (E)? By understanding the etiology of these expectations, clinicians may then more finely tune their therapeutic techniques to fully address their presence.

Fourth, the layered model of mind that emerges from BIT can help clinicians better understand the various domains of consciousness that influence one's behavioral outputs. For example, the emotion-focused therapist could use this to understand that primary emotions likely correspond to an operant level of information processing, thus explaining why these emotions occur so automatically and unexpectedly. On the other hand, secondary and instrumental emotions (which manifest from ingrained behavioral patterns or are used as intentional strategies, respectively) likely reflect cognitive level processes as they both involve the activation of mental imagery and the weighing of consequences found in this level (Greenberg, 2002).

Fifth, BIT can be a useful concept for understanding the manifestation of mental disorders that reflect maladaptive behavioral states. For example, Henriques (2002) used BIT principles to argue that some features of non-organic clinical depression may in fact be the artifact of a behavioral strategy that was once adaptive for humans. He argued that the inhibition of the behavioral system and general lethargy that is frequently experienced in depression may have been an adaptive strategy during times when access to energy resources (e.g., winter) was limited. However, in the modern world where access to caloric resources is plentiful, these once adaptive strategies become maladaptive as their activation causes significant impairment in the lives of those who suffer from them.

Finally, with regard to the unified clinical science movement, BIT may serve as a unifying theory for some psychological disciplines, especially those related to cognitive or neuropsychological functions. The elements of BIT resonate in such disciplines as behavioral genetics and developmental systems. The process of behavioral investment, which is anchored in evolutionary theory, may help to unite behavioral science with

neuroscience and serve as a fundamental process in such fields as computational science and energy economics (Henriques, in press).

The Justification Hypothesis (JH) and the Rise of Culture

The Justification Hypothesis (JH) is perhaps Henriques' most novel insight into human functioning. The JH begins with the premise that shared symbolic language systems afforded many advantages to early humans, such as easily communicating information, being able to think more flexibly, and coordinating the behaviors of large groups of people. However, despite its many advantages, the invention of language also meant that for the first time, others had access to one's private thought processes (e.g., via questions like "why did you do that?"). Now, if one's private interests always coincided with the interests of the group, then this problem would merely be one of communicating reasons for one's behaviors in ways that could be understood by others. However, people often have reasons for their behavior that diverge from the interests of the group. Thus, from an evolutionary perspective, direct access to the thought processes of others through language posed a novel problem: humans became the first animal that had to explain *why* it did what it did (Henriques, 2003; 2007; in press; Shealy, 2005).

Henriques (2003) argues that people developed the capacity for justification as an adaptive solution to this novel problem. Justifications, broadly defined, are reasons given to legitimize a person's behaviors in ways that are likely to reduce the risk of losing social influence or other important resources. They may take many different forms, such as rationalization, lying, and minimizing, to name but a few. By offering justifications for behavior, one becomes able to filter out the aspects of their inner mental life that they want to keep as private and those that they want to be presented publicly.

As an adaptive solution, justifications are regulated by the same processes that underlie all of evolution: justifications are varied (many justifications are given), selected for (certain justifications legitimize behavior better than others), and retained (selected justifications are stored and repeated). Because of these processes, the justifications that are retained, over time, become the foundation of a person's self-narrative, which forms the basis of the human self-consciousness system (Henriques, 2003; 2007; in press). These justification narratives become so ingrained that, even when presented with evidence to the contrary, people tend to guard their validity with vigor. Shealy (2005) remarks "...one of the most striking and defining characteristics of such justification processes is the demonstrable absence of awareness of the basic fact that one's own beliefs and values may, in the end, be nothing more or less than that...one's own" (p. 84). The establishment of a human self-consciousness system will be referred to again in a few moments.

To illustrate the importance of justification, imagine a man who, while observing a particularly touching commercial with his male friends, begins tearing up. His buddies, quick to emasculate any man who shows signs of emotional weakness, immediately ask him what is happening. If he were to simply tell the truth – that he saw the commercial, it touched him, and he felt the impulse to cry – he may have to endure hours of endless heckling. However, if he offers a different social explanation (e.g., "I felt something in my eye that made me tear up"), he may only have to hear a few snide comments. This response pattern may be influenced by past experiences where he showed emotional vulnerability among male peers and was chastised for his openness.

Justifications are not confined to individual behavior alone. Henriques (2003, 2004; in press) argues that the emergence of justification processes in humans led to the further development of justification *systems* that seek to guide and mediate the behaviors of large groups. From this vantage point, laws, moral dictates, and even religious and philosophical beliefs are all seen as justification systems writ large that offer the individual roadmaps on what behaviors are socially acceptable. These large scale cultural justification systems offer beliefs and values about what is morally right and wrong and make claims about how one should organize their personal and public lives accordingly.

While the process of justification may seem fairly straightforward, it is important to note that the act of justifying oneself to others is actually a complicated business. The thoughtful reader might recognize that, in an average day, one engages in justification processes too often to count. The frequency with which people justify their actions highlights a couple glaring problems. First, if one were to justify the *same* behavior differently from person to person, they put themselves at greater risk for being exposed as inconsistent, fraudulent, and untrustworthy. Secondly, not all justifications are created equal, and some will have more adaptive power than others. Considering this from an evolutionary standpoint, it is most adaptive to have some cognitive feature designed to monitor and track the many justifications that one gives in order to ensure correctness, consistency, and coherency. According to the JH, it was precisely this demand that gave rise to the mental organ of justification, or the human self-consciousness system (Henriques, 2003; 2007; in press).

A review of general theories of cognitive organization may be helpful before addressing how justifications gave rise to the human self-consciousness system. Research in the fields of cognitive science, neuropsychology, and psychotherapy suggest that the human mind is organized into two primary information processing systems: a non-verbal, experiential system, and a verbal, rational system. In an attempt to connect psychodynamic theory with cognitive science, Epstein proposed that the human mind can be divided into an “experiential self”, consisting of images, feelings and desires, and a “rational self”, consisting of language-based thinking and reasoning (Epstein, 1994). Cognitive scientist Daniel Kahneman proposed a more elaborate mental structure that is organized in a similar fashion. According to his model, System 1, the non-verbal system, is an automatic, effortless, and fast parallel processing system designed to handle sensations, perceptions, motivations, and emotional outputs. In contrast, System 2, the reasoning system, is a slow, delayed, controlled, effortful, emotionally-neutral, flexible, rule-governed serial processing system (Kahneman, 2003).

Henriques (in press) argues for a similar structure of the human mind, but notes that what is absent from Epstein’s (1994) and Kahneman’s (2003) proposals is *why* such mental structures arose in the first place. Using BIT as a guide, he defines “System 1” as “a nonverbal, perceptual-motivational-emotional, parallel neuro-information processing behavioral guidance system that computes resource availability and organizes action.” Inherent in this definition are the principles of BIT, which, in sum, state that the nervous system evolved to compute behavioral investments and help organize the animal-as-a-whole. He notes that this system is one that is shared with other mammals

“System 2” is defined as “a verbal (symbolic-syntactical), reflective, logical-analytic, sequential information processing system” (Henriques, in press). Inherent in this definition are principles of the JH, which argues that the emergence of a shared language system led to the problem of justification and, over time, led to the development of cognitive structures (found in System 2) designed to handle this problem. Indeed, research from cognitive science appears to support this hypothesis. For example, split-brain studies show that, even when blind from information given to the right hemisphere, the “interpreter” function of the left hemisphere will attempt to justify why the right hemisphere made certain choices (see Gazzaniga, 1992; 1997).

The separation of a behavioral investment guidance system from a justification guidance system thus far advocates for a two-domain model of human self-consciousness. However, this model would be wholly incomplete without noting the differences between *private* justifications (reasons given to self for behaviors) and *public* justifications (reasons given to others for behavior). Clearly, the former represents a part of self that is inaccessible by others (e.g., self-talk), while the latter represents the part of self that is displayed for all to see. Accordingly, it is argued that the justification guidance system is actually two systems, where one is a *private* self-consciousness system and the other is a *public* self-consciousness system (Henriques, in press). Thus, the model of human consciousness offered by HUTP consists of *three* systems – experiential self, private self, and public self – that dynamically interrelate with one another to form the experience of human consciousness. Because of its three parts, this model from now on will be referred to as the tripartite model (see Figure 2.3 for a visual representation).

At this point, it should be noted that because all three components of the tripartite model represent distinct systems, there must be some degree of filtering that occurs both among and within each. Accordingly, Henriques proposes that such filters exist between each of these systems. Interestingly, he also proposes that these processes correspond to phenomena studied by major schools of psychotherapy. The first of these filters –the “Freudian filter” – is so named to represent the dynamic tensions between the “primary processes” of the experiential self and the meaning-making processes of the private self-consciousness system of interest to Freud and many psychoanalysts. The second of these filters – the “Rogerian filter” – is so named to highlight the conflict one experiences when their private self does not align with the version of self they feel compelled to offer publicly to others that is often tackled by client-centered therapies.

The full tripartite model of human self-consciousness proposed by HUTP includes three systems of self (an experiential self, a private self, and a public self) and two modes of filtering between these domains (the Freudian and Rogerian filters). However, this system is also referenced against the background of external reality, which includes (1) the relational transactions made between self and the larger world, (2) the desire to gain and maintain social influence, and (3) influence from large scale justification systems, or “collective core beliefs or group worldviews [that] are the templates through which groups and group members interpret their shared experiences” (Eidelson & Eidelson, 2003). When the tripartite model is set in motion against these, it shows how a person justifies his or her self-consciousness experience in the context of a dynamic, evolving reality (refer to Figure 2.3 for clarity).

Context of Justification

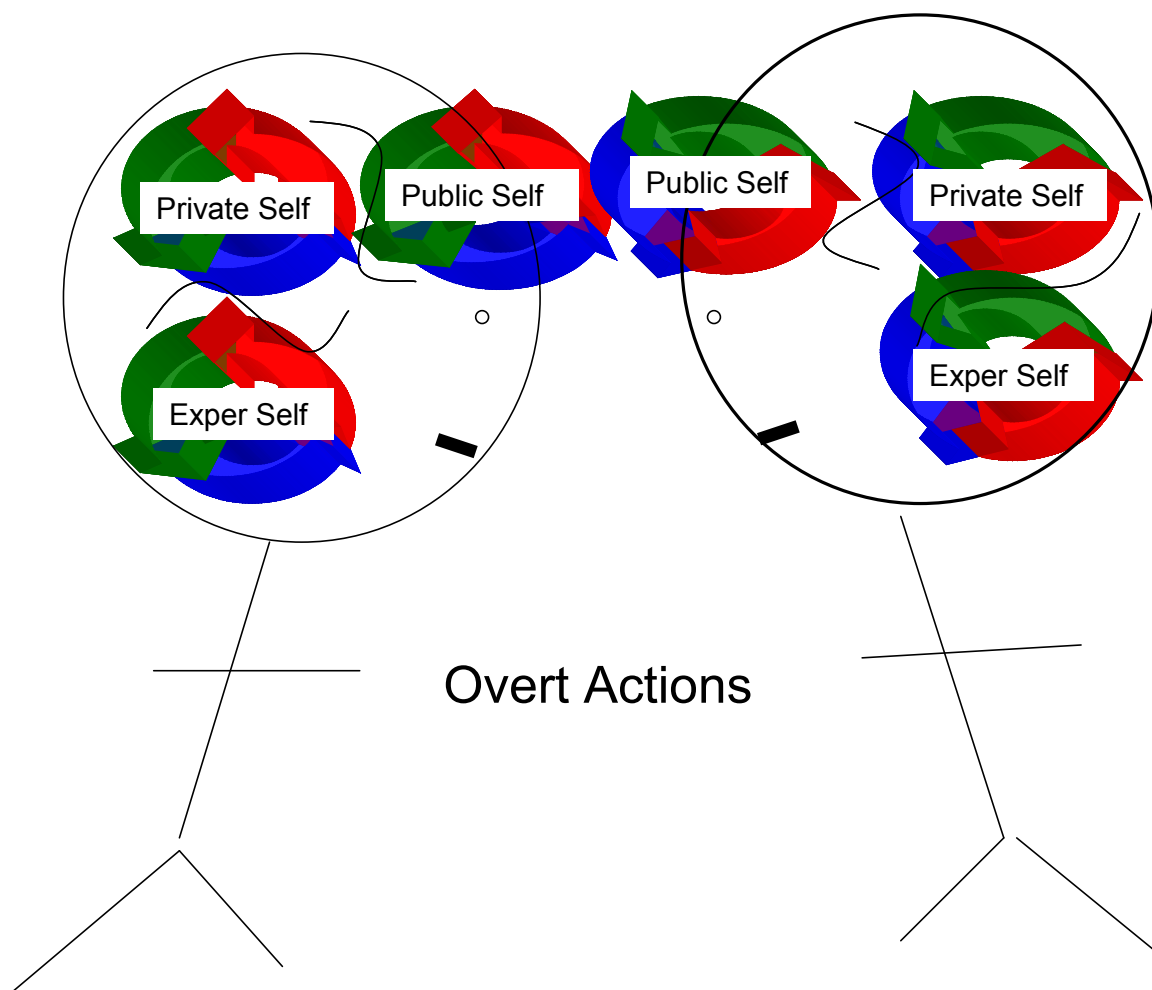


Figure 2.3: Representation of Tripartite Model of Human Self-Consciousness

Applications of the JH to a Unified Clinical Science

How might the insights of the JH be of use to clinicians? First, and most importantly, the JH may serve as the missing link for understanding the development of human self-consciousness. Undoubtedly, one of the greatest challenges for the science of psychology is to explain with certainty what makes us humans so different in comparison to our animal brethren. With a firm grounding in evolutionary science, the JH offers a template for both *why* and *how* the human self-consciousness system arose in an attempt

to resolve that problem. It argues that the advancement of language led to the problem of justification, or that humans became the first animal that had to explain why it does the things that it does. The proliferation and abundance of justifications then necessitated the development of a meditational system that varies, selects, and retains justifications across the developmental lifespan. This system, known as the human self-consciousness system, met this need through the creation of three systems and two filtering processes that dynamically interrelate and reciprocate to weave together a consistent, coherent self-identity that remains flexible to change over time.

The tripartite model of human self-consciousness offered by HUTP provides a graphic representation of some of the key insights from psychotherapy and cognitive science and has strong face validity. When referenced against one's own experiences of being a self-conscious being, it is easy to identify with the different parts of self and the processes by which filtering occurs between each. The organization of this system can help clinicians quickly and accurately identify where client distress is located. For example, when working with an emotionally inhibited male, a therapist might use this figure to see that he has separated his emotional/experiential self from private awareness through the use of defense mechanisms employed by the Freudian Filter, and design her interventions accordingly. This system can also be a useful visual aid to use in therapy as an educational tool for clients. For example, it could be used in couple's therapy to show how one partner presents in an overly favorable light to the other for fear that, should his unjustifiable thoughts and feelings be revealed, she would surely leave him.

Secondly, the JH may serve as an organizing principle for phenomena studied by many different disciplines of psychology. For example, it may illustrate why some

defense mechanisms (e.g., rationalization, denial) emerge when an individual behaves in a way that is unjustifiable to self or others. From a cognitive psychology perspective, it may help to further explain the splitting of the mental architecture into two domains (parallel and logical-analytic) and how the processes of metarepresentation emerged in humans (Stanovich, 2004). From a social psychology perspective, the phenomena of cognitive dissonance may reflect self-justification in order to maintain a coherent sense of self. Furthermore, viewing belief systems such as law, religion and moral reasoning as large-scale justification systems may provide greater linkages between human psychology and the social sciences.

Third, it may serve as an organizing principle for uniting various schools of psychotherapy. Clinically speaking, it is often the justification narratives of clients that therapists work most directly with, and most modern psychotherapy approaches address justification to some degree. Cognitive therapy, for example, emphasizes the analysis of one's private thoughts and public behaviors as the vehicle for meaningful change (Beck, 1995). This form of therapy primarily addresses justifications found in the private self by helping the client assess both the accuracy and utility of their immediate thoughts and greater justification narratives. Other forms of therapy that appear to directly address one's justifications include narrative therapy (White & Epston, 1990), schema therapy (Young, Weishaar, & Klosko, 2005), rational-emotive behavior therapy (Ellis, 2001), and psychodynamic therapy, to name but a few. In fact, considering that the primary way therapists interact with their clients is through verbal discourse, it's hard to imagine any psychotherapy that doesn't involve meaningful interactions with one's private justification narrative.

The Influence Matrix (IM): A Social Extension of BIT

The Influence Matrix (IM), a useful schematic that maps out how social influence is both perceived and pursued by emotional responding, is an extension of BIT into the social and relational domain. The IM shows how humans gain and maintain social influence through the three axes of Power, Love and Freedom. To fully understand how the IM works, one must first understand the power that the drive for social influence possesses in everyday human interactions, which requires some insight from an evolutionary perspective.

When thinking about survival needs, being a part of a group has many advantages over going it alone. Groups are larger and thus more intimidating to predators. In addition, groups help provide an individual animal some degree of anonymity, thereby decreasing its chances of becoming a predators next meal. Groups also make it easier to obtain some resources necessary for survival (e.g., food, shelter). Despite its obvious survival advantages, being a member of the group has some negative consequences. For example, a solitary animal only has to worry about its immediate environment and calculate its behavioral expenditures in accordance with its own energy needs.

When one is part of group, however, the rules of behavioral investment change. Because the survival of the group depends on everyone “playing by the rules”, if an animal behaves purely in the interests of its own needs, it risks being cast out from its group and loses those survival advantages. To be in a group, an animal must calculate its own needs, but also be able to weigh its needs against the requirements of the group. This, however, is often no simple task.

To illustrate the dynamic between individual and group needs, imagine a pack of famished hyenas that happen upon the carcass of a zebra. If those hyenas were to act with only their needs in mind, the group as a whole would dissolve, the advantages afforded by group inclusion would dissipate, and it would become every hyena for itself. Competition would rule and each individual hyena would risk being injured, killed or chased away in the fights that ensued. In this scenario, while it would certainly be good to be “top dog” (and thus have most of the access to the carcass), the risk involved with being one of the “losers” would certainly outweigh any benefits. Fortunately, hyenas have been shown to engage in complex rituals of posturing, submission, and dominance that determine the hierarchy of power within the pack. This allows the pack to function more cohesively and thus gain additional access to much-needed resources (East, Honer, Wachter, Wilhelm, Burke & Hofer, 2009).

As you can see from the example, the dynamic between individual and group needs can be very complex. After all, while being in a group has many advantages, those advantages are essentially nullified if an individual cannot meet his or her basic needs. Thus, all members of a group are in direct or indirect competition with one another for *social influence*. Social influence represents the relative status of an individual in a group, and because those members with the most status gain access to the most resources (e.g., food and reproductive rights), obtaining the most social influence possible is something that all social animals are quite motivated to do. For humans, obtaining social influence is no straightforward process. If it were, we might expect that the person with the most social influence in a group would be the strongest or most physically aggressive. Obviously, this is not the case, and a cursory glance at one’s own daily social interactions

reveals innumerable nuances and subtleties in relationships that require more complex explanation.

The IM is a three dimensional model of social motivation and affect that seeks to explain the complex relational behaviors of humans (see Figure 2.4 for clarity). This matrix posits that individuals exist in a unique state of social influence at any given moment in time along three dimensions: dominance-submission (Power), affiliation-hostility (Love), and autonomy-dependency (Freedom). It predicts that an ideal state of social influence involves a healthy balance of dominance, affiliation, and autonomous-interdependence. Although people will vary as to how much power, love and freedom is necessary, the balance between all three is the ideal social state and the IM posits that people are generally motivated to approach high influence states (Henriques, 2005; Montazeri, 2010).

The IM is intended to provide a blueprint for how humans assess and respond social demands while maintaining or gaining their level of social influence. Similar to BIT, the IM points out that emotions are information points used to influence an organism's behaviors towards a specific goal. In simpler animals, two basic emotions seem to predominate: anger, which signals that one should fight, and fear, which signals that one should flee (Friedman & Silver, 2007). Obviously, the human emotional system offers a wider range of responding than this, but its basic goal remains the same: influencing one's behaviors towards a specific goal. And because we are embedded in a social context where social influence corresponds to long-term survival success, the IM argues that the human emotional system has evolved to both track and adjust our behaviors to maximize our social influence (Montazeri, 2010).

Ultimately, the IM is a pictorial representation of the processes that guide one's navigation of the socio-emotional landscape. Some of these processes, like understanding and responding to primitive emotions like fear and anger, seem to be hardwired and universal. Many of these processes, however, are learned, developed, and refined over the course of one's lifetime (Barrett, 2006). Consistent with the principles of natural selection, three components go into this social learning process: variation, selection, and retention. Thus, under normal circumstances, children express a wide array of response patterns towards others (variation) that either help the child adapt to his or her surroundings (and are selected for) or do not (and are selected against). Over time and experience, the most "adaptive" features are retained and folded into one's personality structure, while "maladaptive" features fail to make the cut. Important to remember, however, is that (a) while some ways of relating to others may be adaptive at a certain stage of life, they can become adaptive at later stages, and (b) that all of these processes exist to help one gain or maintain a position of social influence. Thus, the way that one goes about gaining or maintaining their social influence varies as widely as individual life experiences do.

Applications of the IM to a Unified Clinical Science

How might the IM be of use to a unified clinical science? First, it may help explain the emergence and function of complex social behaviors in animals. Anchored in evolutionary theory, the IM both provides a form and a function for the human relational styles. It argues that because humans are social creatures, yet also function independently to meet individualistic needs, all people are in competition for social influence, which represents actual and potential access to desired resources. Consistent

with this argument, the IM predicts that emotions developed in tandem with complex group behaviors as a means of assessing one's degree of social influence and directing social investments. Functionally, the IM itself is a three dimensional model of social motivation and affect that helps to explain how people think about social influence.

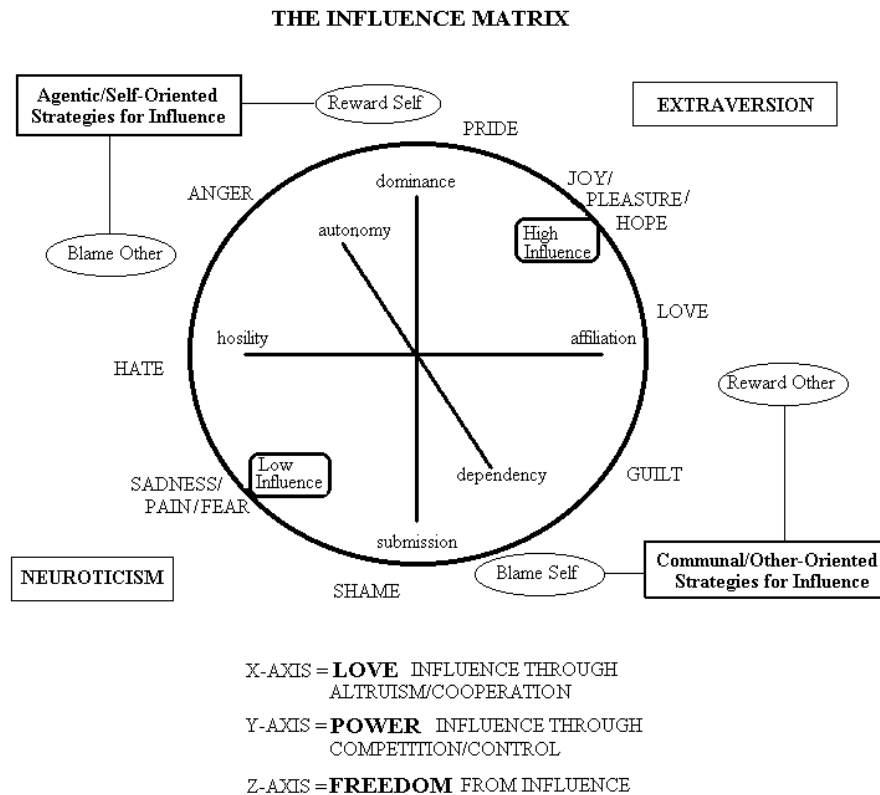


Figure 2.4: The Influence Matrix

Secondly, the IM may serve as a unifying construct for many disciplines involved in the research of human social behaviors, affect, and personality. Montazeri (2010) argued that key insights from a number of scientific disciplines - including attachment theory, parenting styles, psychodynamic theory, affective theory, and self-determination theory, to name a few – could be unified by the construct of the IM. She also argued that the IM builds upon and expands existing lines of research into social motivation and affect, such as Leary's Interpersonal Circumplex (Leary, 1957). Recent research into the

IM suggests that it may also be able to connect with personality and trait theory by predicting personality typology (Montazeri, Burnett, Berry, and Henriques, 2007).

Finally, the IM may have direct applications to the practice of psychotherapy. In her dissertation, Montazeri (2010) sketched out how the IM could be used as a clinical tool. Developmentally speaking, she hypothesized that people learn to use the six ways of relating – dominance, affiliation, dependency, submission, hostility and autonomy – in both competent and incompetent ways. Furthermore, healthy social responding involves the capacity to flexibly respond to the social emotional demands of others, while maladaptive responding is often represented by fixed, rigid patterns imposed on others regardless of changing contexts. For example, while the use of submission may be an appropriate tool for navigating an early abusive environment, the continued use of submission throughout adulthood may lead to problematic relationships. Considering this, she notes that the principle ways that therapists can use the IM as a clinical tool include being able to “1) raise clients’ awareness of their relating behaviors towards others and of others’ relating behaviors toward themselves, 2) modify such behaviors as are resulting in difficulties, and 3) minimize negative relating while maximizing positive relating” (p.114). Also, once areas of incompetent relating have been identified, therapists can promote more competent styles by “1) identifying how the client (or those in the client’s life) is relating rigidly and in ways that are no longer adaptive; 2) actively relating to the client in ways that are healthy and flexible; 3) modeling competent behavior from each of the *Power, Love and Freedom* dimensions, and/or modeling competent behavior particularly from the opposite direction in which the client has a deficit” (Montazeri, 2010, p. 120).

So, what does using the IM look like in the clinical setting? To illustrate, consider the case of Jack and Jill. They enter your practice claiming that while their marriage is on the verge of divorce, they want to work things out for the sake of their children. During your intake session, Jill, a successful lawyer who is the primary breadwinner, complains that Jack is lazy, selfish, and unresponsive to her needs. Jack, who takes care of their two children since he is currently unemployed, remains mute during Jill's tirade. With some prompting by you, Jack says that he doesn't think Jill fully understands how much he contributes to the family. Jill immediately snaps back, proclaiming that Jack is ungrateful of her hard work, and that if he wanted to be more appreciated, he should take the initiative to find a job. Jack slumps back in his seat with a defeated look on his face.

In later sessions, you learn that Jill grew up in an abusive environment where showing vulnerability of any sort meant further abuse at the hand of her mother. To survive this environment, she learned to overcompensate for her perceived deficiencies by establishing an unrelenting presence of dominance through the expression of anger and hostility. You learn that Jack also grew up in an abusive environment; however, in Jack's case, he often witnessed his alcoholic father beat his mother incessantly. In this case, Jack learned that submissive behaviors helped keep him safe from his father's abuse. Using the IM, several relational themes immediately emerge from just one session. In their relationship, Jill continues to use dominance to cope when she feels threatened, such as when she perceives Jack to be uncaring of her efforts. Conversely, Jack continues to use submission when threatened. Unfortunately for both, their

continued, inflexible use of these strategies has led to a relationship defined by mistrust, miscommunication, and defensiveness.

As Jack and Jill's therapist, your task then, using the IM as a guide, is to help them (a) understand why their relating styles may once have been adaptive, but are no longer so, (b) how to flexibly vary their styles of relating to promote adaptive communication, and (c) accurately assess the current state of their marriage and the advantages and disadvantages of reevaluating their relationship. During couples therapy, you may choose to have the partners explain their emotional states when threatened and understand what information those emotions hold, use role-playing to model healthier patterns of relating, and suggest paradoxical interventions as a means of highlighting the dysfunction of their current pattern.

Assimilating and Integrating Key Insights with HUTP

Henriques (2003) points out that the fragmentation of psychology may also be due in part to irreconcilable differences between major schools of thought. Arguably, the field of psychology as a whole has developed in tandem with the major schools of psychotherapy. Historically, devotees to each single-school approach have so fervently touted theirs as champion above others that unification has seemed improbable, if not impossible, to achieve. The momentum within the psychotherapy integration movement has led to the development of a few systems (e.g., cyclical psychodynamics) that help resolve some of the incongruities between these approaches, but even then, epistemological differences continue to persist.

The ToK, however, may be of use in resolving some of these longstanding differences. Henriques (2003) used the ToK to show how two rival systems – Skinner's

radical behaviorism and Freud's psychoanalysis – may be subsumed into Henriques' system in a manner that promotes unity. Specifically, he argued that these systems appear to be irreconcilable because their level of analysis reflects different dimensions of information processing. Skinner's fundamental insight was argued to be that the nervous system emerged to turn the multicellular animal into a coordinated singularity and manage its behavioral investments. Thus, Skinner was most concerned with processes found in the Mind dimension.

Henriques (2003) makes connections between behaviorism and psychoanalysis by noting that Freud had discovered the dynamic unconscious. This dynamic unconscious includes a number of primitive, pain-pleasure, approach-avoidance strategies and impulses that are quite similar to the way that the behavioral investment processes of the Mind dimension have been laid out. However, Freud was also argued to have discovered the human ego, which functions to inhibit the socially unjustifiable impulses of the id (or, in ToK terms, behavioral investment processes of the Mind dimension) and, when those impulses could not be inhibited, to offer reasons that legitimize one's behaviors. Thus, Freud was most concerned with processes of the Culture dimension; namely, the process of justification and the influence of large-scale justification systems on human behavior. As graphically depicted in Figure 2.5, the ToK provides a clear delineation between the dimensions of interest to Skinner and Freud (Mind and Culture, respectively). By doing so, it helps clear up the muddy waters of psychology and invites new lines of discourse between these two systems.

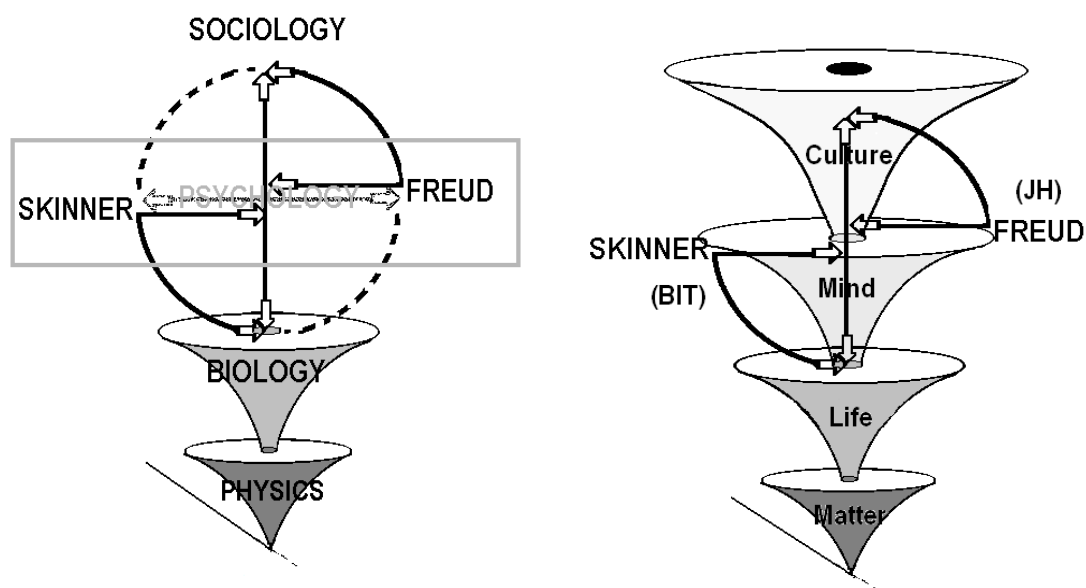


Figure 2.5: Current state of Psychology (left); Psychology as defined by ToK (right)

With a firm understanding of HUTP and its various components in mind, the next chapter will focus on analyzing this system against the criteria for a UCS as presented in chapter one. In chapters four through six, HUTP will be again be critically analyzed, yet in comparison to several popular forms of integrative psychotherapy. Finally, in chapter seven, HUTP will be reviewed as a proposal for a UCS.

Chapter 3: Henriques' Unified Theory as a Unified Clinical Science?

As presented in chapter one, leaders in the psychotherapy integration movement have recently made the call for a unified meta-theory that not only integrates various therapeutic approaches, but connects with the greater body of human knowledge. A consolidation of the arguments made by several of these leaders yielded ten criteria across five general domains designed to identify legitimate proposals for a unified clinical science (UCS). These domains require a UCS proposal to include multi-levels of human functioning, be able to define the field of psychology and connect with other sciences, account for human change and development, provide a universal language, and evaluate and assimilate existing psychotherapeutic modalities. In the following sections, Henriques' Unified Theory of Psychology (HUTP) will be assessed with these criteria to evaluate it as a legitimate proposal for a UCS.

Domain 1: Multi-Levels of Human Functioning

1. *The meta-theory should span all levels of analysis of human functioning and show the interrelationships between distinct domains.*

Virtually all meta-theoretical systems, like the biopsychosocial model, attempt to show how individual aspects of human functioning dynamically interrelate to compose the greater gestalt of the human experience. Similarly, any legitimate proposal for a UCS should be able to simultaneously offer a microscopic view of individual human attributes and a macroscopic view of the greater whole. Does HUTP meet these qualifications? A strong argument can be made that it does.

Like other models of human complexity, such as Bronfenbrenner's (1994) ecological model, HUTP argues that human functioning spans a number of independent,

yet interrelated, levels of growth. HUTP carves out these levels of growth by identifying four separate dimensions of information processing: Matter, Life, Mind, and Culture. Each dimension is distinctive from the rest because of the way that information is processed within. For example, the Culture dimension is separate from the Mind dimension because the symbolic information (language) of the former is fundamentally distinct from the neuronal information (chemico-electrical impulses of the nervous system) of the latter (Henriques, 2003; 2005).

With four dimensions of complexity visually represented in the ToK System, the model offered by HUTP also shows interrelationships between its separate domains. It argues that humans are nested within multiple domains of reality that can be viewed from both bottom-up and top-down perspectives. For example, from a bottom-up perspective, HUTP shows that people emerge from organic molecules (Matter, quantum information) that develop the capacity for self-replication (Life, genetic information) which, because of environmental pressures for adaptation, eventually organize the animal into a coordinated, autonomous whole through the creation of a nervous system (Mind, neuronal information) that ultimately develops the capacity for justification (Culture, symbolic information) and self-consciousness.

From a top-down perspective, one can see that societal-level justifications can have a wide array of influences on human behaviors, biological processes, and the manipulation of matter and energy. For example, the U.S. government justified the creation of the atomic bomb in order to end a war and spare countless numbers of American lives. The dropping of the atomic bomb on Hiroshima directly impacted the lives of millions of Japanese civilians, advanced lines of research into the manipulation of

matter, and reciprocally changed modern society by ushering it into the atomic age (Henriques, 2003; 2005).

To offer a clinical demonstration of how HUTP satisfies this criterion, consider the following example from the film “Forrest Gump.” Prior to going to the Vietnam War, Forrest’s unit leader, Lt. Dan, recalls how multiple generations of men in his family died proudly in war and justifies that it would be an honor if he did the same. While in combat, Lt. Dan is severely wounded, but is miraculously saved by Forrest. Later, in the hospital, it is revealed that Lt. Dan has lost his legs. Compounding this trauma, when he returns to the U.S., he is greeted not with a hero’s welcome, but with accusations of being a murderer and a disgrace. He slips into a deep depression, isolates himself, and finds comfort through the abuse of alcohol and other drugs (Finerman, Newirth, Starkey, Tisch, & Zemeckis, 1994).

Using HUTP as a guide, one can assess Lt. Dan’s functioning in the following ways. Lt. Dan begins with the justification narrative that he is being a valiant and dutiful soldier by going to fight for his country. This justification is reinforced by a military that promotes selfless service in the name of country. While in Vietnam, he coordinates his behaviors accordingly (e.g., fighting heroically) which serve to further solidify his justification narrative. However, after being saved, his system receives a major blow. He awakens to find that his legs have been amputated, representing a significant shock to the functioning of his body. Given his justification system, he interprets his becoming a paraplegic as meaning that he has become weak, feeble, and dependent on others. He responds to these implications with intense feelings of anger and hatred towards Forrest, proclaiming that it would have been better if he were left to die. He clings desperately to

the idea that he will be seen as a hero for sacrificing so much, but when he returns home to accusations of being an immoral murderer, this hope is destroyed. With a broken body, a defeated self-concept, and a society that has now devalued his sacrifice, he drowns his emotions of shame and anger with alcohol and spirals deep into a physiological and psychological depressive state.

2. *The interactions between multiple levels of analysis should explain and connect existing psychological phenomena or create new phenomena for further exploration and research.*

An exploration of HUTP suggests that it sufficiently meets the requirements of this criterion. According to HUTP, the adaptive pressures inherent to each of its four dimensions of complexity led to new strategies of processing information in novel ways. Some of these adaptive strategies, or “joint points”, have been studied extensively by other sciences, such as the Big Bang theory of physics and biology’s modern synthesis. By using a reverse engineering process that seeks to identify what factors led to the development of existing psychological structures (e.g., human self-consciousness), two theories in particular – Behavioral Investment Theory (BIT) and the Justification Hypothesis (JH) – emerge from the ToK and HUTP. These two theories have shown HUTP’s capacity to not only make connections with other psychological sciences, but also to reveal new ways of exploring and understanding the human condition (Henriques, 2003; 2005; in press).

As presented in chapter two, BIT, a theory grounded in evolutionary science, posits that the nervous system evolved to flexibly compute and coordinate the behavioral investments of an animal (Henriques, 2003; in press). Henriques argues that BIT can

serve as a unifying construct for five brain-behavior paradigms in particular: cognitive science, behavioral science, evolutionary theory and genetics, neuroscience, and systems theory. At a theoretical level, he argues that BIT is the fundamental idea that all five of these sciences adopt either implicitly or explicitly, noting that many leaders in these domains have used some form of BIT as an organizing framework for their models of the nervous system. For example, he shows how a perceptual control theory conceptualization of the nervous system is one where “animals work to reduce discrepancies between current states and computationally referenced goal states” (Henriques, 2003, p. 162). This conceptualization is similar to the P-M=>E algorithm offered by BIT.

At an applied level, BIT carries over to the practice of psychotherapy and can help clinicians better understand how their client’s motivational states and perceptions of reality lead to the complex behaviors that they exhibit. For example, and as presented in chapter 2, the heuristic P-M=>E can be useful for identifying where errors in perception (e.g., unrealistic motivational states, misinterpretations of reality) might occur with regard to maladaptive behavioral investments. As another example of its clinical utility, Henriques (2000) used BIT in conjunction with an evolutionary framework to show that some salient features of clinical depression may have once had an adaptive value (e.g., physiological shutdown during winter months), but have become maladaptive in the context of conveniences afforded by modern technology.

Similarly, Henriques (2003; 2004; in press) argues that the JH, which posits that the human self-consciousness system emerged from the adaptive problem of justifying ones actions to others, may serve as a bridge between several disparate fields of

psychology. He argued that Freud's fundamental observation was that the human ego functions as the mental organ of justification designed to consciously track and influence the reasons one gives for their many behaviors. This observation, which explains self-consciousness from an evolutionary standpoint, is argued to unite several domains of inquiry, including psychoanalysis, evolutionary psychology, social psychology, developmental psychology, and many of the social sciences, including sociology, law, philosophy, religion, and even the system of science itself.

Finally, the IM, an integrated model of social motivation and affect that stems from BIT, has also been presented as a unifying construct. Montazeri (2010) argued that the IM may unite numerous paradigms that seek to explain human emotions and social behaviors, including attachment theory, parenting styles, psychodynamic theory, affective theory, self-determination theory. Furthermore, recent research into the IM suggests that it may also be able to connect with personality and trait theory by predicting personality typology (Montazeri, Burnett, Berry, and Henriques, 2007). In sum, the three theories that emerge from HUTP – BIT, the JH, and the IM – show evidence of being able to connect with and unite a variety of disparate fields of psychological research.

Domain 2: Define the Field of Psychology and Connect with Other Sciences

3. *The meta-theory should be able to connect with other major scientific domains (i.e. physics, medicine, sociology) and effectively define the scope of psychological science.*

HUTP makes an ambitious attempt to connect with many of the other scientific domains of inquiry. With the ToK as a meta-map, one can see that HUTP is able to bridge the gaps between all major scientific domains (for a pictorial representation,

please refer to Figure 2.1). The ToK System makes these connections by essentially carving nature into four dimensions of complexity. Accordingly, each of these four dimensions corresponds to a major body of scientific inquiry. For example, study of the Matter dimension corresponds with the physical sciences (including physics, chemistry, astronomy, etc.), the Life dimension corresponds with the discipline of biology, the Mind dimension corresponds with psychological formalism, and the Culture dimension corresponds with human psychology and the social sciences. Many of these systems, however, are “hybrids” that study phenomena across multiple dimensions, such as organic chemistry (Matter & Life) and psychopharmacology (Matter, Life & Mind) (Henriques, 2003).

Using the joint points of BIT and the JH as a guide, HUTP also helps define the scope and composition of the science of psychology. In his 2004 article *Psychology Defined*, Henriques argues that there can be a coherent definition of psychology, and that the field has historically stretched across two domains of complexity in a way that has prevented it from being effectively defined. Specifically, rather than existing as a single, unified construct, the overall discipline of psychology is actually a blending of psychological formalism and human psychology, where “psychological formalism” corresponds to the behaviors of animal objects and “human psychology” corresponds to human behavior at the level of the individual. From a ToK perspective, then, psychological formalism is the study of phenomena within the Mind dimension (e.g., animal behaviors). This area of research pertains to all animal life forms with nervous systems that compute behavioral investments (including humans), but does not include principles like human self-consciousness, belief systems, and culture. In contrast, human

psychology is seen as a *hybrid* of both psychological formalism and the social sciences and spans the Mind and Culture dimensions. It builds upon the complexities of behavioral investment found in the Mind dimension and includes human self-consciousness and group justification systems that develop into larger societal and cultural constructs.

Henriques and Sternberg (2004) also proposed a third branch of psychology – professional psychology – to represent the direct application, as opposed to investigation, of psychological principles. This variation of psychology is likely of most interest to psychotherapists and other clinicians as it reflects the epistemological stance of using psychology to enhance the lives of clients as opposed to investigating psychology for the sake of broadening human knowledge alone. By dissecting psychology into three unique branches, he argues that “psychology” can be more precisely defined as “the institution devoted to the science of mental behavior, the human mind, and the professional application of such knowledge toward the greater good” (Henriques, in press).

In sum, by using the ToK as a ‘meta-map’, “psychology” is better defined as two separate, yet related fields of scientific inquiry: psychological formalism and human psychology. Furthermore, a third division of psychology – professional psychology – is differentiated to address the application as opposed to research of psychological principles. All three of these domains, in turn, are nested in the larger system of the ToK that shows connections between all forms of human knowledge.

4. *The meta-theory should be able to merge and address all forms of human psychology, including personality, cognitive science, neuropsychology, systems theory, etc.*

With a new definition of human psychology as a hybrid discipline of psychological formalism and the social sciences, HUTP can merge and explain many of the phenomena of interest to applied psychologists (Henriques, 2005). To do so, HUTP offers three novel constructs – BIT, JH, and the Influence Matrix (IM) – that help bridge the gap between these seemingly disparate paradigms. As previously mentioned, Henriques (2003, in press) presents BIT as a unifying construct for five disciplines: cognitive science, behavioral science, evolutionary theory and genetics, neuroscience, and systems theory. It succeeds as a unifying construct because of its ability to effectively describe the evolutionary principles leading to the development of a nervous system, the role of a nervous system, and the basic principles that a nervous system operates by. Clinically speaking, this principle can help therapists better understand the basic processes behind their clients' motivations, perceptions, and behavioral patterns.

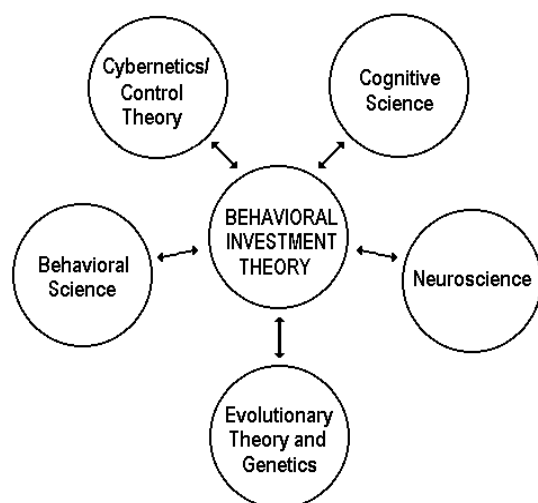


Figure 3.1: BIT as a Unifying Construct

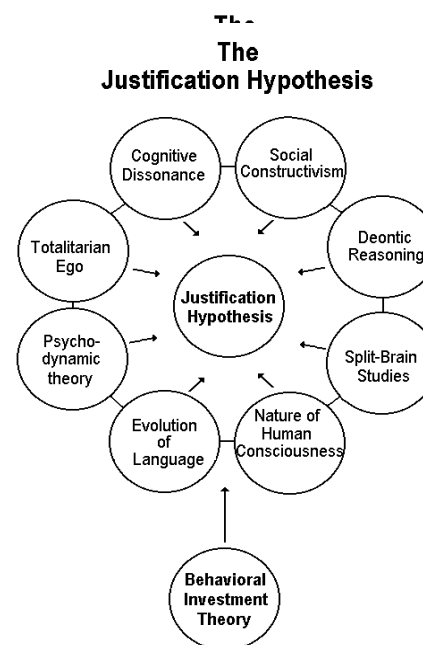


Figure 3.2: JH as a Unifying Construct

Stemming from BIT, the Influence Matrix (IM) offers an integrated model of social motivation and affect. Drawing from key insights, this construct allows for a

consolidation of knowledge across the fields of evolutionary psychology, affective science, psychodynamic theory, interpersonal theory, and attachment theory (Montazeri, 2010; Henriques, 2005; 2007; in press). Clinically speaking, it has been shown to be an effective tool for therapists to understand the personality and relational behaviors of their clients, as well as to identify maladaptive relational patterns (Montazeri, 2010).

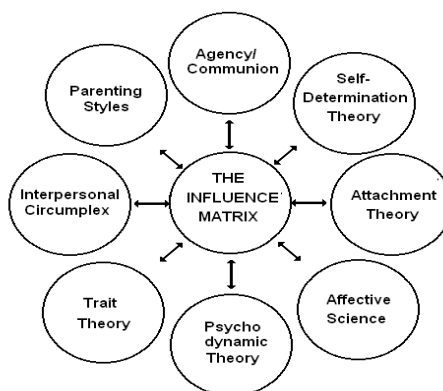


Figure 3.3: IM as a Unifying Construct

The JH is presented as a construct designed to bridge the gap between phenomena studied in psychological formalism (e.g., basic cognitive processes, social influence) and phenomena studied by the social sciences (e.g., law, religion, politics, and human self-consciousness). Henriques (2003; in press) argued that this insight has the capacity to unite numerous domains of scientific inquiry, including cognitive dissonance, social constructivism, deontic reasoning, psychodynamic theory, the evolution of language, and split-brain research. Furthermore, the JH has been presented as a foundation for the development of a human self-consciousness system that merges principles from a variety of psychotherapy approaches and brain sciences.

Others have commented on HUTP's capacity to assimilate and accommodate various sub-disciplines of psychology. Stanovich (2004) discussed how BIT and JH

interface with cognitive psychology, remarking “I am especially in tune with the idea that the combination of Behavioral Investment Theory (BIT) and the Justification Hypothesis (JH) yields the idea of a mental architecture consisting of two broad domains (parallel and logical-analytic)” (p. 1263). Preliminary evidence showing connections between the IM and the Big Five personality factors of Neuroticism, Extraversion, and Agreeableness has also been offered (Montazeri, Burnett, Barry & Henriques, 2007). Others (Quackenbush, 2004; Shealy, 2004) have commented on the ability of the JH to provide a means for understanding how individuals and societies reciprocally self-regulate within a system of agreed-upon justifications. In sum, HUTP is a promising model that has shown the ability to globally unite distinct fields of scientific research (e.g., biology, physics, psychology) as well as sub-disciplines designed to study specific phenomena (e.g., cognitive psychology, systems theory).

Domain 3: Account for Human Change and Development

5. *The meta-theory should be able to describe the phylogenic (evolutionary) and ontogenetic (lifespan) development of human beings and account for changing dynamics across these two domains. Furthermore, the meta-theory should be able to accommodate to future developments in human psychology.*

HUTP appears to demonstrate the flexibility necessary to account for human phylogeny and ontogeny. As previously mentioned, the ToK system carves nature at its joints to show that genetic information processing, which occurs in the Life dimension, is distinct from, yet interrelated with, neuronal information processing, which occurs in the Mind dimension. It is between these two dimensions that human phylogeny and ontogeny are best expressed. Specifically, the Life dimension shows how certain

evolutionary features of the human species are transmitted across generations, and the Mind dimension shows how the expression of those features influence the ontogenetic development of an individual within their own lifetime. It should be noted that in this system, the interaction between a person's genetic potential and their life experiences can lead to an expression of certain genetic traits and an inhibition of others.

HUTP also accounts for the interrelationship between human phylogeny and ontogeny by describing the adaptive pressures that led to the nervous system. It begins by showing how the genetic information processes of the Life dimension allowed for the emergence of self-replicating organisms. Unfortunately, disseminating information at a genetic level (e.g., an adaptive response to an environmental change) is painstakingly slow and requires multiple generations of the organism to reproduce before that information is successfully encoded into its genome. BIT argues that the adaptive pressure to quickly respond to environmental changes necessitated the emergence of a nervous system designed to compute and coordinate the behavioral investments of the animal as-a-whole. With the emergence of a nervous system, adaptive responses to environmental changes could now be learned and encoded within a single lifetime as opposed to across generations. As the nervous systems of animals became increasingly complex, the ability to make greater behavioral investments, and thus increase one's chances of survival and reproduction, also increased (Henriques, 2003).

Humans, however, share an evolutionary advantage that makes them unique from their animal counterparts: the capacity for justification. According to the JH, the evolution of shared language systems meant that humans became the first animal that had to give reasons for its behaviors. Because the reasons for one's behaviors are not always

socially acceptable, the adaptive solution of justification emerged. This capacity sparked the development of dynamic, evolving human self-consciousness system that engages in reciprocal feedback between itself and the environment via justification processes over the course of one's lifetime. Furthermore, certain justifications shared at a group level evolved into large-scale justification systems that reciprocally influence and organize human behavior on a massive scale (e.g., morals, laws, and beliefs). Through these, important information (e.g., tool-making) can be preserved and passed on to future generations in order to increase the chances of survival for the human race (Henriques, 2003; in press).

In sum, BIT accounts for human phylogeny and ontogeny by showing how adaptive pressures to quickly respond to environmental change led to the development of a nervous system that could quickly compute the behavioral investments of the animal. The JH shows how adaptive pressures created by shared language systems led to the adaptive solution of justification, which sparked the development of a self-consciousness system and large-scale justification systems that retain human knowledge and organize human behavior on a massive scale.

6. *The meta-theory should account for the dynamic pressures of change versus stability and individuality versus togetherness.*

This principle is best captured by Allen's (2007) commentary on attributes common to most metatheoretical systems. He describes the first part of this requirement, "account for the dynamic pressures of change versus stability", as "the constant war within systems between stability and change—the tendency of systems to strive to

maintain homeostasis and yet to evolve and adapt to changing external environmental demands” (p.277).

Does HUTP fulfill this part of the criterion? In short, yes. As a system of emergent evolution, HUTP captures the principles of stability versus change wonderfully. The ToK represents how adaptive pressures over time led to increasing complexity within each dimension and the emergence of novel adaptive strategies that gave rise to new dimensions of complexity. This complexity is accounted for by the processes of variation, selection, and retention that are inherent in any system of emergent evolution. In the ToK, some type of adaptive problem associated with each dimension led to many variations of solutions designed to address that problem. Consistent with natural selection, some of these “solutions” proved to be “fitter” than the others, thus being selected for (representing stability). However, several of these solutions (e.g., BIT and the JH) brought with them new adaptive problems (represented by the various dimensions of the ToK), each of which required new solutions. To refer back to the question of accounting for stability versus change, the “solutions” of each dimension represents the move towards stability, while the new adaptive “problems” that emerge with them represents the need for change. In the ToK, both of these processes reciprocally influence one another in a dynamic, evolving fashion.

The second part of this requirement, “*account for the dynamic pressures of individuality versus togetherness*”, is summarized by Allen (2007) as “... the universal dilemma engendered by family psychology and attachment theory: what and how much do we owe to ourselves and to our kin group when these two entities apparently have conflicting needs?” (p. 277). Does HUTP meet this requirement? Again, the answer

appears to be “yes.” Using several of Freud’s fundamental insights, Henriques (2003) argues that the human ego is the mental organ of justification. In other words, the JH is used to show how human self-consciousness arose from a need to justify one’s many actions to others in ways that preserve social influence. From the lens of HUTP, then, the human self-consciousness system functions to meet the needs of the individual while retaining a socially justifiable position, thus demonstrating the dynamic pressure of individual versus togetherness needs.

The IM, a dynamic model of social motivation and affect, shows how humans navigate the complex social landscape of self-needs versus group-needs. Montazeri (2010) writes:

Consistent with evolutionary psychology, the Matrix posits that humans have high influence and low influence templates that organize their perceptions of interactions and orient their responses. These templates have universal characteristics associated with each, and humans have the capacities for perceiving these characteristics” (p. 91).

In other words, the IM asserts that humans are born with a basic, yet flexible social and affective templates designed to guide decision making around individual versus togetherness needs. This is accomplished by assessing one’s social influence across three broad domains: Power (dominance v. submission), Love (affiliation v. hostility), and Freedom (autonomy v. dependency). While the IM provides a template for understanding how these decisions are made, the actual decision to attend more to self needs or group needs depends on one’s life experiences and personality (which alter the weight one attributes to individual components of this matrix), current situation and

assessment of one's social influence, and the demands made by others (for a richer discussion on the IM, please see Montazeri, 2010; Henriques, 2005; 2007). In sum, as a model of emergent evolution, the ToK demonstrates how adaptive pressures within each dimension lead to processes that provide stability, yet paradoxically demand new change. Additionally, the IM and the JH can be used a template for understanding how one assesses self-needs versus the needs of larger groups and society.

Domain 4: Provide a Universal Language for Uniting Disparate Schools of Psychology

7. *The meta-theory should be able to provide a universal language for describing complex psychological phenomena among competing disciplines of psychotherapy.*

Henriques (2003) makes the argument that increasing fragmentation of the field, due to a number of competing theoretical and epistemological systems, has led to definitional confusion about phenomena studied by the psychological sciences. To illustrate, consider the definition of an “emotion”, which has been defined as a response tendency (Gross, 1998), “an underlying appraisal of a particular kind of situation” (Clore & Huntsinger, 2007, p. 393), and as something that shouldn't be considered a distinct concept at all (Barrett, 2006). To provide a little perspective, all of these definitions originate from a single discipline – social psychology – and represent but a small subset of a large definitional debate. Imagine the confusion surrounding this term when adding the perspectives of competing disciplines like psychotherapy, cognitive science, neuroscience, evolutionary psychology, etc. Even though researchers across all of these disciplines are studying the same fundamental concept, the lack of an agreed-upon

definition for “emotion” prohibits the communication of useful information, pits certain types of researchers against one another, and blunts meaningful progress in this domain.

Arguably, major figures in the field of psychology have suffered from the lack of a universal language. For example, Henriques (2003) discusses how Skinner, who was largely “anti-mental”, constructed his system of radical behaviorism in part out of opposition to Freud’s mentalist psychoanalytic theory. This, in turn, led to the development of paradigms that have been pitted against one another for decades. However, Henriques argues that though Skinner took a tough stance against mentalism, his system of behaviorism actually incorporated mental phenomena (e.g., thoughts and imagery) but failed to acknowledge doing so due to poor definitions of either “mental” or “behavior.” Had a universal language been in place to illustrate the compatibility of these two systems, decades of unnecessary quarreling between their proponents could have been diminished and new lines of research could have been advanced.

HUTP has shown an ability to provide definitional clarity to many domains of psychological science. For example, using the ToK, HUTP offers a more precise definition of psychology by splitting “psychology” into the separate but related fields of “psychological formalism” and “human psychology”, where the former is concerned with the behavioral investment properties of the nervous system and the latter blends psychological formalism with uniquely human and social phenomena (Henriques, 2004). Henriques also uses BIT to help refute Wakefield’s (1997) Harmful Dysfunction Analysis to show that many mental “diseases” (harmful breakdowns of evolved mechanisms) are actually mental “disorders”, or “dysregulations of the behavioral investment system in which individuals develop maladaptive solutions to problems in

their environment” (Henriques, 2002, p.167). Furthermore, he uses BIT to show that in some cases, “depression” may be more reflective of behavioral shutdown strategies than a biological dysfunction (Henriques, 2000). In sum, while HUTP has much work to do to resolve some longstanding definitional fiats, it has demonstrated an ability to provide a unifying framework necessary to invite greater communication among competing paradigms.

Domain 5: Evaluate and Assimilate Existing Psychotherapies

8. *The meta-theory should be able to define the scope of existing psychotherapies, show how they work in relation to one another, and provide a framework for further integration.*
9. *The meta-theory should be able to assimilate existing schools of psychotherapy and evaluate the degree to which concepts in these schools are consistent with human functioning. Furthermore, this evaluation process should be grounded in empirical research.*
10. *The meta-theory should be able to provide a working template by which psychotherapists can make clinical decisions for various clients.*

To this point, HUTP has been shown as a viable candidate for a UCS as it has satisfactorily met the necessary criteria in four of the five domains. A discussion on the criteria of Domain Five has been saved until now as this represents the main focus of this paper. Indeed, for a unified clinical science to have any efficacy whatsoever, it must directly interface with applied psychology’s cumulative body of work and be able to make some claims as to what is legitimate, what is not, and what needs to be researched further. Additionally, a truly unified clinical science should be able to provide a

coherent, valid, and useful framework that can be used by psychotherapists of all backgrounds and clinical experiences. Much like the biopsychosocial model, a UCS becomes most useful when it provides a scaffold of sorts by which clinicians can unify their academic knowledge and apply it to the conceptualization, diagnosis, and treatment of diverse clientele.

Earlier, the four primary schools of psychotherapy – psychodynamic, humanistic, cognitive, and behavioral – were presented with regard to the psychotherapy integration movement. As was demonstrated in chapter two and earlier in this chapter, HUTP has shown an ability to tear down some of the artificial barriers that surround these approaches (e.g., Skinner’s behaviorism and Freud’s psychoanalysis). However, the true test of HUTP’s legitimacy will hinge on its ability to merge and unify not just these single-school approaches, but recent attempts at psychotherapy integration as well. In the coming chapters, this test will be conducted as HUTP will be analyzed against three integrative psychotherapy approaches: schema-focused therapy, dialectical behavior therapy, and cyclical dynamics. In the final chapter, HUTP will again be reviewed as a viable candidate for a UCS with special emphasis on the three criteria that compose Domain Five.

Chapter 4: Schema Therapy and Henriques' Unified Theory of Psychology

Schema therapy (ST) is a unique psychotherapy approach that expands upon a cognitive-behavioral framework to aid individuals who suffer from chronic, characterologically-based problems that are largely unresponsive to traditional approaches. Grounded in concepts of schema formation, accommodation, and assimilation, ST functions to identify how early perceptions of oneself, though once adaptive, fail to adapt to changing circumstances and lead to significant distress and impairment for the client. In the following sections, the foundation for ST will be laid out and connections will be made between it and HUTP.

ST as an Integrative Psychotherapy

The driving force behind the development of ST was the observation that patients with characterological disorders (e.g., borderline personality disorder) often failed to respond positively to traditional cognitive-behavioral techniques. These failures arise from assumptions made about patients by cognitive-behavioral therapists that are often untrue for populations with personality disorders, including that the patient will comply with the treatment protocol, that patients can easily access their thoughts and emotions, that patients can improve their functioning through logical discourse alone, that patients can improve with short-term therapy, and that patients have easily-identified problems to be targeted for improvement. Noting that these assumptions do not hold for many individuals with significant and longstanding psychopathology, ST developers reached out to other psychotherapy paradigms to find new ways of better treating this population (Young & Lindemann, 1992; Young, Klosko & Weishaar, 2003; Young & Klosko, 2005; Kellogg & Young, 2006).

When compared to the four routes to psychotherapy integration, ST is best characterized as a system of assimilative integration. Anchored theoretically in traditional cognitive-behavioral psychotherapy, it incorporates significant insights and techniques from "...attachment, Gestalt, object relations, constructivist, and psychoanalytic schools into a rich, unifying conceptual and treatment model" (Young et al, 2003, p.1). Furthermore, ST seeks to assimilate several brain-science paradigms as well, most notably cognitive science and neuroscience.

The central concept behind the development of schema therapy is the idea that individuals possess cognitive and emotional schemas that help individuals explain reality, mediate perception, and guide their behavioral responses. Unfortunately, due to a number of contributing factors, the schemas that one develops about their self and their environment are not always accurate, helpful, or both. ST proposes that individuals with long-standing problematic relational patterns, especially those characterized by rigidity and lability, suffer from early maladaptive schemas (EMS), which they define as "...broad, pervasive theme or pattern comprised of memories, emotions, cognitions, and bodily sensations regarding oneself and one's relationships with others, developed during childhood or adolescence, elaborated throughout one's lifetime, and [is] dysfunctional to a significant degree" (Young et al, 2003, p.7).

At a neurobiological level, ST hypothesizes that the amygdala may serve as the seat of EMS development. Specifically, Young et al (2003) argue that when the amygdala – which automatically and often unconsciously processes emotional and experiential information – is exposed to a threatening event during early development (e.g., abandonment by a parent), this event encodes an emotional memory in the brain.

Later in life, if something in one's environment triggers a similar emotional or bodily experience, that event could activate a cascade of maladaptive self-other schemas that shade one's perception of their current reality to a significant degree. Because emotional and bodily experiences are often processed rapidly and unconsciously, the activation of a maladaptive schema may occur without any conscious realization by its victim. For individuals with characterological problems, the early exposure to trauma, unmet core emotional needs, and biological temperament interact with one's life experiences to form EMS which are continually activated and reinforced via positive feedback loops over the course of one's life (Young et al, 2003; Young & Klosko, 2005).

Research into schema development has revealed eighteen common maladaptive schemas that span five primary domains of impairment: disconnection and rejection, impaired autonomy and performance, impaired limits, other-directedness, and overvigilance and inhibition (Young et al, 2003; Young & Klosko, 2005). Studies have shown that EMS appear to be relatively stable constructs (Hoffart, Sexton, Hedley, Wang, Holthe, Haugum, Nordahl, Hovland, & Holte, 2005), correlate well with traits of personality disorders (Riso, Froman, Raouf, Gable, Maddux, Turini-Santorelli, Penna, Blandino, Jacobs, & Cherry, 2006), and positively correlate with an insecure attachment style (Mason, Platts, & Tyson, 2005).

Also central to ST are the concepts of coping styles and coping responses. Coping *styles* refer to the basic ways by which a person responds to threats in their immediate environment. Young et al. (2003) identifies three primitive response patterns to threat: fight, flight, and freeze. They argue that the development of EMS during childhood can be viewed as threatening to the child. In response to the threat posed by an

EMS, an individual may engage in one of three coping styles – schema overcompensation, schema avoidance, and schema surrender – all of which correlate to the primitive ways of responding to threat.

Each of the three coping styles represent an elaboration of the three primitive response patterns to threat. For example, overcompensation is a coping style that matches most closely with the primitive set of *fight* and involves an individual putting forth an extreme effort to fight against the threat of the EMS. Those who overcompensate typically move in a direction opposite that of the EMS; for example, an individual who was chronically neglected as a child and made to feel worthless may overcompensate by becoming a perfectionist. Avoidance is the coping response that most closely matches with the coping style of *flight* and often involves the patient arranging their life in such a way to avoid the activation of their EMS. Such efforts may result in the behavioral manifestations of substance abuse, parasuicidal behaviors (e.g., self-mutilation), and social withdrawal. Finally, schema surrender most closely matches

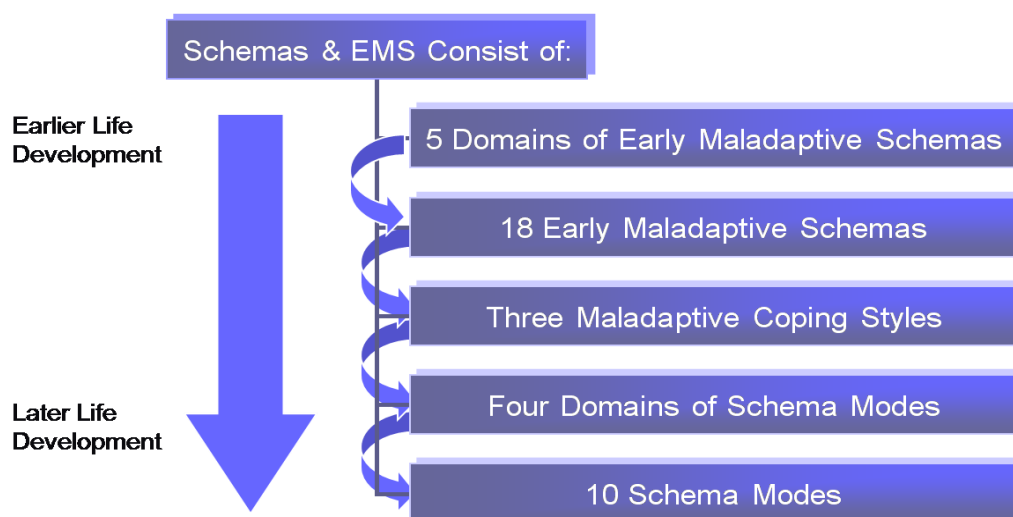


Figure 4.1: Organizational Chart of Schema Therapy

with the coping style of *freeze* and involves an individual being totally paralyzed by the activation of an EMS (Young et al, 2003).

Coping *responses* are described as the unique set of *behaviors* used to respond to the threat of an EMS that correspond with one of the three coping styles. For example, an individual who feels abandoned and employs an avoidant style may behaviorally withdraw and abuse substances when a significant other threatens to break up with him. These coping response patterns may include behaviors that are both adaptive and maladaptive in nature. Furthermore, the coping response patterns that one employs to eliminate the threat of an early maladaptive schema may paradoxically and reciprocally compound the distress of an EMS (Young et al, 2003; Young & Klosko, 2005).

ST & the Self-Concept

For the psychotherapist, a readily accessible concept in schema therapy may be that of the schema mode, a term which refers to “the moment-to-moment emotional states and coping responses – adaptive and maladaptive – that we all experience” (Young et al, 2003, p.37). Schema modes, therefore, are the cognitive and emotional response patterns that predominate after the activation of a schema set and are based on one’s coping style. The concept of the schema mode emerged from findings that some individuals with strong personality features (e.g., as in borderline personality disorder) would endorse the possession of most, if not all, of the early maladaptive schemas on the Young Schema Questionnaire (Young & Brown, 2001; Kellogg & Young, 2006). Schema modes are crucial for understanding the cognitive and emotional states that a person may be in at any given moment.

In many ways, schema modes are considered to be the core aspects of what might be considered one's personality or sense of self. ST argues for a sense of self that is defined by various schema modes that emerge in response to changing environmental contexts. For psychologically healthy individuals, these modes work together as a unified whole, and an *adaptive* schema mode, labeled the "Healthy Adult", tends to predominate. However, those with personality disorders tend to exhibit an array of *maladaptive* schema modes that rapidly vacillate and dominate a person's functioning. These are described as dissociated states; in other words, these schema modes are split off and disintegrated from the gestalt of the person's ego structure. One of the tasks of schema therapy is to identify and integrated these dissociated schema modes with the patient's overall ego structure. By doing so, it is hoped that the patient will learn new strategies for emotional and behavioral regulation and respond to stressors in a more adaptive fashion (Young et al, 2003; Young & Klosko, 2005).

To illustrate how ST functions to integrate various fragmented schema modes into a unified whole, consider the following case example. Ms. S. presented as a woman with borderline personality disorder who experienced a number of traumas in her development (e.g., sexual abuse) that led to a fragmentation of personality characterized by four schema modes: the abandoned and abused child, the detached protector, the punitive parent, and the angry child. In his therapy with her, Young worked to first help Ms. S. recognize and label her four schema modes through guided imagery and visualization. Then he worked to nurture and protect the abandoned and abused child mode (to establish rapport and trust), confront the punitive parent mode (to challenge her internalized and demoralizing expectations for self), access the angry child mode (to help her gain better

access to her emotional self), and evaluate the pros and cons of her detached protector mode (to understand how it is both adaptive and maladaptive). Ultimately, his challenge was to better integrate all four of these modes into a unified, adaptive whole that could be labeled the “healthy adult (Young, 2005).

Connections of ST with HUTP

When ST is compared with the meta-theoretical system of HUTP, several immediate connections can be made. The first involves the biological and cognitive processes by which early maladaptive schemas develop. As previously mentioned, ST hypothesizes that EMS develop when exposure to early traumatic experiences leave traces of negative emotional (e.g., fear) or bodily (e.g., heart palpitations) experiences in the amygdala. Later in life, when something in one’s environment triggers a similar emotional or bodily experience, it activates an EMS that pervades their thought, shades their interpretation of current reality, and leads to the employment of maladaptive behavioral patterns.

The nonverbal cognitive processes outlined by ST are quite similar to those offered by Behavioral Investment Theory (BIT) of HUTP. To recap from earlier, BIT posits that the nervous system evolved as a computational control system that computes the behavioral investments (energy expenditures) of the animal. In contrast to the general Input → Output formulations of early cognitive science or the S→R formulations of the early behaviorists, BIT posits a control theory model of information processing characterized by the P-M=>E heuristic, where P refers to one’s perception of current reality, M refers to a valued goal state, and E represents the emotional or experiential output that emerges from this computation to orient the animal toward action.

The schema development process offered by ST can readily be connected to the P-M=>E formulation. To illustrate, in ST, an EMS can be traced back to an experience where the person perceives an event (the “P” of BIT) which is in direct contrast to a desired state (M), which in turn yields a negative emotional state (E). For example, a young boy who longs for his mother's attention, but consistently perceives her to neglect him and shower his sister with love, will feel hurt and angry. ST posits that such experiences are then encoded into the emotional memory of the amygdala which, when compounded over time, solidifies into an EMS. In short, the P-M=>E heuristic offered by BIT fits very well with the way ST characterizes schema development.

Coping styles and responses also fit well within the framework of BIT. At a general level, coping refers to how an animal adjusts to the demands of its environment. From an evolutionary perspective, the ability to cope to environmental demands positively correlates with reproductive success and survival. Considering this, BIT posits that the nervous system emerged in order to coordinate the behavioral investments of the animal in ways that increase the chances for survival. In other words, the nervous system's function is to adaptively cope to changing environmental demands.

However, when “coping” is viewed with more specificity, it becomes apparent that some ways of coping will be more genetically influenced and some will reflect learned behavioral strategies. In ST, this finding may be represented in the difference between coping *styles* and *responses*, where *styles* are representative of coping strategies in lower-order animals and *responses* are behavioral strategies learned throughout one's development. Unfortunately, ST is not much clearer than this when defining these two concepts. BIT, however, may offer some clarity about these via its architectural model of

the human mind (see Figure 2.2). To recap, this model segments the human mind into four levels of information processing: sensory-motor, operant, cognitive, and self-conscious. When one views “coping” as patterns of behavioral investment that can be mapped out onto this model, the “coping styles” of ST appear to correspond best to sensory-motor and operant information processing and are reflective of foundational response sets shaped by evolution. “Coping responses”, on the other hand, may correspond best with cognitive information processing and reflect the learned behavioral patterns developed over the course of one’s lifetime.

According to ST, it is the self-other relational schemas that appear to be most central for the development of characterological difficulties. This of course connects to the Influence Matrix (IM), which as described earlier, is one of the four pieces of HUTP and is an extension of BIT to the relational domain. The IM begins with the premise that humans are highly social creatures, and because relationships correlate with reproductive and survival success, all humans are in direct or indirect competition for social influence. However, obtaining social influence is no easy task as it requires careful calculations on how to manage both one’s individual needs and the demands of their social groups. Thus, the IM argues that humans developed relational templates designed to navigate the complexities of the social and emotional landscape (Henriques, in press; Montazeri, 2010).

ST makes a similar assertion, albeit implicitly. The ST framework posits that all humans are driven towards meaningful relationships with others and that “healthy” schema sets reflect an adaptive degree of reciprocity in social relationships. Accordingly, many EMS develop when a person’s poor early experiences with inadequate relationships

leads to the development of maladaptive relational strategies for getting one's needs met. For example, the EMS that comprise the impaired autonomy and performance domain – dependence/incompetence, vulnerability to harm or illness, enmeshment/undeveloped self, and failure – all reflect a maladaptive dependence on others and insufficient autonomy due to multiple etiologies (Young et al, 2003).

The IM asserts that all humans attempt to navigate the socioemotional landscape across three general domains: power (dominance-submission), love (affiliation-hostility), and freedom (autonomy-dependence) (Henriques, in press; Montazeri, 2010). ST adopts a similar position which is reflected in the development of many EMS which mirror difficulties across these three continuums. For example, the impaired autonomy and performance domain generally reflects difficulties across the freedom continuum; the other directedness domain reflects impairment across the love continuum; and several EMS in the overvigilance and inhibition domain reflect difficulties across the power continuum (Young et al, 2003).

According to the IM, people often develop unique ways of coping with perceived deficits in social influence, such as hate/hostility and shame/submission. ST shares a similar view by incorporating the concepts of EMS, coping styles and coping responses. Coping styles (overcompensation, avoidance, submission) reflect the general strategies that people employ to adapt to the activation of an EMS. The specific coping style that a person employs greatly influences their learned behavioral and emotional responses to an EMS. Because coping styles vary from person to person, this means that two individuals with a similar EMS might approach it in wholly different ways. For example, consider the self-sacrifice EMS, where a person excessively works to meet the needs of others at

the expense of their own. For those with this EMS, a *surrenderer* might give much to others without asking for anything in return, an *avoider* might avoid situations that require giving altogether, and an *overcompensator* might give as little to others as possible. These three coping styles to the same EMS reflect the two poles (affiliation-hostility) of the love continuum on the IM (Young et al., 2003).

Earlier, schema modes were described as reflecting rigid, more permanent structures that compose one's sense of self. A schema mode, which consists of emotions, coping styles and learned coping responses, is generally described as a predominant state that subsumes a person's functioning in response to the activation of a particular schema set (Young et al, 2003). This concept is also similar to insights afforded by the IM. For example, the IM demonstrates how emotional and behavioral states are elicited by perceived changes to one's social influence. Similarly, the schema mode reflects a dramatic shift in a person's behavioral investment pattern in response to the perception of deficiencies in social relationships. What differs about the schema mode, however, is that it reflects more entrenched patterns of thought and behavior, whereas the IM describes flexible, in-the-moment responding (Montazeri, 2010).

Connections can also be made between the models of self posited by ST and HUTP. In brief, the ST model of self begins with core emotional and experiential schemas which, through time and development, become more firmly entrenched. These schemas become associated with coping styles and behavioral responses that reciprocally feed back into the person's self concept. From these, various schema modes develop that become unified into a persistent sense of self or, in the case of severe personality

disorders, remain fragmented as dissociated states (Young et al, 2003; Young & Klosko, 2005).

HUTP's model for the human self-consciousness system diverges from ST's model in several important ways. The HUTP model of the adult self consists of three domains (an emotional/experiential self, private self-consciousness, and a public self) and two filtering processes (Freudian and Rogerian filters). These components are built foundationally on self-other relations as well as the larger sociocultural narrative in which the individual is embedded. Each of these parts is charged with specific task demands. For example, the task of the private self is to develop a coherent justification narrative for who one is and why one does what one does. According to this model, a healthy self system is one that is integrated and coherent with relatively open and authentic pathways between the three parts of self. The development of identity disturbances is assumed to be the result of a breakdown in communication between the parts. This is represented by the Freudian and Rogerian filters which employ certain defensive strategies in response to some form of threat. For example, when a virtuous, conservative politician becomes addicted to pornography, his Freudian filter may limit the impact of this contradiction to his private self-narrative by driving him to become a vocal opponent against the adult film industry (Henriques, in press).

ST's model of self is less well-defined than the one offered by HUTP. Emotions, bodily experiences, thoughts, and self-narratives are all clumped together into the single gestalt of one's overall self-consciousness experience. While this macro perspective is useful for conceptualizing the whole of a person's psychology, the lack of well-defined boundaries around various mental phenomena make it difficult to clearly see how some

phenomena (e.g., negative thoughts) contribute to a person's functioning independently of others. However, the overall gestalt of the ST conceptualization *is* quite similar HUTP's. Consider that the primary tasks of ST are to raise a client's awareness of their EMS, help them to develop an understanding and acceptance of their EMS, and develop a narrative that allows for a reduction in the rigidity and lability of their EMS. From the vantage task of HUTP, these tasks reflect the building of a healthy private justification narrative that opens more effective pathways between the experiential, private, and public selves.

ST possesses several key concepts that may be useful for HUTP to assimilate. First, the wealth of knowledge regarding schema development in general and maladaptive schema sets in particular may enrich and deepen the clinical viability of HUTP. For example, it was shown earlier that the P-M=>E equation of BIT may represent the underlying algorithm that dictates the formation of schema sets. Unfortunately, this algorithm may be difficult for clinicians to immediately apply when conceptualizing the schema development of their clients. However, when it is combined with the processes of schema development offered by ST, a clinician may have a powerful and useful conceptual tool for understanding the etiology and exacerbation of early maladaptive schemas.

Secondly, the concepts of coping styles and responses may help clinicians to more effectively use the IM as a tool for understanding the relational patterns of their clients. Montazeri (2010) argued that people can competently or incompetently use the relational styles depicted by the IM depending on their unique developmental experiences. For example, she argued that the competent use of dominance might reflect confidence in

oneself and the assumption of responsibility; conversely, incompetent dominance might reflect a conceited demeanor, an authoritarian stance towards others, or antisocial personality traits. The distinction between competent and incompetent relational styles may be developed further by integration with the ST concepts of coping styles and responses. To illustrate, having a general coping style of overcompensation may make a person more prone to overusing certain relational strategies (e.g., dominance) which results in maladaptive coping responses (e.g., being physically abusive) when an EMS set is activated (e.g., the mistrust/abuse EMS).

Finally, the concept of the schema mode may help better explain how those with severe personality disorders experience a fragmentation of self. As previously mentioned, ST conceptualizes those with severe personality disorders as often having several maladaptive schema modes that function in an independent and fragmented fashion. As it currently stands, the model of human self-consciousness predicted by HUTP does well in showing how the humans should be organized when *healthy*, but does not directly explain how a fragmentation of self (e.g., dissociative states) might occur in those with severe personality disturbances. However, when combined with the concept of schema mode, the HUTP model might predict that fragmented schema modes develop after one unconsciously and automatically experiences the activation of an EMS (in the Emotional/Experiential self) in a way that feels alien and ego-dystonic. In response, they then develop new self-narratives in an attempt to justify these bizarre experiences and, over time, these new self-narratives become fragmented schema modes.

In conclusion, an analysis of ST shows that many of its key insights can be effectively assimilated into the system offered by HUTP. First, the ST conceptualization

of schema development was shown to be compatible with the P-M=>E algorithm offered by BIT. Secondly, some aspects of the schema mode were shown to be compatible with competent and incompetent styles of relating as illustrated by the IM. Thirdly, an analysis of the structure of self offered by both systems demonstrated numerous similarities. Furthermore, HUTP itself would benefit from the assimilation of key insights from ST because of its comprehensive analysis of human schema development and how the concept of the schema mode might better explain the fragmented self-states of those with severe personality disorders.

Chapter 5: Cyclical Psychodynamics and Henriques' Unified Theory

Cyclical psychodynamics (CP) is a unique integrative system that seeks to assimilate behavioral and family systems therapies with a strong psychodynamic approach. This effort, established by its founder Paul Wachtel (1977; 1997), emerged after the author initially criticized behaviorism for promoting techniques that he thought were woefully inadequate. After exploring their work, however, he found that behaviorism was more sophisticated than he imagined and realized that the strengths of the behavioral approaches complemented the psychoanalytic approaches. In his attempts to integrate these two paradigms, he came to see that the analytic concept of developmental fixation was one of the key areas that needed to be given up or greatly modified. He recognized that the either/or formulation of past versus present was misguided and that while the maladaptive behavioral cycles that clients often engage in may be somewhat based in early developmental patterns, most reflect processes generated in response to current contextual factors. From this, he formed the concept of the vicious circle, where early events or relationships set in motion certain maladaptive ways of behaving that are strengthened by one's current situation. Using the vicious circle as a foundational principle, Wachtel was able to effectively bridge the gaps between psychodynamic, behavioral, and family systems therapies (Wachtel, 2008).

CP as an Integrative Psychotherapy

Much like schema therapy, CP lays claim as both an assimilative and theoretically integrative system. Its claim as an assimilative system comes from its firm grounding in classic psychodynamic and relational schools of thought, which Wachtel, Kruk, and McKinney (2005) describe as "the emphasis on unconscious processes, inner conflict,

and the importance of transference in the patient's relationship with the therapist" (p. 172-3). However, CP recognizes that these systems alone are insufficient to explain the totality of human functioning.

Wachtel et al. (2005) note several limitations to psychoanalysis. First, they cite its overemphasis on the roles of early experiences on personality. They argue that while early experiences indeed have some influence on the development of one's character, it is unlikely that said character is accounted for by these alone. This overemphasis places the psychoanalyst at risk for underestimating the influence of current situations on a person's functioning. Second, they note that the vehicle of change in psychoanalysis – insight into how one's early experiences influence their current functioning – is exaggerated and that understanding oneself often does little to stimulate meaningful change without guidance for how to do so. For example, though it may be intriguing to learn that the excessive demands of one's parents during childhood led to chronic feelings of incompetence as an adulthood, such information does little to suggest how these feelings continue to influence one's day-to-day life or, more importantly, how they may be remedied.

Third, Wachtel et al. (2005) cite a lack of clarity about the process of change and an insufficient exploitation of Freud's revised anxiety theory as another limitation of psychoanalytic theory. To be precise, they note that the revised model of anxiety, in which signal anxieties stimulated by unjustifiable impulses in turn produce some sort of a defensive responding, is similar in many ways to the behavioral principles of avoidance, negative reinforcement, and aversion of punishment. They also note that while many psychodynamic practitioners laud the "breakthrough moment" as a prerequisite for growth, even Freud realized that most change in psychotherapy occurs after repeated

exposure to feared stimuli, which is a foundational principle for many behavioral therapies. Finally, they argue that early behavioral patterns of avoidance in certain social situations may lead to lapses in the development of social skills, something that is inadequately attended to by psychodynamic theories.

Wachtel (1994, 2009) argues that the primary distinction between psychodynamic and behavioral theorists is that the former assume causality as “inside-out” and the latter assume causality as “outside-in.” Stated differently, psychodynamic therapists focus on one’s internal beliefs, motivations, and drives. This viewpoint emphasizes the role of early life experiences and inner mental processes on a person’s current functioning. Behavioral therapists, on the other hand, focus on how environmental influences and learned behavioral strategies influence a person’s development. Unfortunately, these assumptions have led to false dichotomies that polarize each school’s followers and make them appear incompatible with one another. By assimilating behavioral and family systems principles into psychodynamic theories, Wachtel (2009) argues that “the distinction between the person’s ‘inner world’ and his or her ‘external reality’ breaks down, and they are seen as continually defining and redefining each other in a recursive fashion” (p. 173). In other words, a linear approach to conceptualization is rejected in favor of a cyclical view where the primary worlds of behaviorism and psychodynamics mutually influence one another in a dynamic, evolving manner.

As an assimilative system, CP begins scaffolding with psychodynamic insights that explain how early experiences shape one’s personality and form schemas that shade how one selectively perceives his reality. Using these observations, it then incorporates insights from behavioral and family systems perspectives that explain how people

essentially recreate their “inner world” by behaving in ways that cast others into social roles that recapitulate their early experiences. These insights show that, by unconsciously recruiting others to fill these roles, the person constructs a reality that reconfirms their existing worldview, a cycle that is often repeated over and over again. Noticing this pattern, which is at the heart of cyclical psychodynamics, allows the therapist to simultaneously attend to the “inner world” of schemas and early life experiences, the “outer world” of social relationships, and the ways that both dynamically influence one another in the client’s current reality.

Although CP begins as an assimilative approach to integration, the finished product takes on a form that is better defined as a theoretically integrative system. This is characterized by the development of unique principles that emerge from assimilation of the separate schools. One such principle is that of the vicious circle, which is where “the defense and the defended against, both the unconscious psychological forces and the way of life with which they are associated, determine each other in a continuing cycle of confirmation and reconfirmation” (Wachtel, 1993, p. 23). As mentioned earlier, this vicious circle assumes that one’s early experiences guide the development of schemas that are then projected onto one’s current external reality and influence one’s behaviors. These behaviors, in turn, influence one’s external reality in such a way that it provides confirming evidence for the legitimacy of the internal schema set. With this in mind, Wachtel (1993) notes that a primary characteristic of vicious circles as irony as the person often behaves in ways that elicit a response they were trying to avoid in the first place. For example, consider the person who, because of his fear of abandonment because of unworthiness, becomes so clingy and suffocating that he ultimately turns-off

those he desperately seeks connections with. Such a vicious circle ironically confirms his initial beliefs of unworthiness and grants legitimacy to his fear of abandonment.

A second fundamental principal of CP is the recruitment of accomplices. Much like a director who casts his actors in ways that satisfy a predetermined script, this argues that people behave in ways that are likely to induce exactly the self-other reactions they expect to happen. A simple example of this is that if one expects others to generally ignore him, he may unconsciously behave in ways that elicit precisely that response (such as refusing to speak to others or becoming isolative). In many ways, this principle is not unique to CP alone and has been studied extensively by family systems theories (e.g., assuming role of “black sheep”, “golden son”, etc.), to name but one system. However, unlike family systems theories, the CP version argues that people *actively*, yet unconsciously, recruit others into prescribed roles not just because of system dynamics, but because of *internalized* scripts based in earlier life experiences. Where family systems theories might argue that a person is unwillingly *cast* into particular roles, CP argues that the person willfully, yet unconsciously, *maintains* their roles in order to keep their existing schemas consistent. In many ways, this principle equates to the phenomenon of self-fulfilling prophecies which are studied by social psychologists (Wachtel, 2008).

A final fundamental principle of CP is not so much a novel concept as it is a paradigm shift for many clinicians. As Wachtel (2008; 2009) argues, many psychotherapies (psychodynamic and behaviorism included) grant superiority to either “one-person” perspectives, which focus on the intrapsychic, or “two-person” perspectives, which focus on one’s external social reality. Unfortunately, such over

emphases set unnecessary limits on the scope of therapeutic change. CP, however, calls for a greater focus on understanding the person in *context*. From this vantage point, both the inner- and outer-worlds of the individual are dynamically set into motion against one another. Understanding the person in their context, then, helps the clinician observe how these two realities mutually construct the client's *current*, contextual reality (Wachtel, 2008; 2009).

In sum, cyclical psychodynamics shares features of both assimilative and theoretical approaches to integration. It is assimilative in the sense that it begins with a strong foundation in psychodynamic and relational theories and expands its breadth of scope by incorporating key insights from behaviorism and family systems theories. By assimilating these multiple paradigms, it transforms into a theoretically integrative system via the creation of novel concepts like vicious circles, the recruitment of accomplices, and an emphasis on a contextual understanding of the client.

CP and the Self-Concept

Similar to schema therapy (see chapter four), CP incorporates Piagetian concepts of schema assimilation and accommodation to offer a roadmap for *how* a self-identity develops. Using these principles as a foundation, Wachtel (2008) notes that two primary things occur over the course of one's development to influence their personality organization, the first being an expansion and consolidation of self-perpetuating patterns (including vicious circles) that, over time, become more deeply entrenched in one's psyche. In essence, this argues that dominant features of personality stem from early life experiences and that these features, in a cyclical fashion, are confirmed and reconfirmed over time until they become stable traits. Wachtel readily notes that this version of

personality development is shared by most single school theories. A good illustration of this would be a young boy who grows up in a dismissive, chaotic household and develops a schema that says “if I want my needs met, I have to learn to satisfy myself.” Even when this person encounters situations that seemingly disconfirm this schema (e.g., a partner who is quite responsive to his needs), it is likely that this belief will continue to persist unabated.

What begins to set CP apart from others systems is Wachtel’s (2008) second observation, which is that while some global personality features do seem to persist from early development, a large number of features will vary depending on a person’s current context. Essentially, he argues that personality is not solely an archaic feature of childhood that is inflexible to change, but that it is also composed of behavioral response patterns designed to adaptively respond to varying contexts, which he defines as *multiple self states*. To offer a simple example of this, consider the following: in some situations (like when teaching), I find myself to be a gregarious extrovert; in others, like when I come home in the evening, I express a more introverted attitude, often intentionally secluding myself from contact with others. If personality were simply rigid, fixed, and pervasive, we would expect that I would globally express either introversion or extroversion, but certainly not both. However, with a version of personality that argues for *both* some functional fixedness and some contextual variance, we see that while my “baseline” is probably an equal convergence of these traits, the ability to have multiple self states allows for a greater degree of adaptability to changing contexts.

The CP *structure* of self, then, includes a *global* self that is initially molded by early life experiences and *multiple* self-states that arise as adaptive strategies to changing

contextual circumstances. As he (Wachtel, 2008) writes, "...we are *always* experiencing the world in terms of the structures that evolved in the past and *always* modifying those structures to accommodate to the present" (p. 133). This version of self can be represented by the image of a tree, where the trunk represents the global and pervasive aspects of personality and the branches represent slight divergences that arise in response to different contexts with different demands.

The Assimilation of CP into Henriques' Unified Theory of Psychology

From this discussion, several immediate connections can be made between CP and HUTP. The first regards the scope of human functioning assumed by both theories. In CP, family systems theories and behaviorism are assimilated into psychodynamic theory to provide both "inside-out" and "outside-in" views of human functioning (Wachtel, 2009). From this perspective, one's overall psychology is reciprocally influenced by external events and relationships that inform their self-other representations (schemas) which later influence their external reality. Similarly, HUTP argues for a view of human functioning where the internal and external reciprocally shape one's version of reality. However, HUTP differs from CP's model, primarily by (1) connecting human psychology with other major domains of human knowledge, (2) allowing for a greater understanding of biological influences on human personality, and (3) attending more specifically to why some features of human personality arose as a result of evolutionary pressures. While CP does do much to extend the breadth and scope of its constituent single school theories, it has even more to gain through assimilation with HUTP.

CP lends itself well to a focus on behavioral investment patterns because of its incorporation of behavioral insights. To restate from earlier, behavioral investment

theory (BIT) posits that the animal nervous system evolved in response to adaptive pressures to organize the movements of the animal as-a-whole and developed computational software designed to expend energy (behave) in accordance with the animals motivational states and perception of reality (Henriques, 2003; 2005; in-press). In the context of CP, then, BIT emerges most readily in the form of vicious circles. These circles represent maladaptive behavioral investment patterns in the sense that one engages in ways of interactions with others that arise from currently maladaptive self-other schemas, a lack of attention paid to one's current context, or a combination of both. From this perspective, the CP therapist's goal is to first identify why and how these behavioral investment patterns are maladaptive, then to help explain these findings to the client, and finally to offer behaviorally-guided, adaptive solutions designed to interrupt these cycles.

CP is heralded as a relational theory because it argues for a greater focus on how here-and-now relationships dynamically influence and shape one's worldview (Wachtel, 2008). Specifically, it offers that the individual is both an actor and director of their life-script; that is, people both play out and influence others to satisfy their internalized, pre-determined "scripts" (schemas). With this in mind, while it is likely that the CP therapist does pay some attention to the overt behavioral investments that her client makes (especially maladaptive behavioral investments), given the relational nature of CP, it is even more likely that she attends to both behavioral investment patterns and social influence concerns simultaneously.

Considering this, CP interfaces well with the Influence Matrix (IM). Wachtel (1993) notes that the CP perspective of interpersonal relating diverges from its

psychodynamic foundation with regard to the etiology of poor relational styles, where the latter would see such as archaic impulses from early developmental experiences and the former views such as based in early experiences, yet continuously regenerated by the present context. Similarly, the IM shows that while interpersonal relating styles are somewhat influenced by early-life schemas, they are also developed in response to dynamic, evolving social contexts. For example, Montazeri (2010) demonstrated how the IM could be used to identify incompetent relating styles based in past experiences that fail to adapt to current situations. This is similar to Wachtel's (1993; 2008) concept of the vicious circle, where, because of early experiences, a person engages in a maladaptive behavioral cycle by recruiting others into roles that fit their version of reality, thereby recapitulating the cycle and leading to further interpersonal distress.

While CP offers a strong conceptualization of *how* people relate, like ST, it fails to provide an explanation for *why* relationships are so central to human affairs. In contrast, HUTP provides such an explanation, arguing from an evolutionary psychology perspective that because social relationships represent potential access to resources necessary for survival, humans are motivated to act in ways that promote the greatest social influence possible (Henriques, in press; Montazeri, 2010). Once again, though CP does offer a strong system for understanding human relations, it has much to gain through assimilation with HUTP.

The models of self offered by both systems show many similarities. In the HUTP model, human self-consciousness arises from evolutionary pressures to justify ones actions to others in order to maintain social influence. Though not directly spoken to in its approach, the importance of justifications is implied by CP. Earlier, justifications

were presented as the seeds for human self-consciousness in that they shape how one sees self in relation to the world. The process of self-justification was presented as an automatic and largely unconscious process. In a similar vein, Wachtel (1993) states that “stability and coherence of the self is so key to our adaptive efforts that we will even struggle to maintain a negative image of the self if that negative image has been integrated into the core of our sense of reality” (p. 47).

The HUTP tripartite model of human self-consciousness argues that self is marked by three systems: the Emotional/Experiential self, Private self, and Public self. Furthermore, it argues that self develops via the *process* of dynamic interrelations between these parts in response to the overt behavioral expressions of others and large-scale justification systems (like law, politics, and religion) across the developmental lifespan. The CP model, on the other hand, uses concepts of schema development to show how some global features develop and persist throughout lifetime, yet also how subtle variations of these global features develop in response to the demands of different contexts. The tripartite model of HUTP is quite similar in that it too argues for a basic structure that is dynamically changing in response to the demands of one’s environment.

These models differ, however, with regard to the clarity each provides on what qualifies as self. In the CP model, the concept of self is rather vague. The implication seems to be that a line is drawn between one’s inner reality and external reality, where the former includes all things that are private to oneself (including thoughts, emotions, and mental imagery) and the latter all things that are publicly displayed (like overt behaviors, environmental conditions). While the basic structure of this model allows the clinician the flexibility necessary to see how contextual factors may influence one’s inner

psychology, it does little to show the roles that various mental phenomena have in relational to an overall self-concept.

Conversely, the HUTP model does offer clear delineations between various mental phenomena and shows how these dynamically interrelate to form a self-concept. For example, it effectively separates emotions and mental imagery from beliefs about oneself, relegating the former to an emotional/experiential self and the latter to the private and public selves guided solely by justification narratives. It then separates the private self from the public self, noting that the way one presents self to others is not always commensurate with how they actually view their self.

A final similarity between CP and HUTP involves the influence of the socio-cultural context on the identity formation and behaviors of the individual. CP focuses extensively on the reciprocal exchange that occurs between individual and society. Accordingly, this system has been used to advocate for commentary on how society constructs the systems that people live and relate in (Wachtel, 2003). HUTP also calls for a commentary on social systems, noting that the large-scale justification systems that coordinate human behavior are currently in a state of fragmented pluralism, a state that promotes disunity and disagreement. From the vantage point of HUTP, what is needed instead is a system that unites and frames all of human knowledge while simultaneously allowing for the individual's unique experiences, a task that HUTP seeks to achieve (Henriques, in press).

In conclusion, the CP theoretical system shows an encouraging degree of compatibility with HUTP, especially with regard to how humans relate with one another and develop a self-concept. As was shown, because of its compatibility and limited

scope, CP would benefit from assimilation with HUTP as this would provide it with a greater connection to other forms of human knowledge and camp it in a strong evolutionary theory. Conversely, HUTP would benefit from several key insights offered by CP, most notably how vicious cycles lead to one becoming “stuck” in maladaptive behavioral and interpersonal relating styles.

Chapter 6: Dialectical Behavior Therapy and Henriques' Unified Theory

Dialectical Behavior Therapy, or DBT, is an integrative psychotherapy designed specifically to treat populations with borderline personality features. Initially developed by Marsha Linehan, it has shown significant promise for treating various outpatient and inpatient populations – including those with substance abuse and eating disorders – over the past two decades (see Linehan, 1993a, 1993b; Low, Jones, Duggan, MacLeod, & Power, 2001; Robins & Chapman, 2004; Harned, Chapman, Dexter-Mazza, Murray, Comtois, & Linehan, 2009). At its core, DBT is largely based in traditional cognitive-behavioral therapy. However, DBT merges these principles with eastern practices commonly found in Zen Buddhism - including mindfulness, acceptance, and the transactional nature of reality – as well as insights from psychodynamic, client-centered and systems approaches to proclaim itself as a theoretically integrative system.

DBT as an Integrative Psychotherapy

With respect to the various routes to integration, DBT straddles the fence between the two worlds of assimilative and theoretical integration. DBT is assimilative in the sense that its theoretical foundation is anchored in classic cognitive-behavioral approaches. From this perspective, client distress results from maladaptive behaviors and distorted thought patterns that contribute to problematic relationships, ineffective emotional management, and extreme behavioral measures (e.g., para-suicidal and suicidal gestures) to cope with overwhelming emotional discomfort. Accordingly, productive change is pursued through cognitive strategies such as the patient education and practice of the cognitive model and behavioral modification strategies such as the exposure to feared stimuli and the reinforcement of healthier, more adaptive behaviors. This

foundation is enhanced through the assimilation of dialectical principles of acceptance versus change, a greater focus on transactional networks and their influence on developmental trajectories, and therapeutic strategies that promote mindfulness, awareness, and emotional regulation (Linehan, 1993a, 1993b; Smith & Peck, 2004; Heard & Linehan, 2005; Lynch, Chapman, Rosenthal, Kuo & Linehan, 2006).

While DBT is assimilative because of its foundation in cognitive-behavioral therapy, it may also be theoretically integrative because of its emphasis on transactional and dialectical models of change. To restate from earlier, assimilative systems merely build upon an established system with new insights and techniques. A theoretical system, however, emerges from the interaction between two distinct systems and takes on a new form altogether. DBT may be able to proclaim itself a theoretically integrative system because of the way that the dialectical worldview interacts with its cognitive-behavioral foundation (Linehan, 1993a; Heard & Linehan, 1994).

A dialectical worldview has three foundational principles, the first being that of interrelatedness and wholeness. Linehan (1993) describes this as follows:

...a dialectical or transactional model assumes that individual functioning and environmental conditions are mutually and continuously interactive, reciprocal, and interdependent...because influence is reciprocal, it is transactional rather than interactional (p.39).

Unlike many other models of psychotherapy, where the client is assumed to be an autonomous agent who can willfully change their current situation, DBT proposes that the client exists as one part within a deep and complex system of transactional networks.

Thus, change in one area does not occur in isolation; rather, all changes to parts influence the greater whole and vice-versa (Linehan, 1993a, 1993b).

It is argued that there are two other components to a dialectical worldview: the principle of polarity and the principle of continuous change. Linehan (1993a) describes the principle of polarity as follows:

...reality is not static, but is comprised of internal opposing forces (“thesis” and “antithesis”), out of whose integration (“synthesis”) evolves a new set of opposing forces (p. 32).

These forces are seen at all levels of reality, from the behaviors of subatomic particles to the give and take dynamics of social relationships. Linehan argues that the acceptance of this reality helps the therapist better understand his or her client, noting polarity shows that “within dysfunction, there is also function; that within distortion there is accuracy; and that within destruction one can find construction” (Linehan, 1993a, pp. 32-33).

The last of these principles, that of continuous change, is described as the process by which the transactional exchange between the thesis and antithesis yields a new level of complexity known as “synthesis.” This synthesis is fundamentally distinct from its thesis and antithesis predecessors; it is a whole that is *greater* than and *other* than the mere sum of its parts alone. Synthesis is viewed as but one component in a process of continuous change; that is, synthesis yields new sets of opposing forces whose transactional tensions give rise to new syntheses and so on. Impediments to this process are seen as maladaptive for the patient and are navigated carefully by the DBT therapist (Linehan, 1993a, 1993b; Smith & Peck, 2004).

DBT also incorporates principles of Zen Buddhism, especially the values of balance and serenity. To accomplish this task, it uses techniques such as mindfulness, which encourages the client to pay attention to their thoughts, emotions, and bodily sensations with a non-judgmental attitude. By doing so, it is hoped that some clients, especially those with severe, fragmented personalities, can better achieve the integration of their emotional and cognitive minds (Linehan, 2003a; Smith & Peck, 2004).

The application of these three principles transforms traditional cognitive-behavioral therapy into a new, theoretically integrative system. To contrast, the cognitive and behavioral traditions are largely focused on the principle of change. From this perspective, any cognitive or behavioral roadblocks to “healthy” mental functioning should be observed, assessed, and corrected by the client. In DBT, however, a shift is made is to acknowledge that not everything addressed in therapy is in need of change; rather, sometimes the *acceptance* of one’s current reality is most appropriate. The three dialectical principles of DBT also suggest that “there is no absolute truth; rather, truth is situational, subject to change, and continually constructed over time” (Smith & Peck, 2004, p. 28). Furthermore, the DBT perspective proposes that the consolidation of that which should be accepted and that which should be changed is the true route to synthesis, or long-term growth (Linehan, 1993a, 1993b; Smith & Peck, 2004).

Secondly, and to restate from earlier, traditional CBT assumes that the client has the power and desire to make changes that are largely independent of their context. However, DBT embraces an understanding that all people are deeply embedded in complex transactional networks. This means that sometimes, despite one’s best efforts, attempts at positive change can paradoxically lead to even greater troubles because

change in one area will translate into changes in many other areas (Linehan, 1993a). To illustrate, consider the submissive, giving mother of four who seeks to become more focused on caring for herself than her children. In this example familiar to clinicians, though her family may collectively support her efforts, they may also react to her changes by becoming even more needy and demanding in order to maintain the status quo of their family system.

To conclude, DBT is assimilative because of a strong foundation in the cognitive and behavioral schools that is supplemented with eastern insights and practices. Furthermore, DBT's principle of polarity, which argues that change occurs when opposing views are consolidated, also provides the system as a whole with flexibility to incorporate new insights over time. It has been shown that DBT is also theoretically integrative in the sense that it successfully merges systems with different fundamental assertions (e.g., change v. acceptance). With these observations in mind, it is safe to conclude that DBT represents both an assimilative and theoretically integrative psychotherapy.

DBT and the Self-Concept

DBT is a system that was constructed around several unique theories regarding the development of self in individuals with borderline personality disorder. Linehan (1993b) argues that individuals with this disorder often have biological predispositions towards emotional dysregulation, which she describes as over-sensitivity to emotions in general and the inability to effectively modulate strong emotions in particular. Compounding that is exposure to an invalidating environment, which is described as one that does not sufficiently support the patient's emotional vulnerabilities and can possibly

be abusive and/or traumatizing. Over the course of time and human development, the transactional exchange between these two factors can lead to a sense of self that is often fragmented, unstable, and chaotic.

Perhaps the most pertinent question related to a developing sense of self is “who am I?” To find the answer to that question, people rely upon information from a variety of sources. Linehan (1993b) makes the argument that from a DBT perspective

One’s sense of self is formed by observations of oneself and of others’ reactions to one’s actions...unpredictable emotional lability leads to unpredictable behavior and cognitive inconsistency, and consequently interferes with identity development (p. 4).

Through these statements, Linehan seems to suggest a basic blueprint for how people obtain information relevant to the development of self. This blueprint seems to identify two primary components: one that involves *intrapyschic* observations for information (e.g., thoughts and emotions) and one that seeks *interpsychic* information about self (e.g., reactions of others to one’s behavior). It should be noted that in this model, a clear distinction between the thoughts and emotions is not offered despite the strong emphasis on emotional regulation processes in DBT as a whole.

Linehan (1993a, 1993b) also provides other clues as to how these components interact with one another throughout development to form an identity. For example, it was proposed that a person with poor emotion regulation skills may behave or think in ways that contribute to a negative or fragmented view of self. This model is self-reinforcing: a poor self-image resulting from emotional dysregulation feeds back onto the vulnerable emotional system and contributes further to a negative view of self (Selby &

Joiner, 2009). Throughout this process, an inability to effectively inhibit one's anger elicits a cascade of self-reflective processes designed to make sense out of the event and fit it into an ongoing narrative of self.

To illustrate, imagine a client who has biological and environmental predispositions towards emotional dysregulation that are compounded by a lifetime of experiences similar to those above. Imagine that this client developed in a family system that could not help the client make sense of his or her emotions and may even degraded, humiliated, or criticized the client for their expression. When all of these factors combine, a fragmented, oppositional, and confused identity can develop.

The Assimilation of DBT into HUTP

From this discussion, several connections can be made between DBT and HUTP. First, the tripartite model of human self-consciousness offered by HUTP closely matches the one proposed by DBT with several important divergences. To restate, DBT's model suggests that individuals seek out information about the self from three critical sources: internal experiences like emotions, self-talk and analysis of these experiences, and feedback received from others about oneself. In those with a borderline personality, it is proposed that biological predispositions towards emotional sensitivity and dysregulation lead one to behave and think in ways that can be confusing and unjustifiable. The information received from and about these actions and beliefs is filtered through these components to help the person make sense of what kind of person they are. However, it should be noted that in this model, mental experiences like emotions and bodily sensations are considered synonymous with others like beliefs and cognitions (Linehan, 1993a).

Like DBT's model, the HUTP model also provides a framework for understanding how the mind seeks information from various sources of stimuli to synthesize a self-concept. However, the tripartite model suggests a distinction between emotions and self-justification processes. Specifically, this model posits that the human mind has one component that operates at the experiential level and processes bodily sensations and emotional processes, referred to as the Emotional/Experiential self. Conversely, the language-based justifications that one makes to legitimize their actions and mental experiences is seen as a distinct mode: the Private Self (Henriques, in press).

When compared side-by-side, the connections between these two models are quite apparent. The emotional self that is often quite dysregulated in those with borderline personality disorder (as proposed by DBT) connects well with the emotional/experiential self of HUTP. The component of self in DBT that function to observe one's actions and beliefs fits nicely with HUTP's private self, and the DBT component that derives information about self from others matches well with the public self of HUTP.

Secondly, the principle of interrelatedness and wholeness matches well with the conceptualization of human functioning posited by ToK. The ToK visually maps out human functioning as nested within four dimensions of complexity (Matter, Life, Mind, & Culture) that interrelate and reciprocally influence one another. Accordingly, if change were to occur for a person in one dimension, it is likely that change will also occur in one or more of the other dimensions as well. For example, consider the person who is recently diagnosed with cancer (a change in Life). This, in turn, may lead to a shift in one's priorities (behavioral investments, Mind), one's relationships with others (in

Culture), and in the very fabric of their self-concept (vis-à-vis changes in the justification narrative of the Private and Public selves).

Finally, the principles of polarity and continuous change, where the dynamic tension between thesis and antithesis finally gives way to the novel stage of synthesis, closely aligns with the emergent evolution process of HUTP. Specifically, the ToK explains that each dimension of complexity contains dynamic and evolving structures that eventually give rise to new levels of information processing. If one were to take a snapshot of a single dimension of the ToK, they might witness how the competition between evolved structures within (thesis and antithesis) finally yields novel, more adaptive ways of information processing (synthesis). Thus, the continuous change principle of DBT matches well with the principles of evolution found in the ToK.

While HUTP appears quite able to assimilate DBT into its folds, it may also benefit from some of its key insights. For example, DBT proposes that “truth” is a concept that is invented and reinvented across the lifespan of the individual. This principle is essential to a post-modernist perspective, which argues for the subjectivity of the human experience. Conversely, HUTP takes a largely modernist stance by arguing that there are some truths to the universe that are objective, quantifiable and universal. On the surface, these epistemological differences make it difficult to see how the two systems could be successfully united.

Interestingly, however, the assimilation of a fundamental insight from DBT may offer a resolution to these two seemingly incompatible epistemologies. Recall, for a moment, the principle of polarity and continuous change, which argues that the dynamic tension between opposing forces ultimately yields a synthesis, or some fundamental,

novel change. This principle gives equal importance to both the thesis and antithesis; indeed, the equal weight assigned to both is crucial for a synthesis to occur. With this as a guiding principle, one could say the following about the debate between modernism and postmodernism: *both* are equally important, true, and necessary. Using the ToK as a guide, one can see that all philosophical systems, like the two in question, exist in the realm of human justification. And justifications, by nature, are highly subjective, meaning that the post-modernists are right: some aspects of the human experience (e.g., justifications) are highly subjective. By the same token, because the emergence of justification is dependent on a number of quite measurable and quantifiable evolutionary processes having occurred, the modernists are also right: there are some aspects of human experience (e.g. organic molecules, emergence of a nervous system) that are wholly objective in nature. Both positions have their place in HUTP, and both are equally important for understanding the overall gestalt of the human experience.

In conclusion, DBT and HUTP show a significant degree of compatibility. While there are some divergences, the models of self proposed by both systems were shown to be largely compatible. Furthermore, the DBT principles of polarity and continuous change were shown to be compatible with the evolutionary processes that led to the emergence of novel forms of information processing as depicted by the ToK. Finally, it was shown that the principles of polarity and continuous change can be used to illustrate how the longstanding debate between modernists and postmodernists could be successfully resolved under the auspices of HUTP.

Chapter 7: Conclusions on HUTP as a UCS Proposal

In chapter one, the call for a new phase of psychotherapy integration – the construction of a unified clinical science – was presented along with five domains and ten criteria that could help objectively define the composition and scope of such a system. In chapter three, these criteria were used to assess Henriques' Unified Theory of Psychology (HUTP) as a proposal for such a system, and it was found that HUTP shows promise of satisfying four of these domains. An analysis of the final domain - the evaluation and assimilation of existing psychotherapies - was delayed until this point in order to first present three integrative psychotherapy systems and assess their fit with HUTP. In this chapter, the evidence for HUTP satisfying this fifth and final domain will be presented, as well as limitations to this study and future directions for both HUTP and the quest for a unified clinical science.

Evaluation of HUTP and Domain Five of a UCS

To recap from earlier, leaders in the field of psychotherapy integration have recently made the call for a meta-theoretical system of clinical psychology: a unified clinical science, or UCS (see Allen, 2008; Magnavita, 2008; Wolfe, 2008). Consolidating across arguments made by these leaders, it was proposed that a UCS would have a form and function characterized by ten criteria across five broad domains. These domains suggest that, broadly defined, a UCS should be able to (1) address multiple levels of human functioning, (2) define the science of psychology and connect to other major scientific disciplines, (3) account for human change and development, (4) provide a universal language for uniting the various subdisciplines of psychology, and (5) evaluate and assimilate existing psychotherapies.

In chapter three, evidence was presented that suggests HUTP shows promise of satisfying the requirements for the first four domains of a UCS. First, it was demonstrated that using the Tree of Knowledge (ToK) system, the joint points of Behavioral Investment Theory (BIT) and the Justification Hypothesis (JH), and the Influence Matrix (IM), all levels of human functioning could be adequately addressed through HUTP. Second, it was shown that HUTP helps define the science of psychology by effectively splitting it into two separate, yet interrelated disciplines: psychological formalism and human psychology (with a third domain reflecting the application of psychological principles). When nested within the ToK System, these two disciplines broadly connect with the larger gestalt of human knowledge and its representative systems of scientific inquiry. Third, by demonstrating how principles of evolution influenced the emergence of four dimensions of complexity, it was shown that HUTP could effectively account for human change and development across the two domains of phylogeny and ontogeny. Finally, evidence was presented that suggests HUTP may be able to provide a universal language for psychology by offering clarity around the field of psychology itself and some of the primary phenomena that it explores.

The satisfaction of the fifth and final requirement – the evaluation and assimilation of existing psychotherapies – was delayed in order to first assess how well HUTP can assimilate three popular integrative psychotherapies: schema therapy (ST), cyclical psychodynamics (CP), and dialectical behavior therapy (DBT). In this section, each of the three criteria of this domain will be assessed with consideration given to the discussions from chapters one, four, five, and six.

Criterion 1: The meta-theory should be able to define the scope of existing psychotherapies, show how they work in relation to one another, and provide a framework for further integration.

In chapter one, the four major schools of individual psychotherapy – psychodynamic, behavioral, cognitive, and humanistic – were painted with broad brush strokes in order to provide the historical background of the development of psychotherapy as a whole. It was shown how each of these four schools developed in opposition to one another with each claiming to capture a “larger piece of the pie” in terms of human functioning. The tenacity with which proponents of each school defended their system led to the development of a racing horse mentality and deep rifts within the field of psychotherapy.

What may have contributed to such deep divides among these schools was the lack of a unified and integrated theory of psychology and human functioning. Unfortunately, each school began its formulation from a slightly different starting point (e.g., overt behaviors vs. covert mental experiences) which over time led to different conclusions about the nature of human functioning. Because of the varying epistemological and investigatory starting points, these differences led many to believe that some (e.g., cognitive and psychodynamic) were essentially irreconcilable, further fueling the bitter competition between proponents of each.

It wasn't until the 1970's and 1980's that legitimate proposals for psychotherapy integration were first made, and even then, the racing horse mentality persisted (Goldfried, Pachankis, & Bell, 2005). While many new integrative systems have since flourished and invited dialogue between competing paradigms, the dogmatic

assertiveness with which early proponents defended their single school approaches has left many psychotherapists with the opinion that the field can never be fully unified. The quest for a unified clinical science runs counter to this opinion and offers that what is needed is not merely integration, but *unification* of the entire field of psychology amidst the greater gestalt of human knowledge (see Allen, 2008; Magnavita, 2008; Wolfe, 2008; and also Henriques, 2008).

This type of unification requires the construction of a meta-theoretical system that forms a coherent and consistent theory of human functioning that is grounded in empirical science and evolutionary theory. With such a system, the key insights of each theoretical school can be pulled into that framework to form a cohesive whole that can be used as a reference by which to evaluate and define all therapeutic modalities. As a proposal for a UCS, HUTP may be able to do exactly that. The ToK system shows how the human experience is defined by the evolution of four separate, yet interrelated dimensions of complexity. The central insight of the ToK System is that there are separable dimensions of behavior based on what information processing system is mediating the behavior. For example, organic behavior, which makes up the Life dimension, is mediated by genetic information processing, and mental behavior, which makes up the Mind dimension, is mediated by neuronal information processing.

While all four dimensions are of interest to psychologists, two of these dimensions – Mind and Culture – correspond most to the types of phenomena studied by the field. The Mind dimension – which depicts how evolutionary pressures necessitated the emergence of the nervous system designed to coordinate the behavioral investments of the animal – helps explain basic human behaviors, motivational sets, emotions and

mental phenomena. The Culture dimension represents how language resulted in the problem of social justification and led to the emergence of the human self-consciousness system designed to track and organize the justifications one makes to others and to self. This dimension relates to the narrative processes that humans engage in to make sense of self and their external environment. The Mind and Culture dimensions are where clinicians make their primary impact on human functioning through the vehicle of psychotherapy.

Some efforts have already been made to assimilate the major schools of psychotherapy into HUTP via these two dimensions. For example, Henriques (2003) argued that the major insight of Skinner's behaviorism was that animal behavior reflects a class that is separable from the behavior of genes, much as biology is separable from chemistry via natural selection. However, animal behavior is governed by the same principles that guide genetic behavior: selection, variation, and retention. Using this insight, he argued that behavioral therapies are concerned mostly with neuronally-mediated behavioral investments, all of which reside in the Mind dimension. This is reflected in the six principles of BIT – energy economics, the evolutionary principle, principle of genetics, computational control principle, learning principle, and developmental principle – which integrate major insights from the basic psychological, behavioral, and brain sciences. For example, the learning principle reflects the understanding that while the nervous system comes equipped with some basic commands that guide survival (e.g., seeks pleasure, avoids pain), it possesses the capacity to reflexively respond to changing environmental circumstances and to learn from the consequences of its behavioral investments. In the context of the tripartite model of

human consciousness, these processes are depicted by the emotional/experiential self (Henriques, in press).

Henriques (2003) also argued that the fundamental insight of Freud's psychoanalysis was that self-consciousness (represented by the ego) arose to function as a justification filter. This, when combined with the subconscious, primitive mind (the Id), sets the stage for a model of human self-consciousness that spans both the Mind and Culture dimensions. These insights are represented by the Freudian filter of the tripartite model of human consciousness, which demonstrates the dynamic processes involved between the emotional/experiential self and the private self (Henriques, 2003; in press).

The key insights of two other single-school approaches – humanistic and cognitive theories – also correspond well to the Mind and Culture dimensions. For example, cognitive therapy focuses heavily on the way that people think about and make meaning of their existence; or, in HUTP terms, how one forms a justification narrative. A prominent variation of cognitive therapy – cognitive-behavioral therapy – seeks to be more inclusive of one's behavioral investment patterns, thus spanning the Mind and Culture dimensions. When considering this in the context of the tripartite theory of human consciousness, it is likely that the cognitive therapies are concerned primarily with one's private justification processes. Indeed, when reviewing the interventions used by these theories (e.g., analysis of the utility and accuracy of private thoughts), almost all emphasize reconstructing private justifications in ways that are more adaptive.

Like the cognitive therapies, while the humanistic approaches are concerned with all dimensions of human complexity, their scope appears to be most focused on private and public justification processes. For example, Henriques (in press) argues that a

fundamental insight from Carl Rogers was that when a person's public presentation differs greatly from their private self concept, the individual experiences dysfunction. Thus, one goal of humanistic therapy is to provide a nonjudgmental relationship so that the client feels more comfortable to present an authentic presentation of their private self concept. On the tripartite model of human consciousness, this dynamic is accounted for by the presence of a "Rogerian filter" between the private and public self and represents the conflict often experienced between these two domains (Henriques, in press).

In the previous chapters, three integrative psychotherapies – schema therapy, cyclical psychodynamics, and dialectical behavior therapy – were compared and contrasted with HUTP. Though all three systems are concerned with the entirety of human functioning, the primary concerns of each suggest that their overall scope has limitations. For example, while cyclical psychodynamics effectively merges the schools of psychodynamics and behaviorism and explicitly attends to their key insights, it only makes implicit connections to the insights of cognitive therapy at best. This limited scope becomes more apparent when CP is compared to the tripartite model of human self-consciousness as it offers little insight into the differences between self-talk and more basic cognitive processes like mental imagery (Wachtel, 2008).

DBT and ST also attempt to offer comprehensive systems of human functioning. Unfortunately, due to the foci of each, they suffer from a dearth of explanations for why the phenomena of focus in their systems may have emerged via evolutionary processes. When assimilated into HUTP, these theories gain much-needed connections to a framework that combines insights from many scientific paradigms to offer such explanations. All three systems are also limited in their ability to connect directly

without other major sciences (e.g., biology, medicine, neuroscience) that may be able to provide conceptual clarity for some processes of interest to psychologists (behavioral investments, pharmaco-dynamics and -kinetics, and processes of neurotransmission, respectively). Thus, while each system does help advance the field of psychotherapy integration, their inherent limitations mean that clinicians must independently work to find information that fills in the gaps. Needless to say, this predicament leaves much to be desired for the psychotherapy provider.

As a meta-theoretical system, HUTP functions like a public outreach center that both provides a home for all systems of psychotherapy while simultaneously making connections with other fields of human knowledge. With such a system, many of the theoretical gaps found in theories of psychology can be filled with insights from separate, yet related domains of scientific inquiry. For example, with a “home-base” firmly entrenched in the Mind and Culture dimensions, cyclical psychodynamics could also reach out to the applied science of medicine, which studies phenomena in the Life dimension, to gain insight on how the dysfunction of the thyroid reciprocally influences one’s behavioral investment patterns and justification processes in ways that look like clinical depression.

In sum, HUTP serves as a meta-theoretical system that can not only house all major systems of psychotherapy, but also show the limitations of each and how each function in relation to one another. HUTP also allows the applied discipline of psychotherapy to make connections with other domains of scientific inquiry in order to provide opportunities to view human functioning more broadly and with more conceptual depth.

Criterion 2: The meta-theory should be able to assimilate existing schools of psychotherapy and evaluate the degree to which concepts in these schools are consistent with human functioning. Furthermore, this evaluation process should be grounded in empirical research.

This second criterion is perhaps one of the most difficult for any UCS proposal to achieve as it requires it to not only assimilate the major schools of psychotherapy, but to also make judgments as to which aspects are legitimized and which are not. Though efforts along these lines will likely elicit strong reactions from clinicians with allegiances to particular therapeutic modalities, it is a necessary step in order to “tidy up” the practice of psychotherapy by discarding those beliefs that have been shown to be empirically invalid and theoretically unsound.

HUTP shows evidence of sufficiently meeting this criterion as well. To begin, as a system of emergent evolution, it predicts that all psychological phenomena should be proximally or distally related to processes of natural selection. Stated differently, natural selection predicts that most, if not all, psychological functions will have been passed on across generations because they have some adaptive value. In clinical work, some processes (e.g., anhedonia) seem to have little to no adaptive value and may be considered as dysfunction. But even then, “dysfunctional” processes are evaluated as such relative to an understanding of how psychological processes should normally function.

HUTP provides three theories – BIT, the IM, and the JH – that are grounded in evolutionary science and help explain human psychology. By using these theories in conjunction with the ToK, a new vision of human functioning is provided by which to

evaluate all therapeutic approaches. First, the ToK, BIT, and the JH are used to argue that the field of psychology is actually composed of two subsets: psychological formalism, which corresponds to the Mind dimension, and the hybrid science of human psychology, which studies humans at the individual level and extends psychological formalism into the Culture dimension (Henriques, 2004). Because psychotherapy represents the application of human psychology principles for the betterment of people and society, having conceptual clarity about human psychology makes an evaluation of existing psychotherapy systems more feasible.

With more concise definitions, efforts can be made to assimilate all psychotherapy systems under the umbrella of HUTP. To accomplish this task, it is best to first evaluate the psychotherapies at a meta-level before evaluating their finer theoretical nuances. As previously mentioned, the ToK can be used to show the scope of and interrelationships between the big four schools of individual psychotherapy. For example, the cognitive and humanistic schools appear to focus heavily on the Culture dimension due to their emphasis on how people justify their experiences to self and others while embedded within a complex social environment. Behaviorism appears to correspond closely with the Mind dimension due to its emphasis on the behavioral investment processes of the brain and nervous system. Finally, psychodynamic therapies span the Mind and Culture dimensions due to their emphases on how the ego mediates unconscious, behavioral investment processes within the context of cultural demands and self-justifications (Henriques, 2003).

All integrative therapies represent the merger of key insights, principles, or techniques from two or more of the single-school approaches. Thus, if the single-school

approaches themselves can be effectively assimilated into HUTP, it follows that all integrative systems can be as well. Earlier in this paper, it was shown that three integrative systems – ST, CP, and DBT – could effectively be assimilated into the folds of HUTP. For example, CP was presented as a theoretical integration between the psychodynamic and behavioral schools, meaning that it is primarily concerned with the Mind and Culture dimensions. DBT and ST are similar in this regard as they integrate behavioral, psychodynamic, and cognitive insights into their systems.

With the single-school approaches and three integrative systems broadly assimilated into HUTP, efforts can then be made to evaluate each system individually and determine which theories and insights are legitimized and which are not. Unfortunately, given how recently HUTP has been established and elaborated upon, attempts at using it to evaluate the psychotherapies have been quite limited. However, some progress along these lines has been made and the key insights of several systems have been highlighted by HUTP. For example, Henriques (2003) used BIT and the ToK to demonstrate that behaviorism's fundamental insight was that the nervous system functions to regulate the behavioral investments of the animal-as-a-whole using processes that are identical to those found in natural selection (variation, selection, and retention). In the same article, he showed how a fundamental insight of psychodynamic theory – that the human ego evolved to inhibit socially unjustifiable impulses and, when these cannot be inhibited, to offer reasons that legitimize one's behaviors – is consistent with the JH and fits into the overarching frame of HUTP.

HUTP has also been used to show how some key insights are rejected by HUTP due to theoretical inconsistency and/or lack of empirical validation. For example,

Henriques (2003) used HUTP to show how claims by behaviorists that learning principles alone are sufficient to understand human behavior is a major fallacy because it neglects important contributions of social relationships and self-other justifications. From the vantage point of HUTP, this represents theoretical inconsistency because strong claims like this fail to recognize the interrelationships between the various dimensions of complexity. Henriques also argued that several concepts of early psychoanalysis (e.g., the death instinct and an overemphasis on sex and aggression as driving forces behind human behavior) were flat out wrong, perhaps due to contextual factors present at the time of their development and a lack of connections to modern evolutionary theory. Concepts like these would be rejected by HUTP altogether because they lack theoretical consistency and fail to show to empirical validation (Armengou, 2009).

In sum, HUTP is a comprehensive theory of human functioning that is grounded in evolutionary science and can be used as a framework by which to assimilate all psychotherapeutic modalities. Once this assimilation has been achieved at a meta-level, the key insights of each system may then be evaluated for theoretical consistency and empirical validation in order to better define which concepts are legitimized and which are not. While some efforts to use HUTP for this purpose have been made, the system as a whole would benefit from more research in this area in order to actualize its true potential as a UCS.

Criterion 3: The meta-theory should be able to provide a working template by which psychotherapists can make clinical decisions for various clients.

Arguably, a meta-theoretical system that unifies the field of psychology into a coherent whole would have massive implications for future research and the training of

therapists. However, it would be utterly useless if it could not also provide guidance for the assessment, conceptualization, and treatment-selection process for work with diverse clientele. Thus, a UCS should be able to demonstrate not just theoretical *consistency*, but also *applicability* in the everyday domain of psychotherapy practice.

As demonstrated in earlier chapters, HUTP and its components can be used effectively for clinical purposes. First, the tripartite theory of human consciousness offered by HUTP provides a unique conceptual template for understanding how humans process information and form a sense of self. Using this model, one can see that the self is divided into three systems: an experiential/emotional self that is non-verbal and represents largely automatic and subconscious behavioral investment processes, a private self that justifies one's many behaviors to form a coherent self-narrative, and a public self that represents the overt justifications and social face that one presents to others. When this model is set in motion against the background of interpersonal relationships and large-scale justification systems (e.g., moral norms, laws), it allows the clinician to see a wide array of dynamics that influence the client's overall functioning (Henriques, in press).

Second, BIT was shown to be an effective tool for understanding the basic drives behind human behavior. BIT views all humans as investors attempting to control the flow of resources relevant to survival. Accordingly, all behaviors represent various ways that one attempts to have their needs met. With this as a conceptual guide, the clinician's task is to help evaluate the adaptive or maladaptive ways one's behavioral investments help them to meet some valued goal state. BIT also helps establish a layered model of mind that elucidates the various degrees of consciousness. For higher functioning clients,

a clinician may be able to use this as a helpful educational tool for demonstrating the ways that humans process information from their environment. Doing so may aid the client's understanding of concepts like unconsciousness, preconsciousness, and automatic behavioral responses.

The algorithm $P-M \Rightarrow E$ – where P refers to one's perceptions, M refers to a valued goal state, and E refers to the emotional or experiential outcome of this equation – may also be useful heuristic for quickly identifying deficits in cognitive processes that lead to client distress. Using this as a guide, a clinician can identify if pathology stems from inaccurate perceptions, unrealistic goal states, difficulty managing one's emotions or other mental experiences, or any combination of the above. As an example of its clinical utility, Henriques (2000) used BIT principles to argue that from an evolutionary perspective, depression may actually be adaptive as the shutting-down of physiological systems helps the person conserve great amounts of energy. During seasons when the acquisition of caloric resources was quite limited (e.g., winter), this process may have been a powerful survival strategy. However, in modern society with year-round access to important resources, such behavioral strategies can impede one's overall functioning.

Third, as an extension of BIT principles into the social realm, the IM explains how the powerful drive to gain or maintain social influence led to the development of a social-cognitive feedback system that guides the way one behaves interpersonally. The IM is a useful three-dimensional model of social influence and affect that shows six relational styles across three domains – Power (dominance-submission), Love (affiliation-hostility), and Freedom (autonomy-dependency) – and how corresponding emotional feedback reciprocally guides the strategies that one uses to gain or maintain

social influence. Clinically, it can be used with clients to help them better understand their relating deficiencies and ineffective ways of getting their needs met by others. The IM has also been presented as a tool for helping couples understand how their own relational styles impact the dynamics of their relationship and to identify newer, more adaptive ways of effective communication (Montazeri, 2010).

Finally, the JH was shown to help clinicians better understand the ways that clients justify their actions to self and others in ways that help to form a self-concept. It argues that the advancement of symbolic language in humans led to a novel adaptive problem: humans became the first animal that had to explain why it did the things that it did. From this, the capacity for justification, or providing reasons that legitimizes one's behaviors, emerged and spawned the development of the human self-consciousness system (Henriques, 2003). As shown in earlier chapters, the JH is perhaps the most accessible insight of HUTP for clinicians as it directly explains why and how people give reasons for their many behaviors. As the "talking cure", many systems of psychotherapy already directly or indirectly address the way that clients justify their behaviors and experiences to self and others. Perhaps most importantly, therapists offer a nonjudgmental attitude and supportive interpersonal relationship where the need to justify one's unjustifiable experiences is reduced. When this is achieved, the client is in a better position to construct justifications and self-narratives that are more accurate reflections of reality, inherently more useful for their overall functioning, or a combination of both.

HUTP as a Unified Clinical Science

At the very beginning of this paper, I shared a personal training experience that highlights the fragmentation of psychology and the proliferation of competing

psychotherapy paradigms. As you might recall, in my first theories of psychotherapy class, a professor challenged me to adopt only one of the single-school psychotherapies as my own by the end of the semester. What was her justification for such a task? She felt that few employers would seriously consider an early-career therapist who described themselves as “integrative” or “eclectic”, noting that such terms were often pejoratively seen as “trashcan” labels that reflected theoretical ineptitude rather than competence. This belief may have been due in part to the absence of a comprehensive system of thought that can assimilate and integrate the foundational assumptions of psychology and provide a clear picture of the human condition.

This experience was presented in hopes of providing a concrete example that exhibits the current state of psychology and the immense need for a unified clinical science. With the benefit of hindsight, I now readily admit that my professor’s beliefs may have been justified. In personal experiences since, I have encountered a number of classically trained psychotherapists who proudly wear their single school approach like a badge of honor and look down upon those who aspire for integration. It is likely that some of these classically trained psychologists have disseminated their biases to future generations of therapists, thereby recapitulating the political and ideological splits that continue to plague the field. And while there are certainly many students who are trained integratively, the outcomes of these historical splits often invite more confusion than it does cohesion.

Now imagine how different graduate training in psychotherapy might be if prior to an introduction to the competing schools, students were first presented with an integrated system of human knowledge based in evolutionary science that connects with

all domains of psychological inquiry. With such a system, a trainee could then more easily understand the connections between competing paradigms, find ways of using key insights from each to guide clinical practice, and make connections with the larger bodies of psychological science and human knowledge. A UCS like this promotes the development of a conceptually-rich gestalt of human functioning which broadens the ways that trainees can think about and treat their clients. A UCS would also help consolidate a century's worth of psychological findings and steer trainee research towards meaningful paths of inquiry as opposed to fruitless studies with relatively benign impacts on the field.

As previously discussed, HUTP shows significant promise as a proposal for exactly this type of system and, if used in graduate training programs, may help usher in future generations of broad-thinking, well-informed, and integratively-trained psychologists. The ToK, for example, can serve as an organizational framework by which students can consolidate various lines of psychological research into a coherent, unified whole. As an updated physico-bio-psycho-social model, the ToK can be used by students to quickly analyze and assess the various contributions to the function and dysfunction of clients. Students can use BIT as a unifying concept for fields such as evolutionary science, control theory, behavioral science, cognitive science, and neuroscience. Furthermore, they can use it to better understand the emergence of the animalistic nervous system and the basic computational strategies that animals use for survival.

The JH can help students organize insights from social psychology, sociology, evolutionary science, and the humanities to understand how advances in symbolic

language sparked the adaptive solution of justification that has led to the development of rich cultural and social institutions. The JH also helps explain how and why human self-consciousness emerged in response to evolutionary pressures and took on a form and function that incorporates key insights from several competing paradigms (e.g., Freudian filter and psychodynamics, Rogerian filter and experiential therapies). Finally, the IM helps assimilate findings across fields that study human behaviors, affect, and social motivation and provides a useful heuristic for understanding the reciprocal connections between interpersonal strategies and affective states.

But HUTP is not relegated to the halls of academia alone and can be useful for even the most seasoned of therapists. At a theoretical level, the various components of HUTP can be used to consolidate decades of psychotherapy education. For example, the ToK, along with its joint points of BIT and the JH, has been used to show the connections between Skinner's radical behaviorism and Freud's psychoanalysis (Henriques, 2003). As discussed earlier, the ToK can also show how the single school approaches and modern integrative psychotherapies interrelate with one another across multiple domains of human functioning.

The various components of HUTP also have direct applications for the practice of psychotherapy. For example, the IM is an excellent template to use with clients to demonstrate how emotional responses provide information regarding their interpersonal relationships. Furthermore, it can be used in couples therapy to help partners better understand one another and learn newer, more adaptive forms of communication (Montazeri, 2010). BIT can be a useful tool for understanding the processes that lead to vicious, maladaptive cycles of behaving that cause significant impairment and distress.

The JH explains why clients are driven to offer reasons that legitimize their behaviors and how this reciprocally influences the development of a self-concept. Using the tripartite model of human self-consciousness that emerges from the JH, clinicians can conceptualize the various contributions to client distress and formulate interventions that more directly target those areas.

HUTP's most important contribution as a UCS, however, may be its ability to define the field of psychology and address the fragmentation of the field. Using the ToK as a guide, Henriques (2004) argued that "psychology" may actually represent two distinct fields of study: psychological formalism and human psychology. Psychological formalism refers to phenomena explored in the Mind dimension of the ToK, or those things that reflect neuronal information processing. Human psychology reflects a hybrid between psychological formalism and the social sciences. By effectively splitting "psychology" into these two domains, HUTP provides clarity to the field that helps guide future research and resolves longstanding epistemological woes that contribute to the political fragmentation within the field.

Limitations and Future Directions

While HUTP has been shown to adequately satisfy the criteria necessary to claim itself as a UCS, it does present with some limitations that warrant future research and ongoing evaluation. First, as the system has been presented from a largely meta-theoretical lens, it would benefit from additional research to evaluate its various components (e.g., BIT, the JH, etc.) in order to substantiate the accuracy and validity of its many claims. Indeed, for it to be fully actualized as a UCS, its components must stand

up to heavy scrutiny by researchers in the field and demonstrate a capacity to live up to its promise.

It should be noted that some progress has been made in this direction. For example, preliminary research into the IM has shown that it corresponds well to three of the Big Five personality traits (extraversion, neuroticism, and agreeableness) and can be a useful tool for predicting personality typology (Montazeri, Burnett, Barry, & Henriques, 2007). Also, BIT has been shown to correspond well with research from other disciplines regarding the form and function of the nervous system (see LaCerra & Bingham, 1998).

Second, the fragmentation of psychology due to historical, ideological, and epistemological factors has led some (e.g., Sarason, 1989; Staats, 1999) to seriously question if the field will ever achieve unification. Accordingly, any legitimate UCS proposal like HUTP will be expected to help resolve some of the longstanding epistemological woes that plague the field of psychology by offering a framework that invites discourse and unification among psychologists from competing paradigms. Ideally, such a framework would be adopted widely and have an immediate impact on the field. Practically speaking, however, it is likely that much of the fragmentation currently experienced will continue to remain unresolved even in the presence of a strong unified theory. This may be due to a number of factors, including resistance from classically-trained clinicians, disinterest by those outside the confines of psychotherapy research, and an overall dearth of mainstream exposure. Although HUTP certainly has shown the ingredients necessary to help unify the field (see Henriques, 2003; 2004; 2008; in press), these three factors represent significant obstacles that will need to be overcome.

Third, with regards to psychotherapy integration, more research needs to be done to show how various psychotherapy approaches can be assimilated within the confines of HUTP. Although the four primary schools of individual psychotherapy (psychodynamic, cognitive, behavioral, and experiential) and three integrative approaches were explored in this project, the proliferation of over four-hundred approaches (see Norcross & Goldfried, 2005) suggests that much work needs to be completed along these lines. Again, attempts to do so may be met with resistance or disinterest by many in the field, representing a major obstacle to unification.

Finally, though HUTP is presented as a unified theory of *psychology*, it also represents an attempt to unify *all* domains of human knowledge from the Big Bang to human culture. To successfully complete this ambitious task, HUTP will need to invite dialogue and a shared communication system with and between professionals from all fields of science, including physics, biology, the social sciences, and all of the “hybrid” disciplines (e.g., medicine, neuroscience, etc.). However, given the relative insularity of many scientific disciplines, the achievement of this task would likely require HUTP to be disseminated on a massive scale, beginning first with an adoption by the field of psychology as a whole. And, as may be the case for psychology, such an attempt may be met with resistance, indifference, or outright dismissal by those in other fields who could care little about a system that emerges from another scientific domain.

Despite these limitations and challenges, HUTP indeed meets criteria for and represents a promising proposal as a unified clinical science. If taken seriously, HUTP may well have the capacity to unify the field of psychology, resolve longstanding epistemological debates, add depth and clarity to many of the phenomena addressed by

the field, and make connections with the larger body of human knowledge. Considering the many advantages afforded by this system, its universal adoption could represent a positive shift for psychology as a whole. Indeed, should the field be unified by a system like HUTP, it may develop a respect and legitimacy that has become increasingly questioned in the past several decades. The move from theoretical confusion to consolidation could also potentially steer psychological research towards more meaningful endeavors designed to enhance the quality of life for all.

The move towards a unified clinical science is an ambitious one that reflects a general discontent with the fragmentation of psychology and the desire to consolidate a century's worth of scientific knowledge. As advances in fields such as neuroscience, cognitive science, and evolutionary psychology reveal with greater intimacy the core components of the human experience, clinicians are charged with integrating this information into older psychotherapeutic systems in order to better serve the needs of their clients. Achieving this, however, is dependent on the emergence of a system that can effectively bridge the theoretical and conceptual gaps not only within psychology, but among other domains of human knowledge. It is with this vision in mind that Henriques' Unified Theory of Psychology has been presented as a legitimate proposal for such a system, and it is hoped the promise of this system excites and entices a new generation of clinicians who aim for the greater unification of our cherished discipline.

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