TOWARD AN INTEGRAL MODEL OF ADDICTION

By Means of Integral Methodological Pluralism as a Metatheoretical and Integrative Conceptual Framework

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ABSTRACT This article introduces and briefly outlines some orienting generalizations of an integrally informed model of addiction. I argue that by applying Integral Theory as a metatheoretical and transdisciplinary framework, we may be able to arrive at a comprehensive integrative model of addiction that honors all the existing single-factor etiopathogenic models as well as the integrative and dynamic models. In order to examine any part of reality, one must employ a particular methodology. Integral Methodological Pluralism (IMP) acknowledges that there are at least eight methodological families we can use to study any phenomenon. In this article, I use IMP to sketch the outline of a comprehensive and integrative model of addiction. I will explore some of the most dominant explanatory models and theories of addiction derived from the sociopsychological and biomedical sciences, and point out how each model's theory is enacted by a particular methodology as represented by one or more of the eight zones of IMP. Finally, I propose that an Integral Model of Addiction has the potential to integrate all existing evidence-based explanatory models of addiction into a truly integrative, coherent, and comprehensive conceptual framework and metatheory of addiction.

KEY WORDS addiction; Integral Methodological Pluralism; Integral model; metatheory

In the last resort a civilization depends on its general ideas; it is nothing but a spiritual structure of the dominant ideas expressing themselves in institutions and the subtle atmosphere of culture. If the soul of our civilization is to be saved we shall have to find new and fuller expression for the great saving unities—the unity of reality in all its range, the unity of life in all its forms, the unity of ideas throughout human civilization, and the unity of man's spirit with the mystery of the Cosmos in religious faith and aspiration.

- Jan Smuts (1927, pp. v-vi)¹

Addictions have beleaguered society since human beings first discovered they could alter their consciousness by ingesting certain substances.² How a society views and understands addiction has great significance for addicted individuals seeking treatment. In premodern times addiction was often understood as possession by demons and a moral aberration, and its consequent treatment was similarly archaic. It is only in the last 100 years that scientific theories and explanations for addiction have come into existence, and as a result, treatment has become more effective (DiClemente, 2003). Some scholars suggest that substance abuse is currently the most significant health problem in the United States (Bevins & Bardo, 2004).

Correspondence: Guy Pierre du Plessis, 35 Duiker Gate, Capricorn Beach, Muizenberg, Cape Town, South Africa, 7945. E-mail: guy du plessis@yahoo.com. Today, many theories and models of addiction exist. Some of the most prominent explanatory models include the social/environment models, genetic/physiological models, personality/intrapsychic models, coping/social learning models, conditioning/reinforcing models, and integrative models like the biopsychosocial model. Although our explanation of addiction has become more sophisticated, there are still serious short-comings in our understanding of it (Sremac, 2010). Furthermore, there is such a cornucopia of theories and models of addiction that for treatment providers and policymakers, who see a direct link between etiology and treatment protocol, it has become exceedingly difficult to integrate this vast field of knowledge into effective treatment and prevention protocols. Robert West (2005) believes that another problem faced in addictionology is that each of the many existing theories of addiction seem to stem from an innovative idea that accounts for selected aspects of the problem, but which does not account for other features that existing theories already cater for adequately. Highlighting some of the reductionist problems faced in addiction science, West (2005) further states that:

Unfortunately, the prevailing approach in the field of addiction, like behavioural and social science generally, has been to develop theories with a less than complete analysis of what is already in the literature. In practice, theories of addiction have typically been developed because a researcher has, very understandably, wished to emphasise a particular approach to understanding a set of phenomena, or out of a set of specific observations from which the researcher has wished to generalize. (p. 17)

Below, I argue that by applying Integral Theory as a metatheoretical and transdisciplinary framework, we may be able to arrive at a comprehensive integrative model of addiction which honors all the existing single-factor models as well as the integrative and dynamic models. Integral Theory has been applied in the context of integrally informed approaches to addiction treatment protocol design and therapy (Du Plessis, 2010, 2012; Dupuy & Gorman, 2010; Dupuy & Morelli, 2007; Ingersoll & Rak, 2005; Shealy, 2009), but not yet in striving toward a comprehensive etiopathogenic understanding and model of addiction that embraces all the contemporary evidence-based explanatory theories and methodological approaches into an explanatory meta-model of addiction.

In this article I provide the cursory outline of an Integral Model of Addiction (IMA) that could provide a conceptual framework within which the genuine insights provided by the existing theories and models can be placed. It would be a synthetic theory, in the sense that it would attempt to pull together the accumulated wisdom, and provide a conceptual system in which the existing theories could be located. It would be as coherent as possible: the ideas would relate naturally to each other and not simply form a list of unconnected assertions. This article represents the first humble and cursory attempt towards an integrative and comprehensive integrally informed model of addiction.

Integral Methodological Pluralism

The five elements of the AQAL model (all-quadrants, all-levels, all-lines, all-states, and all-types) represent some of the most basic repeating patterns of reality (Wilber, 2000). Therefore, including all of these elements increases one's capacity to ensure that no major part of any solution is left out or neglected (Esbjörn-Hargens, 2009). Integral Theory is both complexifying, in the sense that it includes and integrates more of reality, and simplifying, "in that it brings order to the cacophony of disparate dimensions of humans with great parsimony" (Marquis, 2009, p. 38). The element of Integral Theory that is the most relevant in our attempt to create a truly comprehensive model of addiction is the eight zone extensions of the original AQAL model (Wilber, 2002a, 2002b, 2006). These eight primordial perspectives (8PP) are derived from an inside (i.e., a first-person perspective) and outside view (i.e., a third-person perspective) of the quadrants. Integral Theory states that

reality has at least four interrelated and irreducible perspectives—the subjective, signified by the Upper-Left (UL) quadrant; the intersubjective, signified by the Lower-Left (LL) quadrant; the objective, signified by the Upper-Right (UR) quadrant; and the interobjective, signified by the Lower-Right (LR) quadrant—which should be consulted when attempting to fully understand any aspect of it (Esbjörn-Hargens, 2009). These four universal perspectives are known as the quadrants (Wilber, 1995, 2000, 2006). It is beyond the scope of this article to discuss the other elements of Integral Theory (levels, lines, states, and types), and its relevance for an integral understanding of addiction, although levels and states are briefly discussed. For a comprehensive understanding all of these elements needs to be incorporated. See Du Plessis (2010, 2011), Dupuy and Gorman (2010), and Dupuy and Morelli (2007) for in-depth discussion of levels lines, states, and types in the context of addiction treatment and recovery.

Each of these 8PP is only accessible through a particular method of inquiry or methodological family, and represents at least eight of the most important methods for accessing reproducible knowledge (Esbjörn-Hargens, 2006, 2010). Furthermore, each of these methodologies discloses an aspect of reality unique to its particular injunctions that other methods cannot. For a truly integral understanding of any phenomenon, in our case addiction, one needs to include as many of these perspectives and methods of inquiry as possible. These 8PP are included in Integral Theory's own multi-method approach to valid knowledge, referred to as Integral Methodological Pluralism (IMP) (Wilber, 2002a, 2002b, 2006; Esbjörn-Hargens, 2006, 2010). As such, IMP represents one of the most pragmatic and all-encompassing theoretical formulations of any integral or metatheoretical approach to accessing reproducible knowledge (Esbjörn-Hargens, 2006). Wilber (2002b) states that "any sort of Integral Methodological Pluralism allows the creation of a multi-purpose toolkit for approaching today's complex problems—individually, socially, and globally—with more comprehensive solutions that have a chance of actually making a difference" (p. 14).

IMP has two essential features: paradigmatic and meta-paradigmatic. The paradigmatic aspect refers to the recognition, compilation and implementation of all the existing methodologies in a comprehensive and inclusive manner.³ The meta-paradigmatic aspect refers to its capacity to weave together and relate paradigms to each other from a meta-perspective (Wilber, 2002b, 2006). Wilber (2002b) describes the meta-paradigmatic aspect of IMP as:

...a practice that can enact, bring forth, and illuminate the integral interrelationships between various holons originally thought discreet or nonexistent. In other words, this practice on a set of practices (or this meta-paradigm on the individual paradigms) brings forth and illumines the mutual interactions between actual occasions, and it does so only from a space that theory would later be called a second-tier probability wave. (p. 13)

IMP can therefore be understood as the 8PP and its correlated methodologies with a meta-framework which provides meta-linking between these disparate perspectives and paradigms (Martin, 2008). The eight methodological families identified by Wilber (2002a, 2002b, 2006) are depicted in Figure 1. Wilber (2002a) uses each of the names of these methodological families as an umbrella term which includes many divergent and commonly used methodologies.

Three Blind Men and an Elephant

An Indian myth tells the story of three blind men each holding onto a different part of an elephant, as each was asked to explain what object it was they were holding. Each explained the object in a completely dissimilar way. Although they were all correct in their description of the specific parts of the elephant, nevertheless they were all wrong in giving an accurate description of an elephant as a whole. This story is a useful metaphor for

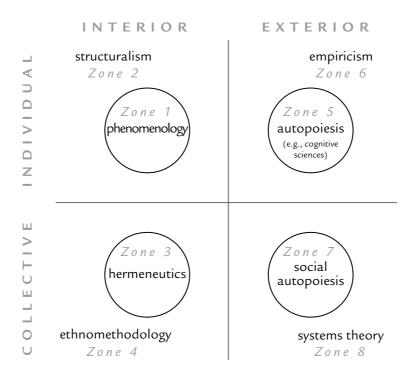


Figure 1. The eight major methodologies of Integral Methodological Pluralism.

how different etiological models attempt to explain addiction, by highlighting their respective usefulness as well as inadequacies. By applying IMP to explanatory addiction models, I will show that each of the single-factor models understands addiction from a specific zone(s), because it applies a specific methodological approach, whereas the more integrative models view addiction across several of these zones. In striving for a comprehensive and integrative integrally informed model of addiction, we honor all the existing theories of addiction, with their respective methodologies, by acknowledging that they all have something valuable to offer through enacting certain aspects of the complex and dynamic process of addiction, and at the same time highlighting their respective inadequacies. By using IMP, one "generates a meta-practice of honoring, including, and integrating the fundamental paradigms and methodologies of the major forms of human inquiry (traditional, modern, and postmodern)" (Wilber, 2002b, p. 16). Applying IMP in the context of addiction models can lay the ground work for meta-paradigmatic mixed-methods research in addictionology.

An integrally informed model of addiction will demonstrate that addiction can have its etiology in one or more of these zones, but will eventually enact across all eight zones (and influences levels, lines, states, and types). Therefore, treatment should include practices that address addiction across these eight zones or perspectives as they co-arise in levels, lines, states, and types. Previous articles on integrally informed approaches to recovery have addressed this issue (Du Plessis, 2010, 2011; Dupuy & Gorman, 2010; Dupuy & Morelli; 2007; Shealy, 2009).⁵

In the next section of this article I will explore some of the most dominant explanatory models and theories of addiction derived principally from the sociopsychological and biomedical sciences, and point out how each model's theory is enacted by a particular methodology as represented by one or more of the eight zones of IMP. Finally, I will show how an IMA could encapsulate and honor all the existing models, without reducing one perspective to another, into an integrative and comprehensive metatheory of addiction.

Etiological Models of Addiction

Developing accurate theories, models, and definitions of addiction is problematic in many ways. One reason is that addiction is an abstract concept. It has no simple location or boundaries, for example, as a chair does. Furthermore, it is socially defined, and therefore opinions can legitimately differ about the most suitable definition—it cannot be said that one definition is unequivocally correct and another incorrect, only that one is more useful or is mostly agreed upon by "experts" (West, 2005). Theories, models, and definitions of addiction in authoritative texts on the subject have changed over the years. At one time, addiction was defined as a state of physiological adaptation to the presence of a drug in the body so that absence of the drug leads to physiological dysfunction (DiClemente, 2003). West (2005) states that: "Nowadays the term 'addiction' is applied to a syndrome at the centre of which is impaired control over a behaviour, and this loss of control is leading to significant harm" (p. 10).

What makes a good theory of addiction? West (2005) writes:

Theories are central to science, but they form only a part of it. They are discrete, coherent accounts of a process that are arrived at by a process of inference, provide an explanation for observed phenomena and generate predictions. Much of science does not fall into this category because it consists of disparate observations or is descriptive rather than explanatory. The same is true for the field of addiction. (p. 16)

The problem is that theories in the field of addiction are rarely tested adequately in real-world settings, because the dominant research methodology does not allow it. However, a good theory of addiction should explain a related set of observations, generate predictions that can be tested, be parsimonious, comprehensible, coherent, internally consistent, and not contradicted by any observations (West, 2005).

I will now explore some of these models and theories of addiction and see if they can be classified as good theories or models. When using what Wilber (2002a, 2002b) refers to as an "integral calculus of indigenous perspectives," which is the sum total of all the various perspectives of "being-in-the-world," we can see what aspects a model honors and what it leaves out. It must be noted that it is beyond the scope of this article to provide an exhaustive discussion of models of addiction, and the discussion that follows only briefly outlines some of the most prominent explanatory models, grouped under broad headings for the sake of simplicity.

Genetic/Physiological Models

The most substantial evidence concerning the role of genetics in addiction is derived from studies of alcohol dependence (Shuckit, 1980; Shuckit et al., 1972). Theorists have suggested that addiction runs in families and can be transmitted across generations. Twin studies suggest that a genetic transmission of alcoholism and chemical dependence is possible, and seem to support the importance of genetics as a contributing factor (Hesselbrock et al., 1999). What is now becoming evident is that the solution will be polygenetic and complex, and will not lie in finding a single gene that can explain addiction (Begleiter & Porjesz, 1999; Blume, 2004; Gordis, 2000).

Historically, addiction and physical dependence were seen as synonymous. Addiction was traditionally characterized by increasing tolerance and onset of physical withdrawal symptoms. Theorists of the genetic/physiological model of addiction argue that the physiological aspects of tolerance and withdrawal are indicators that addictions are biological entities and medical problems. However, not all drugs and addictions produce withdrawal symptoms or create physiological dependence. Yet the physiological component of addictions remains an important one, and there have been major advances in our understanding of the neurobiol-

ogy of addiction (Roberts & Koob, 1997). Advanced neurobiological insight into addiction as having a physiological component and not constituting morally reprehensible behavior has led to it being understood within a medical model as a disease. West (2005) states that "[t]he Disease Model of addiction seeks to explain the development of addiction and individual differences in susceptibility to and recovery from it. It proposes that addiction fits the definition of a medical disorder. It involves an abnormality of structure or function in the CNS [central nervous system] that results in impairment" (p. 76). The disease model has played a significant role in shifting society's view of addiction from one of moral deviance to one that promotes treatment and understanding. Most neuroscientists studying addiction view it as a brain disease (Volkow et al., 2002). Addiction affects, amongst others, the mesolimbic system of the brain, the area where our instinctual drives and our ability to experience pleasure resides. This area contains the medial forebrain bundle, prevalently known as the pleasure pathway (Brick & Ericson, 1999). In addicts, the pleasure pathway of the brain is "hijacked" by the chronic use of drugs or compulsive addictive behavior. Due to the consequent neurochemical dysfunction, addicts perceive the drug as a life-supporting necessity, much like breathing and nourishment (Brick & Ericson, 1999).

It seems clear, based on our understanding of the neurobiology of addiction, that physiological mechanisms and genetic factors potentially play a role in addiction; however, there are many concerns about assigning sole causality to genetic/physiological factors (Gupman & Pickens, 2000). Although the genetic/physiological models are some of the most widely accepted models of addiction, it has attracted a number of critiques (Blomqvist & Cameron, 2002; Moos, 2003). DiClemente (2003) states that "so many different individuals can become addicted to so many different types of substances or behaviors, biological or genetic differences do not explain all the cultural, situational, and intrapersonal differences among addicted individuals and addictive behaviors" (p. 11). From an IMP point of view, it is evident that the genetic/physiological theories understand and apply empirical observation methodologies from a zone-6 perspective (by viewing and studying the exterior of individuals from the outside). These models do not incorporate psychological, social, and cultural perspectives.

Social/Environment Models

Many models of substance abuse have been criticized for not sufficiently emphasizing the role of social and contextual factors (Coppelo & Orford, 2002). In addition, many research studies have shown that some of the greatest risks of becoming addicted are related to the social factors a person is exposed to (Srmac, 2010). The social/environment perspective highlights the role of societal influences, social policies, availability, peer pressure, and family systems on the development and maintenance of addiction (DiClemente, 2003; Johnson, 1980). Furthermore, influencing etiological factors of addiction is the prevailing degree of attitudinal tolerance toward the practice in the individual's cultural, ethnic, and social class milieu. Research has pointed out that macro-environmental influences also play a significant role in the initiation of addiction (Connors & Tarbox, 1995). For instance, since the breakdown of the apartheid system in early 1990s and the concomitant relaxation of border management, South Africa has been targeted as a conduit country for transportation of drugs as well as a lucrative new market for the sale of drugs (Myers & Parry, 2003). Poor law enforcement, combined with the availability of sophisticated infrastructure and telecommunications systems, have further compounded South Africa's vulnerability as a lucrative drug-trafficking destination, resulting in the increased use of heroin, cocaine, and methamphetamine in the country (Parry et al., 2005).

Some supporters of the social/environment models focus on the more intimate environment of family influences as a central etiological factor of addiction (Merikangas et al., 1992, Sher, 1993). They suggest that the onset of addiction is influenced by certain variables that emerge from dysfunctional family environments (Coleman, 1980; Kandel & Davies, 1992; Stanton, 1980). These theorists emphasize that problematic family situations, such as conflicted and broken marriages, difficulties with relationships, and the use of alcohol

and other drugs on the part of the parents, are important influences on the child's decision to experiment with drugs or continuing addictive behavior (Chassin et al., 1996; Jessor & Jessor, 1977). Research has identified familial dynamics such as lack of parental support and ineffective parental control practices as high-risk factors for adolescent substance abuse (Hawkins et al., 1994).

It is clear that social/environment models have relevance in our understanding of addictive behavior at the population level, but they often fail to explain individual initiation or cessation in any comprehensive manner (DiClemente, 2003). The social/environment models attempt to understand and study addiction from a cultural anthropological perspective (zone 4) by taking an outside view of collective interiors; a social autopoiesis theory perspective (zone 7) by taking an inside view of collective exteriors; and from a systems theory perspective (zone 8) by studying the outside of collective exteriors. These models are valuable from LL and LR quadrant perspectives, but fail to incorporate an etiological understanding from the UL and UR quadrants in a meaningful way.

Personality/Intrapsychic Models

Proponents of the personality/intrapsychic perspective link personality/intrapsychic dysfunction and inadequate psychological development to a predisposition toward addiction (Flores, 1997; Khantzian, 1994; Kohut, 1977; Levin, 1995; Ulman & Paul, 2006). For example, pre-existing antisocial disorders, depression, low self-esteem, narcissistic disorders, hyperactivism, high novelty seeking, and emotionality have been acknowledged as possible precursors or predictors of later addiction (Jessor & Jessor, 1980; Kohut, 1977). This led theorists to seek a pre-addiction psychological profile for people who have become addicted. However, a single addictive personality type has not been established, in spite of the commonly held belief that there is such a thing as an "addictive personality." Arthur Blume (2004) affirms this by saying that "there are certain psychological disorders with specific clusters of symptoms that have a high co-occurrence with substance abuse and dependence ... but there is no single personality type for people with addictive behaviors" (p. 73).

A common explanation, from a psychoanalytic perspective, is to view the etiological and pathogenic origins of addiction as a narcissistic disturbance of self-experience (Khantzian, 1999; Meissner, 1980; Ulman & Paul, 2006; Wurmser, 1995). Kohut (1971, 1977) implies that there is an inverse relationship between an individual's early experiences of positive self-object responsiveness and their tendency to turn to addictive behavior as replacements for damaging relationships. Scholars who support the "self-medication hypothesis" believe that addicts often suffer from defects in their psychic structure due to poor relationships early in life (Flores, 1997; Khantzian et al., 1990; Levin, 1995). This leaves them prone to seeking external sources of gratification (e.g., drugs, sex, food, work in later life, etc.) (Kohut, 1977). Khantzian (1995) asserts that,

Substance abusers are predisposed to become dependent on drugs because they suffer with psychiatric disturbances and painful effect states. Their distress and suffering is the consequence of defects in ego and self capacities which leave such people ill-equipped to regulate and modulate feelings, self-esteem, relationships and behavior. (p. 1)

The self-medication model of addictive disorders points out that individuals are predisposed to addiction if they suffer from unpleasant affective states and psychiatric disorders, and that an addict's drug of choice is not decided randomly but chosen for its particular effect because it helps with the specific problem(s) that the person is struggling with. Therefore, initiation of drug use and the choice of drug are based on the particular psychoactive effect sought by the individual (Khantzian 1995; West, 2005). Richard Ulman and Harry Paul (2006), in their fantasy-based self-psychological model of addiction, believe that addiction is better conceptualized as a kind of self-hypnosis than a type of "self-medication." They state that an archaic form of narcis-

sism, namely megalomania, is at the unconscious etiology of addiction. Like other forms of archaic narcissism, it could become developmentally arrested in the setting of a self-object milieu which lacks empathy. In certain cases, such a developmental arrest may lead to addiction in later life. When using addicts enter into a hypnoid or dissociated state involving an archaic fantasy of being a self as a megalomaniacal being endowed with a form of magical control over psychoactive agents (things and activities), these addicts imagine that through possession of these agents they will usher a metamorphosis or transmogrification into a radically new state of being (Ulman & Paul, 2006).

Personality/intrapsychic approach obviously makes a valuable contribution toward a better understanding of addiction, and personality as well as intrapsychic factors appear to contribute to the development of addiction. However, as DiClemente (2003) points out, personality factors or deep-seated intrapersonal conflicts account for a possibly important but relatively small part of a comprehensive explanation needed for addiction. Personality/intrapsychic models attempt to understand addiction from a phenomenological mode of inquiry (zone 1) by studying the inside view of the individual interior; as well as by applying structural-assessment techniques (zone 2) (recognizing object relation structures from early development) by studying the outside of the individual interior. These models do a great job from an UL-quadrant perspective, but do not account for UR, LL, and LR quadrant factors.

Coping/Social Learning Models

Some theorists indicate that addiction is often related to a person's ability to cope with stressful situations. They believe that, as a result of poor or inadequate coping mechanisms, addicts turn to their addictions as an alternative coping mechanism for temporary relief and comfort. An individual's inadequate ability to cope with stress and negative emotions has been identified as an etiological factor in many theories of addiction. Therefore, the coping/social learning models relate addiction to inadequate coping skills, which result from certain personality deficits in the individual (Wills & Shiffman, 1985). According to DiClemente (2003), emotion-focused coping has been identified as a particularly important dimension from a coping model perspective. Some believe alcohol is addictive because of its capacity for tension reduction (Cappell & Greeley, 1987) and its stress response damping effect (Pandina et al., 1992). Researchers have shown that increased drinking after rehabilitation treatment is associated with both skills deficit and the failure to use alternative coping responses (Marlatt & Gordon, 1985).

The social learning perspective emphasizes more than just deficits in coping skills; it emphasizes social cognition. Bandura's social cognitive theory focuses more on cognitive expectancies, self-regulation, and vicarious learning as explanatory mechanisms for addiction (Bandura, 1977, 1986). Also, this perspective highlights the role of peers and significant others as models. When advertisers use prominent public figures to promote a product, they are applying social influence principles.

Although coping and social learning perspectives have become popular in addictionology, generalized poor coping skills cannot be the only causal link to addiction. However, even if coping deficit does not sufficiently provide an etiological explanation, it certainly highlights an important consequence of addiction, namely the narrowing of the addict's coping repertoire (Shiffman & Wills, 1985). The coping/social learning models attempt to understand addiction from a phenomenological mode of inquiry (zone 1) by studying the inside view of an individual's interior; from a hermeneutical-interpretive perspective (zone 3) by studying the inside of collective interiors; from a cultural anthropological perspective (zone 4) by exploring the outside of collective interiors; and finally from an autopoiesis theory perspective (as do many of the cognitive sciences) (zone 5) by studying the inside of individual exteriors. Although the coping/social learning models do incorporate a multi-perspectival understanding of addiction, they still chiefly focus on the UL quadrant processes in understanding addiction.

Conditioning/Reinforcement Behavioral Models

The compulsive use of addictive substances and process addictions are governed by reinforcement principles. Addictive substances and behaviors deleteriously affect the pleasure centers of the brain (Blume, 2004). The stimulation of the pleasure center produces a euphoric experience that tends to positively reinforce addictive behavior. Reinforcement can be positive or negative. Reinforcement models focus on the direct effects of addictive behavior, such as tolerance, withdrawal, other physiological responses/rewards, as well as more indirect effects described in opponent process theory (Barette, 1985, Soloman & Corbit, 1974). Positive reinforcement involves pleasurable consequences related to addictive behavior. Negative reinforcement, as described by opponent process theory, occurs when a person is rewarded through the substance reducing withdrawal or psychiatric symptoms. Both positive and negative reinforcement play a part in development and maintenance of the addictive process (Blume, 2004).

Some theorists have also used Pavlovian conditioning to understand the addiction process. These individuals state that anticipatory drug-related behaviors can be linked to cues associated with the act of using the drug. Therefore, situational cues can elicit initial drug reactions and consequently lead to the resumption of the addictive behavior (Hinson, 1985). More contemporary classical conditioning approaches include cognition and physiological mechanisms in their repertoire of cues and responses (Adesso, 1985; Brown, 1993). This has led to an integration of conditioning and social learning perspectives (DiClemente, 1993).

Today there is significant evidence for the role of conditioning and reinforcement effects in the addictive process, and as with all of the previously mentioned models it offers insight into the nature of addiction. However, the conditioning/reinforcement behavioral models do not explain all initiation or successful cessation of addiction (Marlatt & Gordon, 1985). They predominantly attempt to understand addiction from a phenomenological mode of inquiry (zone 1) by studying the inside view of an individual's interior; by applying empirical observation methodologies (zone 6) via studying the exterior of individuals from the outside; and by means of an autopoiesis theory perspective (zone 5) by studying the inside of individual exteriors. These models tend to overemphasize a deterministic and behaviorist approach to addiction with disregard for many psychological factors (UL), as well as providing inadequate explanation from LL and LR quadrant perspectives.

Compulsive/Excessive Behavior Models

Some physiognomies of addiction, like the inability to successfully stop the behavior, as well as its repetitive nature, has led some theorists to link addiction with ritualistic compulsive behaviors. Theorists who link addiction to compulsive behaviors either come from an analytic or a biologically oriented view. The analytic perspective views the compulsive component of addiction as reflecting deep-seated psychological conflict, whereas the biologically oriented view understands the compulsive behavior as a result of biochemical imbalances reflected in irregular neurotransmitter levels in the brain. Adherents of the first view would see treatment in terms of analysis, whereas adherents of the latter would explore psychoactive pharmacological treatments to bring the compulsive addictive behavior under control (DiClemente, 2003).

Some theorists view addiction as excessive appetite (Orford, 1985). Increasing appetite leads to excess and the developmental process of increasing attachment, which is similar to elements of the social learning model. Potentially addictive substances share not only the potential for excess but also a similar process of leading to access. Both the compulsive and excessive behavior models share the notion that an addicted individual's behavior is out of control and that the addict is attempting to satisfy a psychological conflict or need (DiClemente, 2003).

Both the compulsive and excessive behavior models add some explanatory potential to some of the existing models. However, they do not highlight all the variables needed in order to adequately explain the

G.P. DU PLESSIS

etiology or why individuals continue addictive behavior. The compulsive and excessive behavior models attempt to understand addiction from a phenomenological mode of inquiry (zone 1) by studying the inside view of an individual's interior; and by applying empirical observation methodologies from a zone-6 perspective when understanding compulsive addictive behaviors from a biologically oriented view, by studying the exterior of individuals from the outside. These models do explain addiction from limited UL and UR quadrant perspectives, but do not account for social and cultural factors (LL and LR quadrants).

Spiritual/Altered States of Consciousness Models

Lesser-known models view the pathogenic and etiological roots of addiction from a spiritual, existential, and altered state of consciousness (ASC) perspective. Empirical research has shown that an inverse relationship exists between spirituality and drug addiction, suggesting that spiritual involvement may act as a protective mechanism against developing an addiction, and that a lack thereof can contribute toward developing an addiction (Laudet et al., 2006; Miller, 1997). Some theorists have suggested that addiction is a spiritual illness, a disorder resulting from a spiritual void in one's life or from a misguided search for connectedness (Miller, 1998). For addicts, drugs become their counterfeit god. Therefore, addicts may be unconsciously pursuing the satisfaction of their spiritual needs through drugs or addictive behavior. In a letter to Bill Wilson, co-founder of Alcoholics Anonymous, Jung (as cited in Kurtz & Ketcham, 2002) pointed out that he believed "alcohol was the equivalent, on a low level, of the spiritual thirst of our being for wholeness, expressed in medieval language: the union with God" (p. 113). In a sense, addicts and alcoholics, as Jung believed, are misguided mystics.

Many addicts state that they turned to drugs initially due to an existential void in their lives. Drugs instantly provided a new and often spectacular sense of meaning for them in an otherwise barren existence. Luigi Zoja (2000) states that:

The archetypal need to transcend one's present state at any cost, even when it entails the use of physically harmful substances, is especially strong in those who find themselves in a state of meaninglessness, lacking both a sense of identity and a precise societal role. In this sense it seems right to see the behavior of a drug addict who announces "I use drugs!" not only as an escape to some other world, but also as a naive and unconscious attempt at assuming an identity and role negatively defined by the current values of society. (p. 15)

I believe viewing the etiological roots from an existential perspective is an important inclusion for a comprehensive understanding of addiction (Boss, 1983). A sense of meaning and purpose is closely related to hope. Empirical findings show that recovering addicts who have hope are better able to cope with life's crises (Sremac, 2010). Furthermore (and closely related to existential etiological perspectives), I believe that in some instances the etiological roots of certain individuals' addiction may be a dysfunctional attempt, borrowing terms from Robert Assagiloi (1975), at "self-realization," and the consequent flawed channeling of "superconscious spiritual energies" (i.e., energies to which these type of individuals are often sensitive to, but have not found suitable ways to actualize). This type of transpersonal etiology (an existential quest for postconventional meaning) should not be confused with a pre-personal etiology (narcissistic disturbance of self), which will result in a type of pre/trans fallacy (Wilber, 1995, 2000, 2006). Although I must add that I have observed that many addicts who could be classified as having a transpersonal etiological root for their addiction will also often have co-occurring pre-personal (archaic) narcissistic developmental failure.

Some theorists believe that humans have an innate drive to seek ASCs, because they encompass systemic natural neurophysiological processes involved with psychological integration of holotropic responses

and reflect biologically based structures of consciousness for producing holistic growth and integrative consciousness (Grof, 1980, 1992; Siegal, 1984; Weil, 1972). Winkelman (2001) believes that addicts engage in a normal human motive to achieve ASCs, but in a self-destructive way because they are not provided the opportunity to learn "constructive alternative methods for experiencing non-ordinary consciousness" (p. 340). From this viewpoint, drug use and addiction are not understood as an intrinsic anomaly, but rather as a misguided yearning for the satisfaction of an inherent human need. In considering possible etiological roots for our society's immense addiction problem through an ASC perspective, Winkelman (2001) states:

Since contemporary Indo-European societies lack legitimate institutionalized procedures for accessing ASCs, they tend to be sought and utilized in deleterious and self-destructive patterns—alcoholism, tobacco abuse and illicit substance dependence. Since ASC reflect underlying psychobiological structures and innate needs, when societies fail to provide legitimate procedures for accessing these conditions, they are sought through other means. Incorporation of practices to induce ASC through non-drug means could be useful as both a prophylactic against drug abuse, as well as a potential treatment for addiction. (p. 240)

For a comprehensive understanding of addiction, the inclusion of spiritual and ASC perspectives is essential, although addiction is too complex for its pathogenic origins to be reduced to these elements alone. Furthermore, in some instances one could run the risk of a type of a pre/trans fallacy by confusing developmentally arrested narcissistic needs and behavior with postconventional spiritual yearning, which is actually a fairly common phenomenon in certain drug subcultures (Almaas, 1996). The spiritual/altered state of consciousness models attempt to understand addiction from a phenomenological mode of inquiry (zone 1) perspective by studying the inside view of an individual's interior; and a cultural anthropological perspective (zone 4) by exploring the outside of collective interiors.

The Biopsychosocial Model

A dissatisfaction with the fractional explanations proposed by the previously described single-factor models have prompted some theorists to propose an integration of these explanations (Donovan & Marlatt, 1988; Glantz & Pickens, 1992). By calling their model the biopsychosocial model, they indicate the integration of biological, psychological, and sociological explanations that are crucial in understanding addiction. This model endeavors to unify contending addiction theories into an integrated conceptual framework. According to this model, addictive behavior is best understood as a complex disorder determined through the interaction of biological, cognitive, psychological, and sociocultural processes. Dennis Donovan, a proponent of the biopsychosocial model, states that "addiction appears to be an interactive product of social learning in a situation involving physiological events as they are interpreted, labeled, and given meaning by the individual" (Donovan & Marlatt, 2005, p. 7). The biopsychosocial model argues for multiple causality in the accusation, maintenance, and termination of addictive behaviors.

Yet there are some academics who feel the biopsychosocial model is also inadequate in explaining addiction, and that further integrative elements are needed to make this model's tripartite collection of factors functional. DiClemente (2003) states that "without a pathway that can lead to real integration, the biopsychosocial model represents only a semantic linking of terms or at best a partial integration" (p. 18). DiClemente adds:

[T]he biopsychosocial model clearly supports the complexity of and interactive nature of the process of addiction and recovery. However, additional integrating ele-

G.P. DU PLESSIS

ments are needed in order to make this tripartite collection of factors truly functional for explaining how individuals become addicted and how the process of recovery from addiction occurs. (2003, p. 18)

Without an orienting framework that can explain how these various areas co-enact and interlink, the biopsychosocial approach indeed often represents merely a semantic linking of terms.

Although the biopsychosocial model has not provided the field of addictionology with a truly comprehensive and integrative model, it is one of the first models to recognize the importance of treating the whole person, not merely the addiction. This has contributed greatly to the application of more holistic treatment protocols (Sremac, 2010). The biopsychosocial model attempts to understand addiction from a multitude of perspectives, which include a phenomenological mode of inquiry (zone 1) by studying the inside view of an individual's interior; a hermeneutical-interpretive perspective (zone 3) by studying the inside of collective interiors; a cultural anthropological perspective (zone 4) by exploring the outside of collective interiors; an autopoiesis theory perspective (zone 5) by studying the inside of individual exteriors; empirical observation methodologies (zone 6) by viewing and studying the exterior of individuals from the outside; and finally a systems theory perspective (zone 8) by studying the outside of collective exteriors.

The Transtheoretical Model

In an attempt to find commonality among the diverse models of addiction, DiClemente and Prochaska (1998) proposed their Transtheoretical Model (TTM) of intentional behavior change. The TTM "attempts to bring together these divergent perspectives by focusing on how individuals change behavior and by identifying key change dimensions involved in this process" (DiClemente, 2003, p. 19). The primary developer of TTM, Carlo DiClemente (2003), argues for this model by stating that "[i]t is the personal pathway, and not simply the type of person or environment, that appears to be the best way to integrate and understand the multiple influences involved in the acquisitions and cessation of addictions" (p. 19). The TTM proposes that the process of recovery from an addictive behavior involves transition through phases described as precontemplation, contemplation, preparation, action, and maintenance. Different processes are involved in the transition between these different phases, and individuals can move forward and backward through these phases of change (West, 2005). Proponents of this model believe a person's choices influence and are influenced by both personality and social forces, and that there is an interaction between the individual and risk and protective factors that influence the pathogenic origin or cessation of addiction. This process requires a personal journey through an intentional change process that is influenced at various points by a host of factors, as identified in the previously discussed explanatory models. "The stages of change, process of change, context of change, and markers of change identified in the TTM offer a way to integrate these diverse perspectives without losing the valid insights gained from each perspective" (DiClemente, 2003, p. 20).

Although this model demonstrates an integrative principle that is common to all the previous models, and although it highlights the dynamic and developmental aspects of addiction, I do not believe it provides a metatheoretical framework that truly accommodates all the previous perspectives into an integrative framework. The TTM predominantly focuses on one integrating principle (i.e., change) found in all the prominent addiction models, but does not provide the meta-paradigmatic framework needed for a metatheory of addiction. Furthermore, the model has attracted a number of critiques, and West (2005) states that "reservations have emerged about the model, many of which have been well articulated (Etter & Perneger, 1999; Bunton et al., 2000; Whitelaw et al., 2000; Sutton, 2001; Etter & Sutton, 2002; Littell & Girvin, 2002)" (p. 68). Yet the TTM has contributed greatly to our understanding of addiction and recovery as a dynamic process, by explaining it through a developmental-contextual framework. Furthermore, it has provided clinicians with a dynamic developmental framework to understand treatment resistance and ambivalence as well as to identify

certain developmental markers indicative of positive change in recovery (Miller, 2006; Miller & Rollnick, 2002; Miller & Carroll, 2006). The TTM attempts to understand addiction primarily from a zone-2 perspective, applying structural-assessment techniques, by studying the outside of individual interiors.

An Integral Model of Addiction

In contemporary addictionology studies there is an ongoing debate concerning the nature of addiction, and there is no agreement on a single etiopathogenic model—a fact that clearly reflects the complexity of this phenomenon (DiClemente 2003; Sremac, 2010; West, 2005). As I have shown in this article, there are multiple etiological perspectives of addiction: biological, sociocultural, psychological, and spiritual/ASC theories are all important in understanding it. Srdjan Sremac (2010) states that "one of the difficulties for a comprehensive theory of addiction is the increasing 'medicalitazation' of the notion of disease" (p. 268). As Morgan (1999) points out, the search for biological and genetic explanations for addictive behavior has obscured the more holistic and interdisciplinary perspectives. Furthermore, most of the above-mentioned models apply the natural sciences paradigm that underlies modern medicine, which Medard Boss (1983) points out has its limitations in explaining the whole human realm, as it originated from and is only sovereign in the nonhuman realm.

Our brief review of the most prevalent explanatory models of addiction highlights several important issues. First, addiction appears to involve multiple determinants, each representing very different domains of human functioning, ranging from individual factors like self-esteem and physiology to societal influences. Second, we can conclude that there is no single explanatory construct at a single point in the life of an individual that can adequately explain addiction. Finally, because of the inadequacy of the single-factor models to account for the complexity of addiction, integrative perspectives like the biopsychosocial model and TTM are beginning to dominate the field of addictionology (DiClemente, 2003).

Legitimation Crisis in Addictionology

Although there has been a move toward more comprehensive models in the field of addictionology, current holistic models have not yet achieved the goal of providing a truly all-inclusive and integrative framework to account for addiction. Carlo DiClemente (2003) states, pointing out the limitations of one of the most popular contemporary holistic models, "Although the proposal of an integrative model represents an important advance over more specific, single-factor models, proponents of the biopsychosocial approach have not explained how the integration of biological, psychological, sociological and behavioral components occur" (p. 18). What is missing in these integrative models is a metatheory that adequately explains the co-arising, multi-causality, and integration of the many factors. Unlike the biopsychosocial model and the TTM, a truly comprehensive and integrative framework would provide the scaffolding to bring together the various research-supported explanatory models, and orchestrate the integration of multiple determinants as well as the dynamic nature of addiction. The diverse etiological models discussed thus far mostly offer partial, often one-dimensional views. Moreover, the proposed integrative models, like the biopsychosocial model and the TTM, do not provide a comprehensive meta-framework to integrate these diverse explanatory perspectives and explain multiple "co-arising" determinants.

What is currently happening in the field of addictionology is what Wilber (2002a) refers to as a "legitimation crisis"—a breakdown in the adequacy of a particular mode of translating and making sense of the world. The partial existing explanatory addiction models (LL quadrant) cannot keep up with and successfully account for all the results the various research paradigms (LR quadrant) are enacting. Consequently, the current move in addictionology is toward more integrative models of addiction that can account for the mounting data in addiction studies, data which highlight its multidimensional, dynamic, and complex nature.

Toward an Integrative Conceptual Etiological Meta-framework

By proposing an Integral Model of Addiction (IMA) through the application of the AQAL model, and elements of IMP in particular, we can move toward an integrative framework that could provide adequate scaffolding for all the current evidence-based etiological approaches. Because the IMA is based on IMP, it seeks to honor all the important methodologies used in addictionology. Each of the aforementioned models brings valuable insight from a specific paradigmatic point of view, and enacts certain features of addiction by virtue of applying a particular methodologies. By applying Integral Theory in the context of addiction models, it can provide us with a "meta-theoretical framework that simultaneously honors the important contributions of a broad spectrum of epistemological outlooks while also acknowledging the parochial limitations and misconceptions of these perspectives" (Marquis, 2008, p. 24). From an IMP perspective, none of these models or perspectives have epistemological priority because they co-arise and "tetra-mesh" simultaneously, although in some contexts a priority can be established and justified. Khantzian (1987) states that each of these explanatory models has "an advantage in describing certain features and etiological determinants of substance dependence. Each also has its limitation" (p. 534). Therefore, these models are all valid from the perspectives they use to understand and study addiction, but also always partial in their approach to the whole. This implies that a model is not correct or incorrect but rather that it is more suited to explaining addiction from a certain perspective, and more limiting from other perspectives. For instance, the genetic/physiological models are better at explaining the biological determinants and function of addiction than the personality/intrapsychic models, whereas the personality/intrapsychic models are better at explaining the phenomenological determinants and experience of addicted individuals than the genetic/physiological models. Yet both illuminate important and interlinked aspects of the same phenomenon. This highlights the phenomenon of addiction as a multiple and dynamic object arising as a continuum of ontological complexity (Esbjörn-Hargens, 2010).

By viewing addiction through the quadrants and its 8PP, we can see that all these perspectives with their respective methodological families need to be acknowledged, and as many should be included as possible in order to gain a truly comprehensive view. This avoids what Wilber (2006) calls "quadrant absolutism," where all realities of a phenomenon are reduced to the perspective of one quadrant (e.g., reducing the multiple determinants of addictive behavior to merely impaired neurophysiology). An IMA, through the application of Integral Theory, acknowledges all these perspectives and their respective methodologies, and also provides a meta-paradigmatic integrative framework highlighting how these perspectives co-arise and interlink without having to reduce one perspective to another. Obviously, individuals can become addicted due to a host of different reasons, as articulated by the many explanatory models, and from an etiological point of view all these models may not be relevant in explaining the pathogenic origins of a particular individual's addiction. But what is clear is that once an individual becomes addicted, virtually all areas are affected and need to be included in a comprehensive understanding of the maintenance of addiction, as well as its treatment and the individual's recovery (Du Plessis, 2010, 2012; Dupuy & Gorman, 2010; Dupuy & Morelli, 2007).

Integral Taxonomy of Etiological Models of Addiction

An IMA highlights the need for a dynamic integrative understanding that includes paradigmatic as well as meta-paradigmatic orientations. Only by using a meta-paradigmatic practice can we create a metatheory that encapsulates, relates, and integrates the existing theories into a comprehensive conceptual framework of addiction. Moreover, a meta-model of addiction could help point the field of addictionology toward underexplored areas for etiological understanding of addiction (i.e., vertical developmental levels of zone 2; systemic aspects as represented by zone 7).

Through the application of IMP, an IMA includes all the evidence-based models and explains which aspect of addiction they enact, and provides meta-paradigmatic integration of these diverse perspectives and

their paradigmatic injunctions. In Figure 2, I provide a taxonomy of etiological models of addiction, using the eight zones and methodological families of IMP, into which each of the etiological models thus far discussed can be grouped. It must be noted that this classification highlights the predominant areas that each explanatory model explores, as it is often difficult to draw distinct boundaries. Consequently, this configuration opens itself up to certain methodological classification errors, and only serves the purpose of an exploratory overview of such a possible classification. Figure 2 illustrates how an IMA could integrate all the existing models into an integrative and comprehensive metatheory of addiction, without reducing one model to another. It provides a meta-developmental-contextual framework to view addiction from a multi-perspectival position from any of its possible developmental stages of self, culture, and nature.

Zone 1	Zone 2	Zone 3	Zone 4
Phenomenology	Structuralism	Hermeneutics	Ethnomethodology
Conditioning/Reinforcement Behavioral models Compulsion and Excessive Behavior models Spiritual/Altered State of Consciousness models Personality/Intrapsychic models Coping/Social learning models Biopsychosocial model	Transtheoretical model Personality/intrapsychic models	Coping/Social Learning models Biopsychosocial model	Social/Environment models Coping/Social Learning models Biopsychosocial model Spiritual/Altered State of Consciousness models
Zone 5	Zone 6	Zone 7	Zone 8
Autopoiesis Theory Conditioning/Reinforcement Behavioral models Coping/Social Learning models Biopsychosocial model	Empiricism Genetic/Physiological models Conditioning/Reinforcement Behavioral models Compulsion and Excessive Behavior models Biopsychosocial model	Social Autopoiesis Theory • Social/Environment models	Systems Theory • Social/Environment models • Biopsychosocial model

Figure 2. Taxonomy of the various etiological models of addiction within the eight methodological families of Integral Methodological Pluralism.

The Developmental Dynamics of Addiction

Assimilating the TTM of intentional behavior change, as well as the "stages of development" element of Integral Theory, alongside addiction/recovery developmental models into an IMA highlights the dynamic and developmental nature of addiction as well as the recovery process (Du Plessis, 2010, 2012). Furthermore, each of these eight zones of IMP will enact differently at different phases of addiction and recovery as well as the different stages of psychological development of addicts. For a comprehensive IMA, we need to be able to adequately accommodate and explicate the dynamic and developmental nature of addiction, and at least provide some orienting generalizations. Furthermore, a stage perspective of addiction and recovery has significant implications for therapy. (See Du Plessis, 2010, 2012 for a discussion of the therapeutic application of stages with addicted populations.)

In Figure 3, I indicate various developmental models often used in Integral Theory and developmental psychology (Wilber, 2006), some well-known developmental models of addiction and recovery (Whitfield, 1991; Bowden & Gravtiz, 1998; Nakken, 1998), as well as my own composite developmental model relating

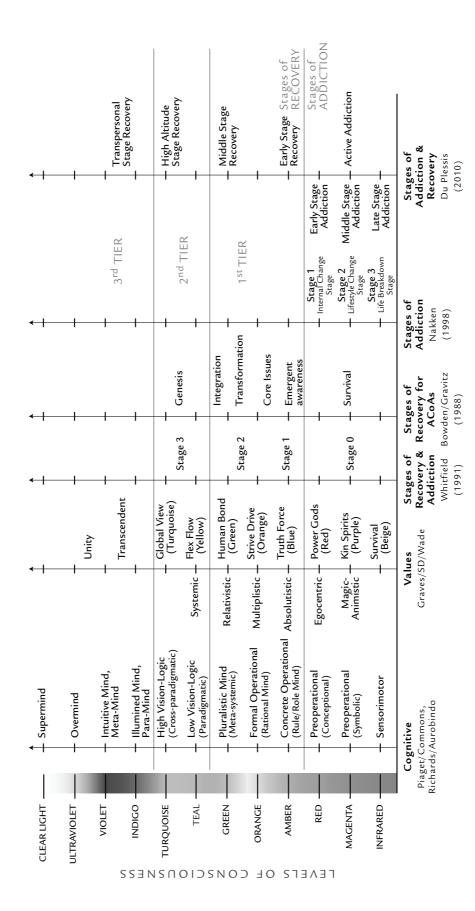


Figure 3. Developmental stages of addiction and recovery. From Du Plessis (2012, p. 130); used with permission.

to addiction and recovery (Du Plessis, 2011). The aim of this figure is to visually illustrate the developmental nature of addiction/recovery. The figure is a simplified example of the different developmental stages that an addict's center of addiction or recovery gravity can possibly rest at." Although the stages of addiction and recovery is better understood as chronological stages or phases, I do believe there is a correlation between the various stage models as articulated in Integral Theory and the various stages (or phases) of recovery models. Simply put, earlier stages of recovery may correlate with early developmental stages, and higher altitude stages of recovery may correlate with more complex developmental stages.

Conclusion

This article provides a preliminary sketch of what an integrally informed model of addiction could resemble. I argued that by applying Integral Theory as a metatheoretical and transdisciplinary framework, we may arrive at a comprehensive model of addiction that honors all the existing single-factor models as well as the integrative and dynamic models. IMP was used to propose the broad outlines of an integrative model of addiction. I explored the most dominant explanatory models and theories of addiction derived from the sociopsychological and biomedical sciences, and pointed out how each model's theory is enacted by a particular methodology as represented by one or more of the eight zones of IMP. Finally, I pointed out how an IMA could integrate all the existing models into an integrative and comprehensive metatheory of addiction, without reducing one model to another. Therefore, an IMA essentially comprises an integrative orientation that can include all the existing evidence-based etiopathogenic models and their respective methodologies, and a meta-paradigmatic conceptual framework that relates the various paradigmatic strands to each other in a dynamic manner. It thereby provides a meta-developmental-contextual framework to view addiction from a multi-perspectival position from any of its possible developmental stages in self, culture, and nature.

Arriving at an adequate understanding of addiction has more than just epistemological and scientific value—it also signifies great benefit in the real world, for the way we understand addiction influences the way we treat it. Therefore, the more comprehensive our understanding, the more effective and sustainable treatment becomes. The main premise of this article is that the application of Integral Theory in the context of etiological models could provide a more advanced integrative conceptual framework than any existing metatheory of addiction. As Wilber (2002b) eloquently states, echoing the premise of this article:

The more one actually practices an integral meta-paradigm ... the more Eros is set rumbling in through the system, agitating and pulling toward a second-tier transformation that explodes the legitimacy crisis inherent in all first-tier waves and throws them open to an enrichment beyond their first-tier imprisonment, an enrichment that is their own inherent potential and divine birthright set free in the deeper and wider spaces enacted by integral practices. (p. 44)

This article is not the final word on integrally informed models of addiction. It is merely a cursory attempt to show what possibilities exist when applying Integral Theory in the study of the etiological and pathogenic origins of addiction, and it hopes to stimulate interest in other academics, clinicians, and researches with a view to the eventual development of a well-researched, integrally informed meta-model of addiction.

Addiction is one of the greatest societal problems facing the world today, and I believe only a truly integral approach can adequately address this massive, mind-boggling, and heartbreaking problem. As Smuts said in 1927, presaging the Integral age: "If the soul of our civilization is to be saved we shall have to find new and fuller expression for the great saving unities..." (p. vi).

G.P. DU PLESSIS

NOTES

¹ In my opinion, General Jan Smuts, South African statesman, philosopher, and author of *Holism and Evolution* (1927), was one of the first truly modern integral thinkers. Smuts, who coined the term "holism" and who was the first to promote a holistic epistemology, is mostly forgotten by contemporary academia. It is well known that Fritz Perls, co-founder of Gestalt Therapy, was greatly influenced by Smuts' holistic theory while living in South Africa after fleeing Nazi Germany, as was Alfred Adler. Adler used *Holism and Evolution* for his classes in Vienna (and had it translated into German) and describes Holism Theory, in a letter to Smuts, as "supplying the scientific and philosophical basis for the great advance in psychology which had been made in recent years" (Blackenberg, 1951, p. 81). Furthermore, in his book *Psychosynthesis* (1975) Roberto Assagioli acknowledges Smuts as the originator of the holistic approach as well as of the Psychology of Personality, subsequently influencing thinkers like Maslow and Allport. Assagioli (1975) describes Smuts' holistic approach as one of the most "significant and valuable contributions to the knowledge of human nature and its betterment" (p. 14). Unfortunately, the majority of modern holistic thinkers seldom acknowledge his pioneering work. However, Ken Wilber holds Smuts' work in high regard, and was influenced by him in the early stages of his career (personal communication, May 26, 2008).

- ² The DSM-IV-TR does not use the term "addiction," but rather "substance abuse disorders," since the World Health Organization concluded in 1964 that addiction is no longer a scientific term. However, the soon-to-be-published DSM-V will use the term "addictive disorders" instead of "substance dependence." For the purposes of this article, the term *addiction* refers to substance use disorders and process addictions such as sex addiction and pathological gambling.

 ³ I use the term *paradigm* to mean a set of social practices or behavioral injunctions, as was originally intended by Thomas Kuhn (1970).
- ⁴ See Esbjörn-Hargens (2010) for a critique of this oft-cited parable.
- ⁵ See my previous articles in the *Journal of Integral Theory and Practice* (Du Plessis, 2010, 2012) for discussion of an integrally informed model for inpatient addiction treatment. The 2012 article proposes and outlines an integrally informed psychotherapy, known as Integrated Recovery Therapy (IRT), that is adapted for treating addicted populations. IRT as a therapeutic orientation is an Integral Methodological Pluralism to therapy for treating addiction. Its two main features are paradigmatic and meta-paradigmatic. The *paradigmatic aspect* refers to the recognition, compilation and implementation of various methodologies in a comprehensive and inclusive manner. The *meta-paradigmatic aspect* refers to IRT's capacity to weave together, relate, and integrate the various paradigmatic practices. IRT is a meta-therapy derived from the Integrated Recovery Model (Du Plessis, 2010), which is a comprehensive, balanced, multi-phased, and multi-disciplinary clinical model designed for inpatient addiction treatment. As with the Integrated Recovery Model, IRT's philosophy is derived from an integration of 12-step, abstinence-based philosophy, mindfulness, positive psychology, and Integral Theory.
- ⁶ For a comprehensive and very impressive discussion of addiction as a narcissistic disturbance from a self-psychology perspective, see Ulman & Paul's (2006) *The Self Psychology of Addiction and its Treatment: Narcissus in Wonderland.*⁷ I intend to write an article exploring the etiological roots of addiction from a transpersonal perceptive through the application of an integral view of Assagioli's psychosynthesis approach as a conceptual framework. This is not an etiological explanation that attempts to be applicable for all addiction individuals, but rather for isolated cases.
- ⁸ In certain subcultures, drug use is often glorified for its mystical and transcendent properties, and the individuals in these subcultures often justify their frequent use of drugs through spiritual values. The problem is not that the ingestion of psychoactive substances cannot produce authentic mystical experiences, or that some of these individuals are not authentically driven to find spiritual enlightenment through the use of psychoactive substances, but rather that the prevalent drug use in these cultures is often driven simply by a need "to get high," and not a spiritual motivation. Consequently, most individuals are there to get high, not to become enlightened, but use these lofty ideals as rationalizations for more primitive impulses.
- ⁹ For an integral critique of the biopsychosocial model, see Baron Short's (2006) article in the Journal of Integral

Theory and Practice.

¹⁰ This article's primary focus is on the application of IMP, without adequately expounding the ontological pluralism of addiction as a multiple object enacted by various methodologies. I believe what is further needed in an attempt at a truly comprehensive integral metatheory of addiction is to incorporate Esbjörn-Hargens' (2010) Integral Pluralism and Integral Enactment Theory as part of its architectonic.

¹¹ It must be noted that this figure is speculative regarding how the stages of recovery and addiction relate to other developmental models, as it is not clear how ego development correlates with the various stages of addiction/recovery models, and is best used as a clinical metaphor.

REFERENCES

- Adesso, V.J. (1985) Cognitive factors in alcohol and drug abuse. In M. Galizio & S. A. Maisto (Eds.), Determinates of substance abuse: Biological, psychological and environmental factors (pp. 125-178). New York, NY: Plenum Press
- Alcoholics Anonymous. (1976). Alcoholics Anonymous.

 New York, NY: Alcoholics Anonymous World
 Services.
- Alcoholics Anonymous. (1952). Twelve steps and twelve traditions. New York, NY: Alcoholics Anonymous World Services.
- Alexander, C., Robinson, P., & Rainforth, M. (1994).

 Treating and preventing alcohol, nicotine, and drug abuse through transcendental meditation: A review and statistical meta-analysis. *Alcoholism Treatment Quarterly, 11*(1/2), 13-87.
- Alexander, C., Druker, S., & Langer, E. (1990). Introduction: Major issues in the exploration of adult growth. In C. Alexander & E. Langer (Eds.). Higher stages of human development (pp. 3-32). New York, NY: Oxford University Press.
- Almaas, A. H. (1996). *The void: Inner spaciousness and ego structure*. Berkeley: CA. Diamond Books.
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th Ed.). Washington, DC: American Psychiatric Association.
- Assagioli, R. (1975). *Psychosynthesis*. Great Britain: Thurnstone Press Limited.
- Bandura, A. (1977). Social learning theory. Engelwood Cliffs, NJ: Prentice-Hall.
- Barrett. R.J. (1985). Behavioral approaches to individuals differences in substance abuse. Drug-taking behavior. In M. Galizio & S. A. Maisto (Eds.), Determinates of substance abuse: Biological,

- psychological and environmental factors (pp. 125-178). New York: Plenum Press
- Bandura, A. (1986) Social foundations of thoughts and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Begleiter, H., & Porjesz, B. (1999). What is inherited in the predisposition toward alcoholism? A proposed model. *Alcoholism: Clinical and Experimental Research*, 23, 1125-1135.
- Bevins, R.A. & Bardo M.T. (Eds.) (2004). Motivational factors in the etiology of drug abuse: Volume 50 of the Nebraska symposium on motivation. Lincoln, NE: University of Nebraska Press.
- Blanckenberg, P.B. (1951). *The thoughts of General Smuts.* Cape Town: Juta & Co. Ltd.
- Blomqvist. J., & Cameron, D, (2002). Moving away from addiction: Forces, processes and Contexts.

 Addiction Research & Theory, 10, 115-118.
- Blum, K. (1995, April 15). Reward deficiency syndrome: Electro-physiological and biogenetic evidence. Paper presented at the annual meeting of the Society for the Study of Neuronal Regulation, Scottsdale, AZ.
- Blume W.A. (2004), Understanding and diagnosing substance use disorder. In R.H. Coombs (Ed.), Handbook of addictive disorders: A practical guide to diagnosis and treatment (pp. 63-93). New Jersey: John Wiley & Sons.
- Boss, M. (1983). The existential foundations of medicine and psychology. New York, NY: Jason Aronson.
- Bowden, J., & Gravitz, H. (1998) Genesis: Spirituality in recovery from childhood traumas. Florida: Health Communications, Inc.
- Bourne, E. & Fox, R. (1973). Alcoholism: Progress in research & treatment. New York, NY: Academic Press.
- Brick, J., & Erickson, C. (1999). Drugs, the brain and

- behavior: The pharmacology of abuse and dependence. New York: Haworth Medical Press, Inc.
- Brown, S.A. (1993). Recovery patterns in adolescent substance abuse. In J.S. Baer, G.A. Marlatt, & R.J. McMahon (Eds.), *Addictive behaviors across the lifespan: Prevention, treatment and policy issues* (pp. 161-183). Newbury Park, CA: Sage.
- Cappell, H., & Greeley, J. (1987). Alcohol and tension reduction: An update on research and theory. In H.T. Blane & K.E. Leonard (Eds.), *Psychological theories of drinking and alcoholism* (pp. 15-89). New York, NY: Guilford Press.
- Carnes, P. (2008). Recovery start kit. Carefree, AZ: Gentle Path Press.
- Carroll, S. (1993). Spirituality and purpose in life in alcoholism recovery. Journal of Studies on Alcohol, 54, pp. 297-301.
- Chassin L., C. J. Patrick, H. M. Andrea & C. R. Craig (1996). The relations of parent alcoholism to adolescent substance use: A longitudinal follow-up. *Journal of Abnormal Psychology*, 105, 70-80.
- Coleman B. S. (1980). Incomplete mourning and addict/ family transactions: A theory for understanding heroin abuse. In D.J. Lettieri, M. Sayers, H.W. Pearson, (Eds.), *Theories on drug abuse: Con*temporary perspective (pp. 83-89). NIDA Research Monograph No. 30. Washington: Government Printing Office.
- Connors, G.J., & Tarbox, A.R. (1985). Macroenvironmental factors determinants of substance use and abuse. In M. Galizio & S.A. Maisto (Eds.), Determinants of substance abuse: Biological, psychological, and environmental factors (pp. 283-314). New York: Plenum Press.
- Cook-Greuter, S. (2004) Making the case for a developmental perspective. *Industrial and Commercial Training*, 36(7), Emerald Group Publishing Limited.
- Coppelo, A., & Orford, J. (2002), Addiction and the family: is it time for services to take notice of the evidence. *Addiction*, *97*, 1361-1363.
- DiClemente, C. C., (2003). Addiction and change: How addictions develop and addicted people recover.

 New York: The Guilford Press.
- DiClemente, C.C., & Prochaska, J.O. (1998). Toward a comprehensive, transtheoretical model of change:

- Stages of change and addictive behaviours. In W.R. Miller & N. Heather (Eds.), *Treating addictive behaviours* (2nd ed.) (pp. 3-24). New York: Plenum Press.
- Donovan, D.M., & Marlatt, G.A. (Eds). (1998). Assessment of addictive behaviours. New York: Guilford Press.
- Duffett, L. (2010). Outcomes-based evaluative research at an integrally informed substance abuse treatment centre using the Integrated Recovery model [unpublished thesis]. University of Cape Town, Department of Psychology.
- Du Plessis, G.P. (2010). The integrated recovery model for addiction treatment and recovery. *Journal of Integral Theory and Practice*, 5(3), 68-87.
- Du Plessis, G.P. (2012). Integrated recovery therapy: Toward an integrally informed individual psychotherapy for addicted populations. *Journal of Integral Theory and Practice*, 7(1), 124-148.
- Dupuy, J., & Morelli, M. (2007). Toward an integral recovery model for drug and alcohol addiction. *AQAL: Journal of Integral Theory and Practice*, 2(3), 26-42.
- Dupuy, J., & Gorman, A. (2010). Integral recovery: An AQAL approach to inpatient alchohol and drug treatment. *Journal of Integral Theory and Prac*tice, 5(3), 86-101.
- Erickson, C.K. (1989). Reviews and comments on alcohol research relaxation therapy, and endorphins in alcoholics. *Alcoholism*, 6, 525-526.
- Esbjörn-Hargens, S. (2006). Integral research: A multimethod approach to investigating phenomena. Constructivism and the Human Sciences, 11(1), 79-107.
- Esbjörn-Hargens, S. (2009). An overview of integral theory: An all-inclusive framework for the 21st century (Resource Paper No. 1). Boulder, CO: Integral Institute.
- Esbjörn-Hargens, S. (2010). An ontology of climate change: Integral pluralism and the enactment of multiple objects. *Journal of Integral Theory and Practice*, 5(1), 143-174.
- Flores, P.J. (1997). Group psychotherapy with addicted populations. Binghamton, NY: The Haworth Press, Inc.
- Forman, M. (2010) A guide to integral psychotherapy:

- Complexity, integration and spirituality in practice. Albany, NY: SUNY Press.
- Glantz, M., & Pickens, R. (Eds.). (1992). Vulnerability to drug abuse. Washington, DC: American Psychological Association.
- Gordis, E. (2000, July). From genes to geography: The cutting edge alcohol research. *Alcohol Alert* (No. 48). Rockville, MD: National Institute of Alcohol and Drug Abuse.
- Grof, S. (1980). LSD Psychotherapy. Pomona, CA: Hunter House.
- Grof S. (1992). *The holotropic mind*. San Francisco, CA: Harper Collins.
- Hawkins, J.D., Catalano, R.F., & Miller, J.Y. (1994).
 Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance use prevention.
 Psychological Bulletin, 112, 64-105.
- Hesselbrock, M.N., Hesselbrock, V.M., & Epstein, E.E. (1999). Theories of etiology of alcohol and other drug disorders. In B. S. McCrady & E. E. Epstein (Eds.), Addictions: A comprehensive guidebook (pp. 50-74). New York: Oxford University Press.
- Hinson, R.E. (1985). Individual differences in tolerance and relapse: A Pavlovian conditioning perspectives. In M. Galizio & S. A. Maisto (Eds.), Determinates of substance abuse: Biological, psychological and environmental factors (pp. 125-178). New York: Plenum Press
- Ingersoll, R.E., & Rak, C.F. (2005). Psychopharmacology for helping professionals: An integral exploration. Independence, KY: Brooks Cole.
- Ingersoll, R.E., & Zeitler, D.M. (2010) Integral psychotherapy: Inside out/Outside in. Albany, NY: SUNY Press.
- James, W. (1901/1961). The varieties of religious experience: A study in human nature. New York: Colliers.
- Jessor, R., & Jessor, S. L. (1977). Problem behavior and psychosocial development. New York: Academic Press
- Jessor, R., & Jessor, S. (1980). A social-sychological framework for studying drug use. In U.S. Department of Health and Human Services, *Theories on drug abuse: Contemporary* perspectives (NIDA Research monograph No. 30, pp. 102-109; DHHS

- Publications No. ADM 80-967). Washington, DC: U.S. Government Printing Office.
- Johnson D. B., (1980). Toward a theory of drug subcultures. Rockville, MD: National Institute on Drug Abuse.
- Jung, J. (2001). Psychology of alcohol and other drugs: A research perspective. Thousand Oaks, CA: Sage Publications.
- Kandel, D. B., & Davies, M. (1992). Progression to regular marijuana involvement: Phenomenology and risk factors for near daily use. In M. Glantz R. Pickens (Eds.), Vulnerability to drug abuse (pp. 299-358). Washington, DC: American Psychological Association.
- Kantzian, E.J. (1994). Alcoholics Anonymous—Cult or corrective? Paper presented at Fourth Annual Distinguished Lecture. Manhasset, NY: Cornell University.
- Khantzian, E. J. (1999). *Treating addiction as a human process*. Northvale, NJ: Jason Aronson.
- Khantzian, E.J., Halliday, K.S., & McAuliffe, W.E. (1990). Addiction and the vulnerable self: Modified dynamic group therapy for substance abusers. New York: Guilford Press.
- Kohut, H. (1971). The analysis of the self: A systematic approach to the psychoanalytic treatment of narcissistic personality disorders. New York: International Universities Press.
- Kohut, H. (1977). *The restoration of self.* New York: International University Press.
- Kuhn, T. (1970). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.
- Kurtz, E., & Ketcham, K. (2002). The spirituality of imperfection: Storytelling and the search for meaning. New York, NY: Bantam Books.
- Laudet, A.B., Morgen, K., & White, W.L. (2006). The role of social supports, spirituality, religiousness, life meaning and affiliation with 12-Step fellowship in quality of life satisfaction among individuals in recovery from alcohol and drug problems. Alcoholism Treatment Quarterly, 24(1-2), 33-73.
- Levin, J. D. (1995) Psychodynamic treatment of alcohol abuse. In *Dynamic therapies for psychiatric disorders (Axis 1)*. Barber, J. P., & Crits-Christoph, P. (Eds.) New York: BasicBooks.
- Marlatt, G.A., & Gordon, J.R. (1985). Relapse preven-

- tion: Maintenance strategies in treatment of addictive behaviors. New York, NY: Guilford Press.
- Marlatt, G.A. (2002). Buddhist philosophy and the treatment of addictive behavior. *Journal of Cognitive* and Behavioral Practice, 9(1), 47.
- Martin, J.A. (2008) Integral research as a practical mixed-methods framework: Clarifying the role of integral methodological pluralism. *Journal of Integral Theory and Practice*, 3(2), 155-164.
- Marquis, A. (2008). The integral intake: A comprehensive idiographic assessment in integral psychotherapy. New York, NY: Taylor & Francis.
- Marquis, A. (2009). An integral taxonomy of therapeutic interventions. *Journal of Integral Theory and Practice*, 4(2), 13-42.
- McPeak, J.D., Kennedy, B.P., & Gordon, S.M. (1991). Altered states of consciousness therapy: A missing component in alcohol and drug rehabilitation treatment. *Journal of Substance Abuse Treatment*, 8, 75-82.
- Meissner, W.W. (1980). Addiction and paranoid process: Psychoanalytic perspectives. *International Journal of Psychoanalytic Psychotherapy*, 8, 273–310.
- Merikangas, K.R., Rounsaville, B.J., & Prusoff, B.A. (1992). Familial factors in vulnerability to drug abuse. In M. Glantz, & R. Pickens (Eds.). (1992). Vulnerability to drug abuse. Washington, DC: American Psychological Association.
- Myers, B., & Parry, C. (2004). Access to substance abuse treatment services for black South Africans: Findings from audits of specialist treatment facilities in Cape Town and Gauteng. South Africa Psychiatry Review, 8, 15-19.
- Moos, H.R. (2003). Addictive disorders in context: Principles and puzzles of effective treatment and recovery. *Psychology of Addictive Behaviors*, 17, 3-12
- Milkman, H.B., & Sunderworth, S.G. (2010) Craving for ecstasy and natural highs: A positive approach to mood alteration. Thousand Oaks, CA: SAGE Publications, Inc.
- Milkman, H.B., & Frosch, W. (1973) On the preferential abuse of heroin and amphetamines. *Journal of Nervous and Mental Disease*, 156(4), 242-248.
- Miller, W.R. (2006). Motivational factors in addictive behaviors. In W.R. Miller & K.M. Carroll (Eds.), Rethinking substance abuse: What the science

- shows, and what we should do about it (pp. 134-152). New York: The Guilford Press.
- Miller, W.R., & Carroll, K. M. (2006). Drawing the scene together: Ten principles, ten recommendations. In W.R. Miller & K.M. Carroll (Eds.), Rethinking substance abuse: What the science shows, and what we should do about it (pp. 293-312). New York: The Guilford Press.
- Miller, W.R., & Rollnick, S. (2002). Motivational interviewing: Preparing people to change. New York, NY: Guilford Press.
- Miller R. W. (1997). Spiritual aspects of addiction treatment and research. *Mind/Body Medicine*, 2(1), 37-43.
- Miller, R.W. (1998). Researching the spiritual dimensions of alcohol and other drug problems. *Addiction*, 93(7), 979-990.
- Nakken, C.M. (1998). Understanding the addictive process: Development of an addictive personality. Center City, MN: Hazelden.
- Orford J. (2000) Excessive appetites: A psychological view of addiction (2nd ed.), Chichester: Willey.
- Parry, C.D.H., Pluddermann, A., & Myers, B. J. (2005). Heroin treatment demand in South Africa: Trends from two large metropolitan sites (January 1997-December 2003). Drug and Alcohol Review, 24, 419-423.
- Piaget, J. (1977). *The essential Piaget*. H.E. Gruber & J.J. Voneche (Eds.). New York, NY: Basic Books.
- Proschaska, J.O., & DiClemente, C.C. (1992). Stages of change in the modification of problem behaviors. In: M. Hersen, R.M. Eisler, & P.M. Miller (Eds.), *Progress in behavior modification, Vol. 28* (pp. 184-214). Sycamore, IL: Sycamore Press.
- Roberts, A.J., & Koob, G.J. (1997). The neurobiology of addition: An overview. *Alcohol and Health Research World*, 21(2), 101-143.
- Ronell, A. (1993) *Crack wars: Literature, addiction, ma*nia. Lincoln, NE: University of Nebraska Press.
- Rioux, D. (1996). Shamanic healing techniques: toward holistic addiction counseling. *Alcoholism Treatment Quarterly*, 14(1), 59-69.
- Siegel R. (1984). The natural history of hallucinogens. In B. Jacobs (Ed.), *Hallucinogens: Neurochemical, behavioral and clinical perspectives*. New York, NY: Raven Press.
- Sremac, S. (2010). Addiction, narrative and spirituality:

- Theoretical-mythological approaches and overview. Retrieved 10 July 2010 from: http://www.cirelstud.org/sites/default/files/sremac_rit_14.pdf
- Shealy, S. (2009). Toward an integrally informed approach to alcohol and drug treatment: Bridging the science and spirit gap. *Journal of Integral Theory and Practice*, 4(3), 109-126.
- Schuckit, M. A., (1980) A theory of alcohol and drug abuse: A genetic approach. In D. J. Lettieri, M. Sayers, & H. W. Persons (Eds.), *Theories on drug abuse: Selected contemporary perspectives* (NIDA Research Monograph No. 30, pp. 297-302; DHS Publication No. ADM 80-976). Rockville, MD: National Institute of Drug Abuse.
- Schuckit, M. A., Goodwin, D. W., & Winokur, G. A. (1972). A long-term study of sons of alcoholics. Alcohol Health and Research World, 19, 172-175.
- Sher, K. J. (1993). Children of alcoholics and the intergenerational transmission of alcoholism: A biopsychosocial perspective. In J.S. Baer, G.A. Marlatt, & R.J. McMahon (Eds.), Addictive behaviors across the lifespan: Prevention, Treatment and policy issues (pp. 3-33). Newbury Park, CA: Sage.
- Shiffman, S. & Wills, T. A. (Eds.) (1985). Coping and substance abuse. New York: Academic Press.
- Short, B. (2006). AQAL: Beyond the biopsychosocial model. *AQAL: Journal of Integral Theory and Practice*, 1(3), 126-141.
- Siegel, R. (1984). The natural history of hallucinogens. In: B. Jacobs (Ed.), *Hallucinogens: Neurochemical, behavioral and clinical perspectives.* New York, NY: Raven Press.
- Smith, E.D., & Seymour, B.R (2004). The nature of addiction. In R. Holman Coombs (Ed.), Handbook of addictive disorders: A practical guide to diagnosis and treatment (pp. 3-30). New Jersey: John Wiley & Sons.
- Smuts, J.C. (1927). Holism and evolution. London: MacMillan & Co.
- Solomon, L.J., & Corbit, J. (1974). An opponent-process theory of motivation: Temporal dynamics of affects. *Psychological Review*, 81, 119-145.
- Ulman, R.B. & Paul, H. (2006) The self psychology of addiction and its treatment: Narcissus in wonderland. New York: Routledge.

- Volkow, N. D., Fowler, J. S., Wang, G., Swanson, J. M., & Telang, F. (2007). Dopamine in drug abuse and addiction: Results of imaging studies and treatment implications. *Archives of Neurology*, 64(11), 1575-1579.
- Weil, A. (1972). *The natural mind*. Boston, MA: Houghton Mifflin.
- West, R. (2005). *Theory of addiction*. Malden, M: Blackwell Publishing,
- White, W.L. (1996) Pathways: From the culture of addiction to the culture of recovery. Center City, MN: Hazelden.
- Wilber, K. (1995). Sex, ecology, spirituality: The spirit of evolution. Boston, MA: Shambhala.
- Wilber, K. (2000). *Integral psychology: Consciousness, spirit, psychology, therapy*. Boston: Shambhala.
- Wilber, K. (2002a). Excerpt A: An integral age at the leading edge. 5 pts. Ken Wilber Online. Retrieved January 10, 2009, from http://wilber.shambhala.com/html/books/kosmos/excerptA/part1.cfm/.
- Wilber, K. (2002b). Excerpt B: The many ways we touch: Three principles helpful for any integrative approach. Retrieved January 10, 2010, from http://wilber.shambhala.com/html/books/kosmos/excerptD/excerptD.pdf.
- Wilber, K. (2006). Integral spirituality: A startling new role for religion in the modern and postmodern world. Boston, MA: Integral Books.
- Wills, T.A., & Shiffman, S. (1985) Coping and substance use: A conceptual framework. *Coping and Substance Abuse*. Orlando, FL: Academic Press.
- Winkelman, M. (2001). Alternative and traditional medicine approaches for substance abuse programs: a shamanic perspective. *International Journal of Drug Policy*, 12, 337-351.
- Whitfield, C.L. (1991). Co-dependence, healing the human condition. Deerfield Beach, FL: Health Communications, Inc.
- Wurmser, L. (1995). Compulsiveness and conflict: The distinction between description and explanation in the treatment of addictive behavior. In S. Dowling (Ed.), The psychology and treatment of addictive behavior (pp. 43-64). Madison, CT: International Universities Press.
- Zoja, L. (1989). Drugs, addiction and initiation: The modern search for ritual. Boston, MA: Sigo.

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TRANSCENDING FIRST-TIER VALUES IN ACHIEVING BINDING, DEMOCRATIC GLOBAL GOVERNANCE

John M. Bunzl

ABSTRACT Binding, democratic global governance is regarded, in principle, as a second-tier solution to global problems. But given the present world predominance of first-tier values, there is concern that global democracy would likely result in citizens voting, at best, for culturally divisive, first-tier global policies or, at worst, for potentially dangerous ones. Moreover, given nations such as China would see democracy at the global level as incompatible with their non-democratic national politics, how can global governance be made palatable to them? This article argues that most existing proposals for democratic global governance fail to address, let alone answer, these concerns, thus revealing their very partial, first-tier perspective. Also discussed is an alternative approach; a proposal argued to be aperspectival, second-tier, and thus capable of resolving these problems. The article suggests that while binding global governance may itself be a second-tier solution to global problems, it needs to be matched by a genuinely second-tier proposal.

KEY WORDS global governance; democracy; world parliament; Integral Theory

Ken Wilber and other integral thinkers have for some time pointed out that climate change, global financial market crises, excessive transnational corporate power, global poverty, and other global threats are worldcentric problems; problems which cannot be solved within the framework of our present, merely nationcentric systems of governance (Bunzl, 2009; McIntosh, 2007; Wilber, 2000). Indeed, such is the intractability of the negative social and environmental consequences of globalization that a transformation toward some form of binding global governance is increasingly seen as the only way our global market could be made compatible with social equity and environmental sustainability (Stewart, 2000). As Wilber (2000) notes, "The modern nation-state, founded upon initial rationality, has run into its own internal contradictions or limitations, and can only be released by a vision-logic/planetary transformation" (p. 192).

Two Key Problems

This article approaches the topic of binding global governance by addressing two key problems or obstacles to it that are elucidated by Integral Theory's identification of a holarchy of first-tier value sets (Wilber, 2000); value sets which raise serious doubts about the desirability—let alone viability—of binding, democratic global governance.

First-tier Values

The first problem arises because the vast majority of the world's population still holds first-tier value-sets (Wilber, 2000; Beck & Cowan, 1996); value-sets which, because each privileges a particular cultural perspec-

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