

AN INTEGRAL ONTOLOGY OF ADDICTION

A Multiple Object as a Continuum of Ontological Complexity

Guy Pierre du Plessis

ABSTRACT In previous work I explored how Integral Theory can be applied as a metatheoretical and transdisciplinary framework, in an attempt to arrive at an integrally informed metatheory of addiction. There was an overemphasis on Integral Methodological Pluralism in that thread of research, without clarifying the ontological pluralism of addiction as a multiple object enacted by various methodologies. To arrive at a comprehensive integral metatheory and integral ontology of addiction, I believe it is necessary to include the conception of Integral Pluralism and Integral Enactment Theory as posited by Sean Esbjörn-Hargens. Integral Enactment Theory highlights the phenomenon of addiction as a multiple and dynamic object arising along a continuum of ontological complexity; it adeptly points out how etiological models “co-arise” in relation to methodology (methodological pluralism) to enact a particular reality of addiction (ontological pluralism) while being mediated by the worldview of the subject (epistemological pluralism) applying the method. This article briefly explores the significance of including Integral Pluralism and Integral Enactment Theory in the quest of an integral metatheory and integral ontology of addiction.

KEY WORDS addiction, ontology, Integral Pluralism, etiology

Who will ever relate the whole history of narcotic? It is almost the history of “culture,” of our so-called high culture.

– *Friedrich Nietzsche* (1882, §86)

If Dasein, as it were, sinks into an addiction then there is not merely an addiction present-at-hand, but the entire structure of care has been modified. Dasein has become blind, and puts all possibility into the service of the addiction. On the other hand, the urge “to live” is something “towards” which one is impelled, and it brings the impulsion along with it of its own accord. It is “towards this at any price.” The urge seeks to crowd out other possibilities.

– *Martin Heidegger* (1962, pp. 194-196)

Developing accurate theories, models, and definitions of addiction is problematic in many ways. One such reason is that addiction is a complex, abstract concept, and has no observable ontological existence or boundaries. Consequently, researchers, clinicians, and scholars have not reached consensus about addiction’s ontic status. 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, highlighting the mercurial nature of this phenomenon.¹ Currently, addiction theories are so abundant and varied (Shaffer et al., 1997, 2004;

Correspondence: Guy Pierre du Plessis, 35 Duiker Gate, Capricorn Beach, Muizenberg, Cape Town, South Africa, 7945.
E-mail: guy@guyduplessis.com.

Valliant, 1995; White, 1998) that the field of addictionology is described by Howard Shaffer (2008), the Director of Harvard Medical School's Division on Addictions, as "conceptual chaos...a crisis of concepts and explanatory categories in the addictions..." (p. 1573).

A further 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). Nick Heather (as cited in West, 2005) states (implicitly pointing to certain features of the ontological complexity of addiction, as discussed later in this article):

[A]ddiction . . . is best defined by repeated failures to refrain from drug use despite prior resolutions to do so. This definition is consistent with views of addiction that see decision-making, ambivalence and conflict as central features of the addict's behaviour and experience. On this basis, a three-level framework of required explanation is (needed) consisting of (1) the level of neuroadaptation, (2) the level of desire for drugs and (3) the level of 'akrasia' or failures of resolve. . . explanatory concepts used at the 'lower' levels in this framework can never be held to be sufficient as explanations at higher levels, i.e. the postulation of additional determinants is always required at Levels 2 and 3. In particular, it is a failure to address problems at the highest level in the framework that marks the inadequacy of most existing theories of addiction. (p. 2)

Previously I explored how Integral Theory, and in particular Integral Methodological Pluralism (IMP), can be applied as a metatheoretical and transdisciplinary framework, in an attempt to arrive at a comprehensive Integral Model of Addiction (IMA) that honors all existing single-factor etiopathogenic models as well as dynamic models (Du Plessis, 2012b). This article can be seen as an extension of my earlier work by adding new elements of Integral Theory to this basic premise, as well as a critique of it by highlighting its partiality. In retrospect, I see that an overemphasis was placed on IMP, without identifying the ontological pluralism of addiction as a multiple object. Including insights of Integral Pluralism and Integral Enactment Theory, as originated by Sean Esbjörn-Hargens (2010), will greatly contribute in the development of a robust and inclusive metatheory and comprehensive ontology of addiction.

In order to provide adequate context, the first part of this article serves as a pretext in the form of an abridged version of my earlier work (Du Plessis, 2012b). The focus is on various etiological models of addiction and how IMP highlights significant relationships between these models, as well as providing important integrative and meta-paradigmatic insights. This article requires familiarity with Integral Theory, and will be best understood when read in conjunction with my article, "Toward an Integral Model of Addiction: By Means of Integral Methodological Pluralism as a Metatheoretical and Integrative Conceptual Framework" (Du Plessis, 2012b). The remainder of the article will explore the significance of including Integral Pluralism and Integral Enactment Theory in the quest for an integral metatheory and robust ontology of addiction.

Etiological Models of Addiction through an Integral Lens

One of the most useful aspects of Integral Theory for an attempt to create a truly comprehensive model of addiction is the eight zone extensions of the original AQAL model (Wilber, 2003a, 2003b, 2006). These eight primordial perspectives (8PP) are derived from an interior (i.e., a first-person perspective) and exterior view (i.e., a third-person perspective) of the four quadrants. Each of these perspectives 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 injunction that other methods cannot. These 8PP are included in Integral Theory's own multi-method approach to valid knowledge, referred to as IMP (Wilber, 2003a, 2003b, 2006; Esbjörn-Hargens, 2006, 2010). The eight methodological families identified by Wilber (2003a, 2003b) are indicated in Figure 1. Wilber (2003a) uses each of the names of these methodological families as an umbrella term that includes many divergent and commonly used methodologies. Wilber (2003b) proposes that IMP should be guided by the three principles of "nonexclusion, unfoldment, and enactment" to ensure that all perspectives are safeguarded. Esbjörn-Hargens (2006) states that "[t]hese three principles serve as guardians protecting the various forms of truth disclosed by different methodologies" (p. 86).

By applying IMP to explanatory addiction models, I will attempt to show that single-factor models understand addiction from a specific zone(s), because they apply a specific methodological approach, whereas the more integrative models view addiction across several of these zones (Du Plessis, 2012b). The following section provides a succinct description of the most dominant explanatory models and theories of addiction derived principally from the sociopsychological and biomedical sciences.

Genetic/Physiological Models: The genetic and physiological models explore biology in an attempt to identify causality between biological markers and addiction (Hesselbrock et al, 1999; Begleiter & Porjesz, 1999; Gordis, 2000; Blume, 2004; Volkow et al., 2002; Brick & Ericson, 1999; Gupman & Pickens, 2000). From an IMP point of view we will notice that the genetic/physiological theories understand addiction from a zone 6 perspective.

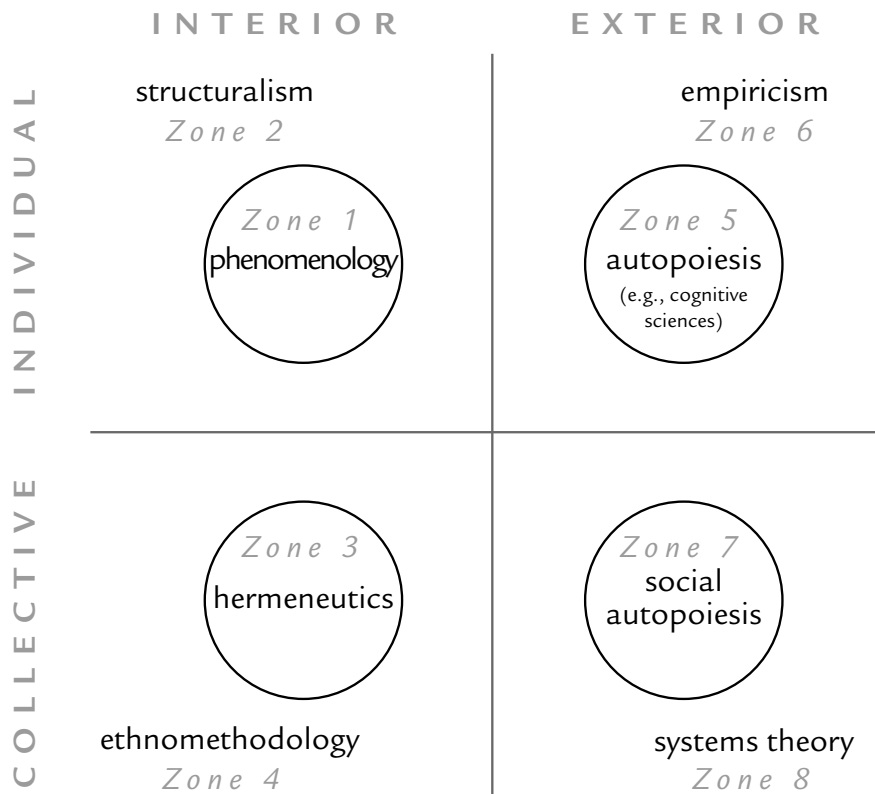


Figure 1. The eight major methodologies of Integral Methodological Pluralism.

Social/Environment Models: 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 (Connors & Tarbox, 1995; Merikangas et al., 1992; Sher, 1993; Coleman, 1980; Kandel & Davies, 1992; Chassin et al., 1996). It is clear that social/environment models have relevance in our understanding of addictive behavior at a 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 primarily from a zone 4, 7 and 8 perspective.

Personality/Intrapsychic Models: Proponents of the personality/intrapsychic perspective link personality/intrapsychic dysfunction and inadequate psychological development to a predisposition toward addiction (Levin, 1995; Kohut, 1971, 1977; Flores, 1997; Khantzian, 1994; Ulman & Paul, 2006; Wurmser, 1995; Khantzian, 1999; Ulman & Paul, 2006). A 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. The personality/intrapsychic models attempt to understand addiction primarily from a zone 1 and 2 perspective.

Coping/Social Learning Models: Some theorists indicate that addiction is often related to a person's ability to cope with stressful situations (Bandura, 1977, 1986). Although coping and social-learning perspectives have become popular in addictionology, generalized poor coping skills cannot be the only causal link to addiction. The coping/social learning models attempt to understand addiction from a zone 1, 3, 4, and 5 perspective.

Conditioning/Reinforcement Behavioral Models: 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 the opponent process theory (Barette, 1985; Blume, 2004). 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 zone 1, 5 and 6 perspective.

Compulsive/Excessive Behavior Models: Theorists who link addiction to compulsive behaviors either come from an analytic or a biologically based view. Some theorists view addiction as excessive appetite (Orford, 1985). 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 etiology or why individuals continue addictive behavior. The compulsive and excessive behavior models attempt to understand addiction from a zone 1 and 6 perspective.

Spiritual/Altered States of Consciousness Models: 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; Weil, 1972; Siegal, 1984, Grof, 1980, 1992; Winkelman, 2001). The spiritual/altered state of consciousness models attempt to understand addiction from a zone 1 and 4 perspective.

Compound Models: Dissatisfaction with the fractional explanations proposed by the previously described single-factor models has prompted some theorists to propose an integration of these explanations (Donovan & Marlatt, 1988; Glantz & Pickens, 1992). The biopsychosocial model is the most widely recognized compound approach to addiction. DiClemente (2003) believes that proponents of the biopsychosocial approach have not explained how the integration of their tripartite collection of influences occurs. Without an orienting framework that can explain how these various areas co-enact and interlink, the biopsychosocial approach often represents merely a semantic linking in terms and exhibits limited integration. The biopsychosocial model attempts to understand addiction from a multitude of perspectives (i.e., zones 1, 3, 4, 5, 6, and 8).

In an attempt to find commonality among the diverse models of addiction and seek integrative ele-

ments, DiClemente and Prochaska (1998) propose their Transtheoretical Model (TTM) of intentional behavior change. Although this model indicates 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 dynamic integrating principle found in all the prominent addiction models, but does not provide the meta-paradigmatic framework needed for a metatheory of addiction (Miller, 2006; Miller & Rollnick, 2002; Miller & Carroll, 2006). The TTM attempts to understand addiction primarily from a zone 2 perspective.

From Conceptual Chaos to an Integral Metatheory/Ontology of Addiction

Although there is a move toward more comprehensive models, current compound models have not yet achieved the goal of providing a truly inclusive and integrative framework to account for addiction. What is missing in these integrative models is a metatheory that adequately explains the co-arising, multi-causality and integration of the many factors influencing etiopathogenesis. 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 explain the dynamic nature of addiction (Du Plessis, 2012b; 2013).

Previously, I have proposed an integrally informed structure, through which we can move toward an integrative framework that could provide adequate scaffolding for all the current evidence-based etiological approaches (Du Plessis, 2012b). 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 certain methodology. From an IMP perspective, none of these models or perspectives have epistemological priority, because they co-arise and “tetra-mesh” simultaneously.²

The Integral Taxonomy of Etiological Models of Addiction

I have shown that through the application of IMP, an integrally informed model of addiction 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 (Du Plessis, 2012b). In Figure 2, I provide a taxonomy of etiological models of addiction, using the eight zones and methodological families of IMP, into which etiological models can be grouped.

In summary, the diverse etiological models discussed thus far mostly offer partial, often one-dimensional views of addiction. And 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. 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. As Smith and Seymour (as cited in Sremac, 2010) point out, “by their nature, human beings are entities composed of interpretative and interactive physical, psychological, and spiritual aspects, and that the disease of addiction, like the human beings that it afflicts, has a tripartite nature and manifests physically, psychologically, and spiritually” (p. 268).

Integral Enactment Theory

The following section explores how Integral Enactment Theory highlights important aspects of addiction that are overlooked by most existing theories. To the best of my knowledge, Integral Enactment Theory has not yet been applied in the context of etiological models of addiction.³

INTEGRAL ONTOLOGY OF ADDICTION

Zone 1	Zone 2	Zone 3	Zone 4
<p>Phenomenology</p> <ul style="list-style-type: none"> • Conditioning/Reinforcement Behavioral models • Compulsion and Excessive Behavior models • Spiritual/Altered State of Consciousness models • Personality/Intrapsychic models • Coping/Social learning models • Biopsychosocial model 	<p>Structuralism</p> <ul style="list-style-type: none"> • Transtheoretical model • Personality/intrapsychic models 	<p>Hermeneutics</p> <ul style="list-style-type: none"> • Coping/Social Learning models • Biopsychosocial model 	<p>Ethnomethodology</p> <ul style="list-style-type: none"> • Social/Environment models • Coping/Social Learning models • Biopsychosocial model • Spiritual/Altered State of Consciousness models
Zone 5	Zone 6	Zone 7	Zone 8
<p>Autopoiesis Theory</p> <ul style="list-style-type: none"> • Conditioning/Reinforcement Behavioral models • Coping/Social Learning models • Biopsychosocial model 	<p>Empiricism</p> <ul style="list-style-type: none"> • Genetic/Physiological models • Conditioning/Reinforcement Behavioral models • Compulsion and Excessive Behavior models • Biopsychosocial model 	<p>Social Autopoiesis Theory</p> <ul style="list-style-type: none"> • Social/Environment models 	<p>Systems Theory</p> <ul style="list-style-type: none"> • Social/Environment models • Biopsychosocial model

Figure 2. Taxonomy of the various etiological models of addiction within the eight major families of Integral Methodological Pluralism. From Du Plessis (2012b).

When striving for a comprehensive model and ontological foundation of addiction, Integral Enactment Theory could provide vital insights, and can help us unlock some of the mysteries of this exceedingly complex phenomenon. I adapt valuable insights from Esbjörn-Hargens and Zimmerman (2009) derived from their study of climate change (originally developed in their book *Integral Ecology* as well as Esbjörn-Hargens’ [2010] article, “An Ontology of Climate Change: Integral Pluralism and the Enactment Of Multiple Objects”) to the milieu of etiological models of addiction. I also explore how Integral Enactment Theory could assist in developing a “new” ontological foundation for the study of addiction.

Esbjörn-Hargens (2010) explains that at the core of Integral Enactment Theory is the triadic notion of Integral Pluralism:

So there are three pluralisms that should be explicit within Integral Theory: epistemological, methodological, and ontological. These three aspects are essential to the notion of Kosmic address, which highlights that an observer uses a method of observation to observe something. In *Integral Ecology* (2009), Michael Zimmerman and I develop this triadic structure of enacted realities into a framework: The emphasis here is that epistemology is connected to ontology via methodologies. So, if we are going to have epistemological pluralism (the Who) and methodological pluralism (the How), then we ought logically (or integrally) to have ontological pluralism (the What). I call this triadic combination Integral Pluralism. (p. 146)

Integral Pluralism is composed of Integral Epistemological Pluralism (IEP), Integral Methodological Plural-

ism (IMP), and Integral Ontological Pluralism (IOP). Before I proceed to highlight the value of these three facets of Integral Pluralism, I briefly focus on the importance of the concept of enactment, an essential feature of Integral Theory's post-metaphysical position (Wilber, 2003a, 2003b; Esbjörn-Hargens, 2010).

The idea of enactment is vital to understand why all of the previously discussed theories of addiction do not have to be contradictory, as they are often interpreted, but can rather be understood as "true but partial." Enactment can be understood as the bringing forth of certain aspects of reality (ontology) when using a certain lens (methodology) to view it. In short, reality is not to be discovered as "pre-given" truth, but rather we co-create or "co-enact" reality as we use various paradigms to explore it. For example, when attempting to understand addiction using empirical research methods we will enact a different ontological reality than when using a phenomenological approach. By avoiding what Wilber refers to as the "myth of the given," we understand addiction as a multiple object with no existing "pre-given" reality to be discovered (Wilber, 2003a, 2003b, 2006). Yet it must be noted we are not referring here to the conception of immaterialism. Wilber (as cited in Esbjörn-Hargens, 2010) says:

This is why I use the word *sub-sist*. There is a reality or a What that subsists and has intrinsic features but it doesn't exist without a Who and a How. So that is where Integral Pluralism in general comes into being: it is bringing forth a reality but it is not creating the reality à la subjective idealism. (p. 169)

Integral Pluralism and its conception of enactment can be seen as an option "between" subjective idealism or immaterialism (Berkley) and positivism or materialism.

Different research methods in addictionology enact addiction in unique ways, and consequently bring forth different etiological models. Virtually all etiological models (typically based on a positivist foundation, including intrapsychic models founded on psychoanalytic metapsychology) treat addiction as a single object "out there" to be discovered or uncovered, and therefore, eventually run into trouble attempting to explain a feature of addiction outside of its enacted reality. For example, physiological models and their accompanying research (naturalistic scientific) methodologies enact the biological reality of addiction, and are inherently incapable of showing any truth of addiction outside the realm of biology (i.e., societal, existential, etc.). When acknowledging the multiplicity of addiction's ontological existence, the "incompatibility" of the various etiological models disappears because each enacts a different reality of addiction—each bringing forth valuable insights in its specific ontological domain.

In discussing the status of the ontology of climate change, Esbjörn-Hargens (2010) raises some stimulating points. I will juxtapose and apply his approach to climate change with addiction. In explaining the "inevitability of ontological pluralism" of climate change, he points out a relationship between the various methods that are used to "see" or enact common professions that encounter the phenomenon (the Who), the associated methodology of each discipline (the How), and the consequent view of climate change (the What). Exactly the same point can be made for addiction.

Applying the above-mentioned triadic relationship to the notion of addiction highlights some fascinating, but seldom acknowledged, issues. When the various professions explore etiological models and apply their respective clinical methodologies, are they actually referring to the same ontic phenomena? We often acknowledge that various researchers and clinicians explore or treat different aspects of addiction, but this is often based on the assumption of a common ontic reality of addiction, and when "puzzled" together forms a comprehensive picture of addiction (which is the underlying ontological foundation of the biospsychosocial model or most other holistic models).

Is this an accurate ontological foundation (What) to build accurate theories (Why) on? Is the neurobiologist seeing the same addiction as the existential therapist? Is the psychoanalyst talking about the same

addiction as the 12-step counsellor? Is the biochemist measuring the same addiction as the social scientist? Yes and no. Yes, in the sense that they are all attempting to view this socially defined and agreed upon phenomenon called addiction; and no, in the sense that they are “bringing-forth-into-the-world” and enacting different realities, ranging in ontological complexity (first, second, and third order of ontology [see below])—which can “overlap” ontologically. In short, there are essential structures of addiction that share the “various enactments” of it, but how it “exists-in-the-world” (in a Heideggerian sense) varies depending on the unique permutation of its integral enactment triad of “Who–How–What.” Esbjörn-Hargens (2010) states:

In fact, there is not a clear, single, independently existing object, nor are there multiple different objects. There is something in-between: a multiple object, with intrinsic features that are enacted from various individuals with their own Kosmic address using various methods to examine overlapping, but in many cases distinct, territories.... This multiple object [addiction] is actually a complex set of phenomena that cannot easily be reduced to a single independent object. (p. 148)

Integral Methodological Pluralism

In previous work I focused predominantly on the application of IMP and its eight zone extensions in developing an integrally informed model of addiction (Du Plessis, 2012b). 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. The *meta-paradigmatic* aspect refers to its capacity to weave together and relate paradigms to each other from a meta-perspective (Wilber, 2003a; 2003b, 2006). By applying IMP to explanatory addiction models, I showed that each of the single-factor models understands addiction from a specific zone(s) because a specific methodological approach is applied, 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 (Wilber, 2003b). 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) (Du Plessis, 2012b).

The problem is that I have overemphasized multiple perspectives (epistemological pluralism) without recognizing there are actually multiple objects (ontological pluralism) correlated with those perspectives (and their respective methodologies). Without downplaying the importance of IMP, I merely want to emphasize that IMP has to be placed within the larger context of Integral Pluralism (Du Plessis, 2012a, 2012b). Esbjörn-Hargens (2010) highlights this mistake thusly:

...in this approach there is still often a lingering sense that there is a single object under investigation by individuals with largely the same perspective. In some cases individuals might combine an understanding of epistemological pluralism with methodological pluralism, which is quite a vision-logic performance. But even here a single object can be and is often posited even if a head nod is given to some vague sense of enactment. (p. 156)

Integral Epistemological Pluralism

Previously I highlighted, albeit implicitly, epistemological pluralism when discussing IMP and etiological

models. I used the Indian story of six blind men which captures the essence of epistemological pluralism. Each of the men touch different parts of an elephant and describe those parts without realizing that each part forms a whole of a single object (Du Plessis, 2012b). Although this story highlights important aspects of Integral Pluralism, it is insufficient in underlining the whole of Integral Pluralism (Esbjörn-Hargens, 2010). This story represents the elephant as a single, “pre-given” object. Esbjörn-Hargens (2010) points out the partiality of this story, explaining that:

Some scholar-practitioners of Integral Theory go astray by overemphasizing multiple perspectives without simultaneously recognizing there are multiple objects correlated with those perspectives (and their respective methodologies). All too often we talk as if the multiple perspectives (e.g., worldviews represented by the altitudes) are all looking at the same object: epistemological pluralism... A common expression that captures the essence of epistemological pluralism is the Indian story of six blind men all touching different parts of the elephant and describing their parts but not realizing that each part forms a whole of a single object (i.e., the elephant). So while this illustrative story has integral value, it only highlights one aspect of Integral Pluralism. The challenge is that there is not always just one pre-given elephant on the other end of each blind man (i.e., they actually enact a slightly different elephant depending on the methods they use). If they all use the same method, then they might indeed enact a single object, but if they use very different methods, then the probability increases that they will enact a multiple object. (p. 155)

In short, when not placing epistemological and methodological pluralism within the larger framework of Integral Pluralism and Integral Enactment, it tends to reinforce the “myth of the given” by implying a single “pre-given independent object” (Esbjörn-Hargens, 2010). Wilber (as cited in Esbjörn-Hargens, 2010) warns against the myth of the given, by saying:

...there is no given world, not only because intersubjectivity is a constitutive part of objective and subjective realities, but also because even specifying intersubjectivity is not nearly enough to get over that myth in all its dimensions: you need to specify the Kosmic locations of both the perceiver and the perceived in order to be engaged in anything except metaphysics. (p. 150)

Integral Ontological Pluralism

Philosophers have long pointed out that all concepts have ontological roots or assumptions about the nature of reality (Bishop, 2007; Polkinghorn, 2004; Schick, 2000; Slife, 2005). Addiction theories and definitions, like all scientific conceptions, and addiction treatments likewise begin with certain philosophical assumptions that determine the initial trajectory and nature of the concept (Slife, 2003; Richardson, 2002; Bohman, 1993). In addictionology, these ontological assumptions often go unnoticed and consequently unchallenged by researchers and clinicians when they begin to explore and treat the disorder (Shaffer, 1986). Ribes-Inesta (2003) comments “...that psychologists have paid little attention to the nature of concepts they use, to the assumptions that underlie their theories, and the ways such concepts are applied in the study of behaviour” (p. 147). Lindberg (1992), implicitly referring to ontological pluralism, states that: “Science has a particular content (not a special methodology or epistemology, but a special ontology so to speak); that is to say a particular set of propositions about nature reflected in disciplines such as physics, chemistry, biology, geography, [psychology] and so forth” (p. 11).

Consequently, in its pursuit of etiological models, addiction science often shares a common ontological foundation (What's), regardless of its "surface" theories (Why's). Therefore, if we could develop an alternative ontological foundation to "co-enact" addiction, it could possibly lead to a different understanding and treatment of it. My speculation is that using an integral ontological foundation (placed in the context of an integral enactive relationship) could possibly ensure a more "accurate" understanding of addiction. In my previous work, I emphasized methodological pluralism and hinted at the notion of epistemological pluralism by pointing out how different etiological models are true but partial, including a discussion of developmental approaches to addiction and recovery (Du Plessis, 2012b). I failed to include ontological pluralism; Esbjörn-Hargens (2010) highlights this mistake among integral scholars, so it is worth quoting him at length:

Furthermore, Integral Theory is clear that where there is epistemology and methodology, there is also ontology. But curiously there is no mention of ontological pluralism within Integral Theory. Its absence is all the more striking given Integral Theory's post-metaphysical stance on enactment, which highlights that specific methodological practices bring phenomena into being. So, on the one hand the notion of ontological pluralism is implied in Integral Theory and on the other hand it is even less developed than the implicit notion of epistemological pluralism. So there are three pluralisms that should be explicit within Integral Theory: epistemological, methodological, and ontological. These three aspects are essential to the notion of Kosmic address, which highlights that an observer uses a method of observation to observe something. (pp. 145-146)

Ontological pluralism underscores that addiction is not a single "pre-given" entity, but rather a multiplicity of third-person realities. Moreover, as we shall see, the miscellany of the ontological realities of addiction has a special enactive relationship with etiological theories and their respective methodologies. Esbjörn-Hargens (2010) goes on to explain:

This represents an enactive relationship between knowing and being, subject and object. Furthermore, the relationship between these elements is explained by a particular theory, or "the Why": the explanatory narrative that accounts for and enacts particular relations between subjects, the methods they use, and the objects they enact. As Edwards (2010) points out—drawing on Giddens' (1987) notion of a *double hermeneutic*—"Theory not only creates meaning, it also concretely informs and shapes its subject matter." In other words, theory is not merely interpretive but constitutive: theoretical pluralism lends itself to ontological pluralism. (p. 498)

The above statement may sound esoteric, but when framed within our current context, its relevance becomes clear. Esbjörn-Hargens (2010) describes these relationships as integral enactment. Integral Enactment Theory adeptly points out how etiological models "co-arise" in relation to methodology (methodological pluralism) and enacts a particular reality of addiction (ontological pluralism), while being mediated by the worldview of the subject (epistemological pluralism) applying the method (Fig. 3). I believe the scheme of integral enactment is valuable in gaining insight into the nature and genesis of etiological models of addiction, as well as developmental models of recovery. Each etiological model discussed so far partakes in this "algorithm." The same triadic relationships involved in Integral Enactment can be conceptually useful when this "algorithm of Integral Enactment" is applied as a scheme outlining the possible development of an integral metatheory of addiction.

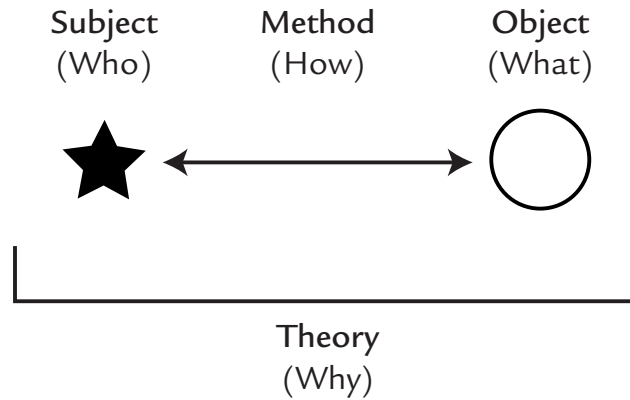


Figure 3. Integral enactment. From Esbjörn-Hargens (2010); used with permission.

In an integral metatheory of addiction (Why), the object studied is theories of addiction (What), the method is metatheorizing (How), juxtaposed with various worldviews and ontological foundations, ego developmental stages, and stages of addiction/recovery (Who).⁴ This is obviously an oversimplified scheme, but I believe it to be useful as an orienting generalization.

George Ritzer and Paul Colomy identify four types of metatheorizing, signified by their particular aims (as cited in Edwards, 2010). It can be used to: 1) understand existing theories; 2) develop mid-range theories; 3) develop an overarching metatheory for multiparadigm study of some field; and 4) evaluate the conceptual adequacy and scope of other theories. The type of metatheorizing that is of interest for this article is the third type: the “multiparadigm study of some field [addiction].”⁵ Mark Edwards (2010) states that metatheorizing “is a form of conceptual research that recognizes the validity of each theoretical perspective, while also discovering their limitations through accommodating them within some larger conceptual context” (p. 387).

I believe there are three essential features of the “architectonic” in any theory that attempts to provide the conceptual scaffolding in the construction of a comprehensive metatheory of any phenomenon. Firstly, it must provide a conceptual framework that is able to accommodate and integrate the various (and often conflicting) explanatory theories of a given phenomenon. In short, it must provide integration for methodological and epistemological pluralism in the field of study. Secondly, it must explain why different theories and their accompanying methodologies enact different aspects of the same phenomenon (ontological pluralism). Finally, it must be able to explain real world observations relating to the phenomenon. As an epistemological and ontological foundation for a comprehensive metatheory of addiction, Integral Theory is sufficiently capable of each of the above-mentioned features of metatheory building.

Addiction as a Third Order Complexity

The final feature of Esbjörn-Hargens’ (2010) work that I want to highlight is his notion of ontological complexity. He describes the three orders of complexity as follows; “the first order is characterized by phenomena that we can more or less ‘see’ with our own senses. The second order is the result of using various extensions of our senses (instruments, computer programs, charts) to see the phenomena... The third order cannot be seen with our senses nor indirectly by our instruments, but only by ‘indications’” (p. 159). Addiction can thus be understood as existing as a probability continuum of ontological complexity, co-arising and enacted through different methodologies and worldviews. For example: A first-order ontology could be the experience of being high on the drug. It is available to our senses. A second-order ontology could be the pharmacological effect of a drug on neurotransmitter levels or unconscious psychological drives as risk factors to substance abuse. Here we can only understand it through measurement and calculations, and in the second example

through a meta-psychological foundation. Both these approaches can grasp only partial aspects of a human existence. At the highest level of abstraction lies the notion of the etiology of an individual's addiction, which is a staggeringly complex phenomenon beyond our senses or instruments. So addiction "is two steps removed from our direct experience (the first order) and our perception of it relies on many abstract indicators (the second order), which are epistemologically distant and ontologically complex" (Esbjörn-Hargens, 2010, p. 159).

When understanding addiction as a third-order ontology, we begin to understand why certain models of addiction, especially the single-factor models, give rise to such partial and reductionist explanations. They are good at explaining certain "archaic features" of addiction in the realm of its enacted first- or second-order ontology, but methodologically and epistemologically they are incapable of enacting addiction as a third-order ontology. Technically, a third-order ontology is actually the level of ontological complexity where the notion of addiction exists most profoundly in our human being-in-the-world (a first- or second-order ontology cannot articulate a complex phenomenon like addiction, and can only enact "archaic-addiction" probabilities). Integral Ontological Pluralism provides an "ontological span" and a pluralistic element, by pointing to the nature of addiction as a multiple object, whereas ontological complexity provides "ontological depth" by pointing out the various degrees of complexity each of these multiple ontic manifestations of addiction can inhabit.

Most of the models discussed have at their foundation a natural scientific worldview and positivistic methodology that are typically adequate for exploring phenomena existing on the first and second order of ontological complexity. However, such models are hopelessly inadequate in explaining complex a phenomenon like addiction (or any human behavior), which "exists" on the third order of ontological complexity. For example, reward deficiency syndrome (Blum, 1995) can only be understood as one of many possible physiological risks that interact with other aspects of being human, without us having to reduce human behavior and motivation to neurotransmitter levels. Simply put, although an addict has low neurotransmitter levels, in the molecular realm of brain physiology concepts like addiction are meaningless. It is like saying an amoeba, which only primarily exists in that primitive level of ontological complexity, has abandonment issues originating from poor object relations.

Medard Boss (1983) points out that the natural scientific method has its limitations in explaining the human realm, as it originated from and is only sovereign in the nonhuman realm (natural sciences). In our discussion of ontological complexity, Boss' approach of *Daseinsanalysis*, based on Martin Heidegger's ontology, can be edifying. Unfortunately, it is beyond the scope of this article other than to merely point this out, and I believe a more in-depth study of this relationship (*Daseinsanalysis*/ontological complexity/ontological multiplicity) would prove to be useful for Integral Theory, as it provides a more integral view of human psychology than most other models. Heidegger provides a method and grounding through which to explore the ontological structure of being human, which he called *Dasein* (translated as "there-being"). Boss' method could be described as an "ontic" articulation of Heidegger's "ontology."⁶ In our current context we could say that by using Heidegger's method in exploring psychology and psychiatry, Boss echoes the dangers of explaining higher-order complex phenomena (which include any aspect of being-in-the-world) by using methodology (i.e., empirical observation) and epistemology dominant in the lower orders of complexity. He believes that in Freud's meta-psychology (and most other theories of human existence) there is inevitably an abstraction and tapering (being-in-the-world reduced to first- and second-order ontology) from our lived engagement with the world. In summary, the notion of addiction is a third order of ontology, which can only be co-enacted ("brought-forth-in-the-world") when juxtaposed with associated "methodological variety" and "epistemological depth" (Esbjörn-Hargens, 2010).

Therefore, trying to reduce any human "being-in-the-world" to a first- or second-order ontology, as natural scientific methods do, is fundamentally flawed. Addiction is caused by, affects, and manifests in all areas of our "being-in-the-world," and only paradigms (or rather meta-paradigms) that function on this level

of ontological complexity may suffice—if we are ever to understand, and successfully treat, this colossal nemesis.⁷

Conclusion

This article provided a succinct and tentative outline of the potential Integral Theory has for genuine integration in the field of addiction research. Moreover, when applied as an epistemological and ontological foundation it holds much promise for the development of a robust integrated metatheory of addiction. Only a truly integral approach will be able to adequately address the massive and mind-boggling complexity of the problem of addiction. I hope this article will stimulate other researchers in exploring the integrative value of Integral Theory in the field of addictionology, and to make a contribution to the nascent, but quickly developing, field of Integral Addiction Treatment and Integral Addiction Research. This article has indicated that Integral Theory can be greatly beneficial in the quest for a comprehensive ontological understanding of addiction, and as a result—beyond the realm of theories and academia—can help save lives.

NOTES

¹ 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 led 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 behavior, and this loss of control is leading to significant harm. The fact that there is harm is important because otherwise addiction would be of limited interest.

It certainly would not merit spending large sums of public money researching, preventing and treating it. There is impaired control in that an addicted individual feels a compulsion to engage in the activity concerned or else it takes on a priority in his or her life that seems excessive. In many cases the addicted individual expresses an apparently sincere desire not to engage in the activity but fails to sustain abstinence. In this formulation, addiction does not just involve control: there is a syndrome that includes a heterogeneous collection of symptoms (p. 10).

² This is an important pursuit, as having a comprehensive etiological understanding of addiction will provide us with more effective treatment protocol (see Du Plessis, 2010; 2011; 2012; Dupuy & Gorman, 2010; Dupuy & Morelli, 2007; Amodia et al., 2005).

³ The bulk of this section of the article was originally presented at the Third Integral Theory Conference on July 20, 2013.

⁴ See Du Plessis (2012a) for a discussion on developmental stages of addiction and recovery. At least three types of developmental stage models need to be considered. The first is the client’s general stage of development. The second is the client’s stage of change as defined by the transtheoretical model of intentional behavior change. Finally, the third type is the general recovery altitude of a client based on clean time and stage of recovery using recovery-based developmental approaches. Although the stages of addiction and recovery may be better understood as chronological stages or phases, I believe there is a correlation between the stage model 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.

⁵ My master’s thesis, titled “Towards an Integral Metatheory of Addiction,” address the question of the suitability of Integral Theory in the design of a comprehensive and inclusive metatheory of addiction.

⁶ I believe using Heidegger’s ontological model can prove useful in exploring the nature or ontological foundation of addiction. The reason being that Heidegger’s notion of Dasein is unique to humans, and in the context of our discussion, he clearly points to a third-order ontology—beyond observation or measurement. Furthermore, Heidegger’s

skepticism and analysis of technology presaged tech/Internet addiction, and points out how technology can negatively influence our capacity of being-in-the-world.

⁷ There are other essential elements of addiction—not pointed out in any of the above theories—that are necessary for a comprehensive view of addiction, but this is beyond the scope of this article. Virtually all theories of addiction begin with the premise that there is something wrong (pathological) with an individual, and substance abuse is an attempt to fix it (pun intended). Spiritual or existential models, which point out that addiction is a false pursuit for transcendence or meaning, are perhaps the exceptions. I raise the question: Could the other end of the pathology-healthy spectrum also be a risk factor in addiction? I believe so, and more often than one would expect. This “non-pathological model,” which I tentatively refer to as the “ontological dissonance model,” is based on the premise that if genius, skill, or talent is not actualized or provided enough expression due to internal or external environmental factors, it can contribute as a significant risk factor to developing addiction disorders. For example, intelligence is normally seen as a protective factor for addiction. But when circumstances seriously suppress the actualization of an individual’s intelligence, then it becomes a risk factor. It becomes what I call *ontological dissonance*. Simply put, having an extraordinary musical talent in an environment where it is not nourished becomes a risk factor for that individual; for most people, not having the opportunity for musical expression would not be a significant risk factor. Very few etiological models explore the relationship between self-actualization and environment. This model will also attempt to explain why among the addicted population there are so many intelligent, sensitive, and talented individuals. That is the real sadness of addiction: it often destroys the best of us. And like the canary in the coal mine, the most sensitive die first. Society often tends to see addicts as congenital, morally, or emotionally inferior human beings. In many cases, I believe the exact opposite is true. Due to their otherworldly sensitivity, addicts are often the most susceptible to the pathologies of society.

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GUY DU PLESSIS, B.A. Hons., is a Researcher at Momentum GGZ, a founding member and Managing Director of the Integral Recovery Institute, and a Board (HPCSA) Registered Psychological Counselor in private practice. He has worked in the addiction treatment milieu for more than 15 years as head of treatment, clinical and program director, counselor, trainer, and program developer. He holds a B.A. Hons (*cum laude*) degree in psychology, with specialization in psychological counseling, a M.A. degree in psychology, and is currently working toward his Ph.D. Guy is the developer of the Integrated Recovery Model and the Integrated Recovery Therapy and Coaching method, and is a pioneer in the implementation of an integrally informed clinical model within an inpatient addiction treatment milieu. He has several published articles in the *Journal of Integral Theory and Practice* and is the author of the forthcoming book *A Integral Guide to Recovery: Twelve Steps and Beyond*.