Contributions of Embodied Realism to Ontological Questions in Critical Realism and Integral Theory

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*Metathteroy for the 21st-Century: Critical Realism and Integral Theory in Dialogue*

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**Introduction: Everybody is Right, Everything is Real**

One could sum up the motivating orientations behind Integral Theory and Critical Realism by pointing to Ken Wilber’s "everybody is right" and Roy Bhaskar's "everything is real." Both philosophers narrate our historical moment in terms of the failings of modernity and post-modernity and offer integrated and inclusive visions of what is possible to come. Critical realism (CR) and integral theory (IT) both encompass hard science, social science, ethics, and spirituality in their spacious meta-theoretical purview. Both were conceived to defend a humble yet rigorous rational empiricism in a postmodern milieu in which truth, realness, and valid knowledge were dismissed. "Everybody is right" and "everything is real," properly understood, convey a pragmatic hopefulness, even an exuberant blessing, which is medicine for the existential ailments and grave challenges of our time.

Bhaskar (like Habermas) sees a primary role of philosophy as, not so much to discover its own exalted truths, but in a humbler role as undertaker for other disciplines. Bhaskar and Wilber see the role of philosophy as fundamentally ethical and emancipatory. Philosophy can under-labor other disciplines in the hope of furthering human happiness, flourishing, freedom, and/or evolution. Emancipation is very much about reducing what Bhaskar calls the demi-real—beliefs and conceptions that do no correspond well with reality. Andrew Collier notes that a philosophy takes on the function of critique (as in "critical theory" and "critical realism") "when it exposes internal contradictions in the beliefs implicit in the practice" of some theory or ideology (1994, p. 18). Critical theories are usually thought of as critiquing social norms, especially dominant narratives and ideologies, but can also be used self-reflectively to critique a theorist’s, group’s, or discipline’s own stance. Critical self-reflection upon one’s own demi-reality is thus self-emancipatory (part of what Bhaskar would call the "pulse of freedom" within all persons). CR and IT are mature post-post-modern theories whose members already engage in self-critical processes, and my offerings here are merely to contribute to this process with some additional tools and concepts.

It is not enough to point out the demi-reality or the systematic biases in reason. Ameliorating demi-reality involves identifying its sources, i.e. the causal and structural mechanisms that produce it (what CR would call an explanatory critique using retroduction). In this chapter I draw on trends in cognitive-science-based embodied philosophy that reveal some of the structural sources of the demi-real. I draw primarily from Lakoff and Johnson's embodied realism (ER), and provide some extensions to it (related to epistemic drives). As Bhaskar and Wilber well note, all ideas, models, and theories are fallible. Demi-reality is not just about false
ideas but also about the fuzzy edges and limitations inherent in ideas—i.e. their indeterminacy. The demi-real involves not just erroneous ideas, but an erroneous certainty in ideas.

Much of the quotidian appeal of CR is its invitation to "get real" in the face of theories that, in Bhaskar's terms, "lack seriousness" and allow idealism and abstraction to outstretch pragmatic intuitions and concrete facts (this is an aspect of the "reality principle"). In alignment with this concern, my approach in this article is aligned with Habermas' concept of postmetaphysics, which critiques the "strong concept of theory, its grasp of the totality, and its claim to a privileged access to truth" (1992, p. 6) that was endemic to positivist philosophies. Though CR and IT critique positivist philosophy, post-metaphysical principles must perennially be re-applied to theories that are as far reaching and compelling as CR and IT.²

Embodied Realism and Metaphorical Pluralism

Between ontology and epistemology. The dance of philosophical ideas between IT and CR concerns ontology and epistemology, and their interrelationship. That is, questions about what can be considered real; how to best conceptualize the layers, elements, or properties of reality; and the bounds of what can be understood about reality. At stake is what can be considered real (vs. epiphenomenal, derivative, illusory, or "merely" subjective), and what is considered real or to exist is often at the core of disagreements about the truth of claims—giving ontological considerations significant importance in dialogue that may not on the surface seem to contain ontological themes.³

Contemporary meta-theoretical approaches share the goal of skillfully combining the gifts of classical and positivistic philosophies with the caveats and unsettling disclosures that emerged in postmodern and deconstructivist philosophies. A conundrum being worked out by post-metaphysical approaches is how to make strong claims while remaining appropriately humble and acknowledging of a fallibilism that is compatible with postmodern/constructivist critiques of knowing.

One can distinguish three coordinated gestures that many contemporary approaches have in common, and that parallel CR's "Holy Trinity" of base principles (Marshals 2012, p. 14). The first gesture is aligned with CR's "ontological intransitivity"—the realist claim that a reality exists outside of our knowing or perceiving of it (even if any particular claim about that reality is fallible—this is the weakest form of realism).⁴ (Wilber includes this step within IT in his discussion of subsistence.) This first gesture is often supported with transcendental arguments or rational reconstruction, to the affect that we always already make this assumption, or that this assumption is a necessary condition for the possibility of further (serious) philosophical deliberation (or for any reasoned action or communication). That is, to deny that there is a reality is to engage in performative contradiction or absurdity ("non seriousness" in Bhaskar's terminology).⁵ These arguments give permission to make claims about a reality independent of human thought. (In CR alethic truth is truth of things distinct from propositions and interpretation).

The second gesture is a constructivist move that is acknowledged by both Integral Theory and Critical Realism. That is to fully acknowledge that there are epistemic limitations and fallibilities to all human knowledge and propositions, as in CR's "epistemic relativity." This is implied in Wilber's adages "the map is not the territory," "everyone is at least partially right" and in his Three Strands description of scientific inquiry.

² Note that CR distances itself from Habermas and postmetaphysics and sees itself as post-postmetaphysical, while in this paper I focus on the similarities. I also question the usefulness of the idea of post-postmetaphysics.
³ Bhaskar says "'Is' and 'real' discharge the burden of ontology" (DPF p, 46).
⁴ Collier notes that "Heidegger...argues forcefully that non-realism is a non-starter, as it presupposes a worldless subject, and we are essentially Being-in-the-world" (Collier, 1994, p. 30).
⁵ Antecedent to this first step, and supported by similar arguments, is the assumption (epistemologically speaking) or claim (ontologically speaking) that reality has stable forms of structure, regularly, and pattern (which, for example, allows for experiences of external reality that are more stable than dreams or imaginations, and from Bhaskar's work, underpins the scientific method). As Lakoff & Johnson put it, though all knowledge is fallible "we are not likely to discover that there are no such things as cells or that NDA does not have a double-helix structure" (PITF, p. 89).
The third gesture is meant to coordinate and extend the first two, and offer a middle path between ontology and epistemology: to claim that validity is graded such that some claims are stronger than others, and that some claims more closely correspond with reality (what Habermas calls "the unforced force of the better argument" (Habermas, 1999). This corresponds to CR's "judgmental rationality" and with Wilber's "we can accept the valid truth claims...insofar as they make statements about the existence of their own enacted and disclosed phenomena" (Excerpt B).

These three gestures are much more accepted in current scholarly circles than they were in the mid-20th century when Wilber and Bhaskar (and others including Habermas) were working out their original contributions, in full battle gear vs. the excesses of postmodernism and positivism prominent in academia and culture at the time. As an example of a wider contemporary agreement, in Philosophy in the Flesh (PITF) Lakoff and Johnson describe traditional "disembodied objective scientific realism" as containing three claims or assumptions (p. 90): (1) There is a world independent of our understanding of it; (2) We can have stable [practical, trustable] knowledge of it; and (3) Our concepts and forms of reason are not constrained by physicality, allowing science to discover absolute truths. They take the first two as true, paralleling the above discussion, and see the last as problematic.

Following these three gestures, the problem of exactly how to argue for strong validity or confidence in specific truth claims is more problematic. IT and CR diverge here, with some within CR accusing IT of the "epistemic fallacy" of leaning too far toward epistemic relativities in its quest for a judgmental rationality that resolves the conundrum. Following the three gestures Integral Theory often moves quickly on to "so let us find and use the best model we possibly can" (i.e. AQAL; and see discussion of Kosmic address later), and proceeds with a relatively positivistic style. And though CR is more cautious on this front, I do not believe that its force produces the escape velocity allowing a distance from epistemology that it presumes in its claim that ontology underpins epistemology (more on this later).

Lakoff and Johnson's Embodied Realism speaks directly to this quandary. Their claims, though radical in the context of meta-theories such as CR and IT, must be reckoned with. Embodied Realism reveals unavoidable sources of the demi-real that, if not exposed and integrated, threaten to weaken the portability of these meta-theories as they spread into wider circles.

Lakoff and Johnson make the radical claim that "the question of what we take truth to be is therefore a matter for cognitive science because it depends on the nature of human understanding....Truth is, for this reason, not something subject to definition by an a-priori philosophy" (PITF 1999, p. 108). They go on to claim that "more than two millennia of a priori philosophical speculation about [certain] aspects of reason are over," and that because "findings from the science of the mind are inconsistent with central parts of Western philosophy...philosophy can never be the same again" (p. 3). These claims come from a deeply epistemological orientation, and may chafe uneasily at Critical Realism's focus on ontology. In addition they challenge the conviction of Integral Theory's categorical models and grand "orienting generalizations."

Copining with the symbolic impulse: toward softer categories. Embodied Realism draws on empirical cognitive science to show how the structural nature of categories and concepts influence how we reason. According to empirical research on prototype theory (Mervis & Rosch, 1981) the concepts and categories we use (in both reflective thought and language) admit to fuzzy boundaries and other types of indeterminacies (including "family resemblance" structures). The mind (or, we could say, the symbolic nature of language) has a tendency to

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6 Bhaskar defines the epistemic fallacy as "the view that statements about being can be reduced to or analyzed in terms of statements about knowledge; i.e., that ontological questions can always be transposed into epistemological terms" (OSI, p. 36)

7 Positivistic in the sense of "positive capability" vs. "negative capability" (Murray, 2011). Positivistic approaches provide models, insights, and distinctions enabling more reasoning power, more meaning generation, and increased clarity and confidence. Negative capability includes high tolerance of and skill with the cognitive dissonance, fallibility, ignorance, mystery, and paradox (also discussed within CR’s 2E edge of negation), which can reveal ever deeper unsettling territories of unknowing and fallibility.
perceive or interpret phenomena (subjectively) in mutually exclusive black-and-white terms. As Gregory Bateson says: "[the] world begins by making splits, then drawing boundaries, then solidifying these boundaries. Then we fool ourselves into believing what we have made ourselves see" (1979). When we employ the knife of the conceptual category (as all terms do, at least nominally), we risk two types of errors. First, that we ignore or misclassify phenomena that falls within the fuzzy overlap at the conceptual split (i.e. at the gray area between democrat vs. republican, state vs. stage, or transitive vs. intransitive). And second, that we ignore or misclassify phenomena that fall outside the conceptual scheme (if we are focused on classifying things within fruits, then chairs may go unnoticed). I call the tendency to interpret or enact categories as having definitive boundaries the "symbolic impulse." 

The shock (or irritation, or plague) of indeterminacy is more significant the more abstract the concepts being discussed, and philosophical concepts (truth, reality, freedom, causality, object, being, knowledge, etc.) are among the most abstract of all. Of interest here is how philosophical arguments, and reason in general, might be reframed when categorical boundaries are softened (actually when that are treated as softened, since studies show that they always are fuzzy). 

Lakoff and Johnson point out that since propositions are composed of concepts we must cope with the graded nature of abstract propositions as well. Concepts are explicitly described by definitions but implicitly, or cognitively, determined by (enacted through) complex abstractions over exemplars that are impossible to definitively describe. Disagreements are often the result of interlocutors tacitly assuming different spaces of exemplars for their concepts, and thereby talking past each other. This has implications for what we might call post-rational discourse. Rather than claiming that a statement is categorically wrong, one can ask "in what sense is it true and in what sense is it false?" Or: "what assumptions would I have to make about the definitions of its terms and the nature of reality for the claim to seem true?" (and similarly for a counter-claim). This relates to the type of dialectic that Bhaskar proposes (in DPF), which, rather that being constrained to the Hegelian and Wilberian transcend-and-include dialectic, can also accommodate a dialectic that deconstructs on its way toward more real(istic) (non-categorical, including rhizome-like) understandings.

Metaphorical Pluralism. In their "Primary Theory of Metaphor" Lakoff and Johnson argue that thought and reason are primarily and fundamentally metaphorical, and that the metaphors we employ are grounded in our embodiment—that abstract thought is composed of conceptual building blocks at the sensory-motor level. The key implication is that if it can't be built up from basic sensory-motor primitives, we can't think it. Example metaphors include: knowing or understanding as seeing or grasping; similarity as closeness; organization as physical structure; change or transformation as motion; relationships as enclosures (PITF, p. 50-54). Importantly, "metaphor is not the result of...interpretation [it is] a matter of immediate conceptual mapping via neural connections" (PITF, p. 57). The metaphorical grab-bag that we have access to in thinking about abstract ideas is fully constrained by our embodiment (and of course in many other ways, such as our cognitive development, but this constraint is species-wide).

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8 The symbolic impulse creates what Bhaskar calls the world of (or perception of) duality, while both reality and perception of reality that is not mediated by the symbolic impulse is the world of non-duality.
9 Bruno Latour echoes this sentiment in his critique of the academic "business" of critique, which sets up dichotomous positions that seem to be at odds with each other when the reality of individual circumstances is more nuanced. "Do you see now why it feels so good to be a critical mind? [no matter which position you take] you're always right!" (2004, p. 238-239)
10 John Stuart Mill famously said "in all intellectual debates, both sides tend to be correct in what they affirm, and wrong in what they deny." Knowledge might more efficiently progress through perspective-taking moves than through traditional antagonistic argumentation.
11 In Murray (2010) I suggest that scholarly communities package their theories and frameworks with an "indeterminacy analysis" of key concepts to make the ideas more "portable."
12 Ideas and concepts build hierarchically upon each other (Fischer 1980; Commons & Richards 1984.), so ideas need not be expressed directly in concrete metaphors, but each component concept is, if we drill down a few levels, grounded in sensory-motor concepts.
Lakoff and Johnson go on to show that many abstract concepts are understood in terms of a "metaphorical patchwork, sometimes conceptualized by one metaphor, and at other times by another." For example, our concept of time is based on a patchwork conglomerate of more fundamental experiences and schema, mostly involving space and motion (from PITF, Chapter 10). The future is in front of us and the past behind us. We face the future. Time passes by or the time has arrived. Time durations can be large or small. Research has "found that we cannot think (much less talk) about time without those metaphors" (PITF, p. 166). These metaphors are not just an aspect of our understanding of time, together they comprise our understanding of time.

Lakoff and Johnson go on to "consider the classical ontological question: Does time exist independent of minds, and if so, what are its properties?...[We] reject the question. It is a loaded question" (PITF, p. 167). Pragmatically, answers to such questions are meaningless or not useful. "Yet the biological and cognitive construction of time does not make it subjective or arbitrary or merely cultural...the metaphors are not arbitrary; they are deeply motivated [by physical reality]. They permit the measurement of time, our very notion of history, the science of physics [and modern technology], and much more" (PITF, p. 168). The metaphors are "apt" and extremely useful, but "being metaphors, can get us into silliness if we take them literally" (ibid).

Research has shown that we unreflectively jump from one metaphorical basis to another and that these metaphors can be incompatible or contradictory. Causation, for example, is understood in terms of a loose collection of features and exemplars having a fuzzy "family resemblance" or "multivalent radial structure" but having no precise definition, specific nature or essence beyond human thought. Though having diverse facets, these concepts have an experiential sense of undeniable unity. The various senses of the word have enough overlap of use and understanding that the mishmash holds together as a single gestalt for us. Lakoff and Johnson's analysis shows that "over the course of history, philosophers have formulated a wide variety of theories of causation, each substantively different from the others and therefore each with its own distinct logic" (PITF, p. 173). Are they talking about the same thing? "Philosophers may disagree as to what is the right theory of causation, but the philosophical community [erroneously] recognizes all of them as theories of the same thing" (ibid).

In PITF Lakoff and Johnson describe at length the metaphorical pluralisms and other indeterminacies of concepts. "Our most fundamental concepts—time, events, causation, the mind, the self, morality [truth, reality, object, being, and freedom]—are metaphorical" (or metaphorically pluralistic, p. 128). These are, of course, key concepts within CR and IT. For ER such constructs "have no precise definition, specific nature or essence beyond human thought" (ibid). This presents a serious challenge to CR's strong orientation to ontology, and bolsters IT's leanings toward epistemology and its claim that epistemology and ontology are symmetrically co-determinate.

We can note the word "precise" in the last PITF quote about "no precise definition." Definitions and definitive claims as important and unavoidable we must do our best to bring clarity and precision to claims and definitions. Embodied Realism simply points out the inherent limits in doing so. ER makes some philosophical claims, but its use for emancipatory critique is not so much in its refutation of any particular proposition, but rather it challenges the force of arguments, exposing fallibilities at a level below propositions, i.e. the level of concepts—the building blocks from which propositions are made. It challenges certainty and partially explains the hermeneutic challenges of multiple and perspectival interpretation.

Applications to CR and IT. There are numerous implications of Embodied Realism for CR, IT, and the current attempts to compare or integrate them. ER can add "seriousness" (in Bhaskar's sense) to philosophical controversies by challenging the performative seriousness (or certainty) of the debates. Indeterminacies might be safely ignored within "the choir" of a particular community or world view, but become problematizes as a philosophical framework (1) critiques others or responds to critique, and (2) attempts to disseminate its ideas to a wider community. I

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13 I am careful not to claim that Wilber or Bhaskar are unaware of the types of indeterminacies and tradeoffs that I speak of; nor do I judge that they are in any way trying to mislead their readers or followers. Rather, to the extent that my arguments critique their claims or performative style, I prefer to assume that they have made informed strategic decisions based on (commendable) goals and assessment of the audience.
call this the "idea portability principle": that understanding and dealing with the indeterminacy of ideas is more important the greater the distance between the world views or beliefs of interlocutors.

[1] Marshall (2012, p. 195) says "IT's ontology has only been implicit, never fully elaborated by Wilber, and in its post-metaphysical phase moved to a fairly strong social constructionist position...which subordinates ontology to epistemology, methodology and enactment." In a series of articles Wilber and Bhaskar debate these issues. Does IT commit the epistemic fallacy?—this is a current area of contention. "The Epistemic Fallacy" is a concept that must (like all concepts) admit to graded boundaries. This may seem obvious but could it be that the clamor would dissipate if this principle were taken more deeply? Posing questions categorically invites an inflammation of the symptoms of indeterminacy. The more nuanced questions are "in what sense does IT commit the EF, and what sense does it not commit the EF?" or "to what degree (or where) does IT lean too far toward epistemology and what problems does that create?" (and similarly for CR and ontology). Indeed most scholars working at the intersection of CR and IT are approaching the question with this type of nuance. Embodied Realism shows why it is not only prudent and generous, but necessary to do so.

Does ontology subsume epistemology? Bhaskar claims that "Everything is contained (constellationally) within ontology (including epistemology and ethics)—or rather its referent, being (including knowledge and values)" (p.142). Yet Norrie notes that CR sees a complex, co-embedded, constellation relationship between ontology and epistemology, "not a clear analytical distinction" (2010, p. 17). ER shows us why concrete metaphors are problematic for ideas, concepts, and theories (and other transitives). Ideas and concepts can have paradoxical, recursive, or intractably complex topological relationships. One theory can contain, contextualize, completely describe, or take a privileged perspective on another; while the second theory can also contain, contextualize, completely describe, or take a privileged perspective on the first (see Roy, 2006). Figure/ground relationships can become flipped or muddled in the intransitive realm. Ebjorn-Hargen's (2010) description of ontology and epistemology as co-(or tetra-)Jarising and interpenetrating seems more in line with the principles of CR, IT, and Embodied Realism.

Strong claims are challenged in light of Embodied Realism's critique of foundationalism. Consider Wilber's "all objects are first and foremost perspectives. NOT 'are seen from perspectives,' but ARE perspectives...there is no 'apart from' how a thing appears...'things' do not exist in a pregiven world" (2006, p. 252). Wilber also states that "objects come into being, or are enacted, only at various developmental levels of complexity and consciousness. Whether they exist in some other way CANNOT BE KNOWN in any event, and assuming that they do exist entirely independently of a knowing mind is nothing but the myth of the given" (Wilber 2006, p. 252). This contrasts strikingly with Bhaskar's "categories are not to be viewed as something which the subjective observer imposes on reality; rather categories such as causality, substance, process, persons, etc.—if valid—are constitutive of reality as such, irrespective of their categorization by observers or thought" (OSI, p. 140).

Yet even within this strong ontological claim Bhaskar tips his hat to epistemology. The addition of the qualification "if valid" is telling. The only test or argument for such validity is

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14 Unfortunately, the debate had not reached a level of "dialog" when Bhaskar passed away; and, looking at the three or four short documents produced, Wilber and Bhaskar did not engage deeply enough with each other's material to avoid oversimplification. The deeper and more nuanced dialogue between IT and CR has been taken up by others in these communities, notably the authors in this volume.

15 Marshall notes that "Bhaskar discusses the problem of incommensurability in a number of places," mentioning how meanings change and evolve within communities of practice (2012, p. 15).

16 In DPF Bhaskar says "presences and absences may be recursively embedded and systematically intermingled in all sorts of fascinating ways [with] all sorts of topologies...loops, hierarchies, holes, blocks, intersecting...intertwined, punctured..." (p. 48).

17 As pointed out by Hediohland-de Witt (2013), to claim that all reality is mind-dependent begs the question of whether minds are mind-dependent, suggesting a performative contradiction.
through discursive, i.e. epistemological means (as empathized by Habermas). Wilber also says "this does not mean 'to be is to be perceived'...nor is this to say that perception creates being...rather to say that being and knowing are the same event" (Excerpt C, p. 142). One can find moments within Wilber's and Bhaskar's work that support both ontological and epistemological positions.

It can be rhetorically and strategically productive for theorists to posit claims with definiteness. The heat behind categorical statements that seem to presume direct access to knowledge of the structure of reality can ignite conviction and loyalty, yet, in the face of alternative perspectives, can generate a scorching flame and a wincing smoke that impedes generative outcomes. One can appreciate and make good use of both of both "positions" without committing categorically to one or the other, and one can intuit a larger truth that holds them both, though this larger perspective may be more difficult to articulate definitively. Within any framework, one might make arguments about foundations or essences, but in the meta-theoretical work of comparing and integrating theories, the more inclusive stance is pragmatically preferred, especially given that reason alone can not adjudicate deep philosophical problems (one must go developmentally "up" a level in both positivistic abstraction/generality and in negative capability and openness). The ping-pong ball bounding between epistemology and ontology can't be subdued into a stillness on either side through rational argumentation, including transcendental argumentation. Our only hope for quiescence is in a post-rational post-paradoxical holding of the opposites in dynamic interplay.

[2] In other papers (Murray 2010, 2013, to appear) I explore how Embodied Realism impacts IT claims based on AQAL categories including subject/object, singular/plural, stage/stage, levels, types, and lines. Strong categorization can precipitate over-reaching claims that ignore territories in-between or outside of the category's definition. What gets ignored when we assume that phenomena must be subjective or objective, but not both or neither? What gets marginalized when we attempt to classify a human capacity in terms of the canonical set of developmental lines usually listed by Wilber? In categorical systems such as AQAL, the symbolic impulse is what tempts one to shoehorn phenomena into neat packages when the situation calls for a more nuanced analysis. Paul Marshall speaks to this in describing the "pathology of the paradigm of simplicity [of] Cartesian clear and distinct ideas, analytical reductionism of whole into parts, and isolation of objects from their environmental contexts" (2012, p. 21).

Wilber and others in IT readily acknowledge the indeterminacies of these categories, and IT speaks to the interaction, co-definition, and co-(tetra)emergence within categorical dualities; and it references higher level constructs that transcend and include dualities. But IT is weak on the negative capability of being explicit about the limitations of the constructs themselves and what exemplars might exist in the liminal areas between or outside of a polarity or category system. Also, because of the exceptional and seductive explanatory power of the framework, IT scholars and practitioners tend toward misplaced concreteness (reification) in (1) assuming that the categories exist in and constrain the (intransitive) real, and (2) treating the conceptual boundaries as mutually exclusive.

[3] CR does not rely as heavily on categorical models at IT, but is of course not immune to these considerations. CR makes a considerable contribution to philosophical thought in arguing that ideas, mechanisms, absences, and non-duality are each real. But these concepts are massively indeterminate, and in particular the concept of the real. To its skeptics CR must answer the question, "Is negation really real?" Embodied Realism suggests that the question is unanswerable in any definitive way that would satisfy most critics. It is better to, as Bhaskar does, explain the sense in which each of these things is real, and what that implies more broadly.

Perspectivally engaging different facets of a metaphorical pluralism may only be an intermediate step from which disagreement might proceed but at a more nuanced level of discourse. Interlocutors might disagree with the explanation of how "X is in a sense Y, and in
another sense not Y.” The goal is not agreement or finality, but a process of increasing clarity, mutual understanding, flexibility, and productivity. This is a basic assumption in procedural rationality (see Habermas, Rawls) but is taken ever deeper as the indeterminacies of propositions revealed by ER are acknowledged.\footnote{Note that for each conversational context one must make the pragmatic call of how deep to push the challenge of indeterminacy, while taking certain concepts as unproblematic, in order to avoid “analysis paralysis.”}

[4] Another application of ER is in the controversy of whether IT’s panpsychist (or pan-interiorist) theory amounts to an epistemic overreach. Wilber, following Whitehead, claims that sentence, prehension, and consciousness is extended all the way down to subatomic particles. Some make the (misplaced concreteness) mistake of creating a metaphysics of this principle. Consciousness is mistakenly seen as a substance that permeates atoms—as something that infuses humans in abundance and is sprinkled into rocks and subatomic particles. What Wilber and Whitehead have accomplished is to show how the ideas of consciousness, prehension, and sentence can, quasi-metaphorically, be stretched usefully, even to an extreme, such that plants, asteroids, and even sub-atomic particles can be said to have these attributes (proto-consciousness, proto-sentence, etc.).

This stretching at first challenges our understanding of "consciousness" and then it enriches our understanding of the referents (e.g. people and rocks). We see them in a new way. No new properties, observations, substances, or even hidden causal mechanisms need to be added. Particles and rocks still do what we understand them to do. But seeing their behavior, nature, and interactions in terms of prehension opens up new avenues of understanding and creative exploration—not only for particles but also for humans and other objects imbued with our "old" meaning of prehension. In this way metaphors not only link things "metaphorically," but extend meaning from its foundation.\footnote{A similar case can be made for the metaphorical-and-real extension of the concepts of "agency" and "actor" to inanimate objects as suggested by Latour, and to causality, as suggested by Bhaskar.}

[5] I will give two final short applications, without getting into the details of the controversies. First is the controversy within the IT/CR confluence on whether objects and processes in reality are "enacted." I believe that much of the difficulty within this conversation, as with other topics noted above, stems from metaphorical pluralism, and the fact that our descriptions and understanding are fundamentally limited by sensor-motor metaphors. It seems possible to articulate the senses in which reality, under certain senses of the word, is enacted, under certain senses of the word; while noting senses in which reality is not enacted, without needing a single ruling on the question (which is impossible from an ER perspective). We can increase nuance and create important differentiations through a continuous movement between exemplars and abstractions, to generate a space of mutual understanding.

Second is the question of whether one can one "gain access to" a mind-independent reality, as CR claims is possible. On the surface, epistemologically-oriented ER gives a definitive "no." But we can, as an immanent critique, apply ER's principles of fallibility to its own conclusions to nuance the dilemma. "Access" is a graded concept and a metaphorical pluralism, so we can ask, under what senses of access is CR's claim valid, and under what senses is it not? It is best to do so using exemplars, as a concept's meaning is co-determined within the two spaces of abstract definitions and concrete exemplars (see Lakatos, 1976).\footnote{Imagine someone who does not have physical access to roses wanting to learn about and experience roses; and that person wears thick gloves on their hands. They are allowed to enter a botanical garden to satisfy their desires. They have thus gained direct access to the rose—an actual object. However, as with the numerous limitations to all human sense experience, intuition, and reason, we will say that the gloves cannot be removed, and in this sense the person can not have full unadulterated access to the reality of the rose. Additionally, "direct" (or any other word one could use in its place) is a graded metaphorical pluralisms, adding to the overall indeterminacy.}
Pragmatism and Metaphysics

Pragmatism revisited. Embodied Realism has a strong resonance with pragmatism. The philosophy of Pragmatism is summed up by Louis Menand, perhaps the leading contemporary expert on the subject, who says that Pragmatism as an idea about ideas: "The idea is that ideas—theories, beliefs, convictions, principles, concepts, hypotheses—are essentially means of adaptation...Ideas are not 'out there' waiting to be discovered, but are tools that people devise" (2004, p. 1, 8). This is a strong statement of epistemic relativity (the "second gesture").

CR's critique of Pragmatism (see PIF) does not take the Pragmatist's full scope and import, as articulated by Menand, into account. Bhaskar's critique of Pragmatism focuses on the neo-pragmatist Richard Rorty, who, though aligning himself with the early pragmatists, takes the radically non-pragmatic (and deconstructivist) route of de-valuing all reference to reality and valid knowledge. This contrasts with the core sensibilities of the early Pragmatists (James, Peirce, Dewey, etc.), who are sympathetic with the so-called Reality Principle (from Freud)—the call to ground ideation in experience so as to avoid the overreaching of an intellect attempting a "view from nowhere."

I find the essence of Pragmatism to have much alignment with CR and the "seriousness" of "getting real" that CR implies (and see Bhaskar's invocation of the reality principle in DPF, p. 55). CR's "holy trinity" arguably implies a deeply pragmatic philosophy, one that argues for the usefulness and reasonableness of ideas in the service of deeper knowledge building dialogue and more effective ethical action; and one that is ever open to both empirical and rational modes of critique and development. However, Menand notes that Pragmatism "does not solve the problem of objectivity...it just ignores it" (2004, p. 11). This might explain CR's distancing from Pragmatists, despite the compatibilities.

Metaphysics, transcendental argument, and strata of reality. The ontological status of abstractions and generalities about foundations, essences, totalities, and universals is problematic because they occupy an uncomfortable position between interiorities (transitives) and concrete exteriorities. Like Platonic forms/ideals, they seem to "exist" in a realm that is not fully real and not fully idea(!); they do not exist in space and time and yet are claimed have an objective existence independent of mind. In his description of post-metaphysics, Wilber associates metaphysical thinking with "the myth of the given" and "postulating fixed, eternal, [ahistorical] independently existing archetypes" (2006, p. 247). Habermas (widely acknowledged for his work on post-metaphysics) says that the main task of philosophy is not in establishing infallible truths, but in "rationally reconstructing the intuitive pre-theoretical knowledge of competently speaking, acting and judging subjects" (Habermas, 1992, pg. 38). Reconstructive sciences and reconstructive modes of inquiry make arguments about the (usually implicit or intuitive) preconditions or know-how that underlying basic human competencies. The call to post-metaphysical argumentation is not a call to abandon metaphysical notions as much as a call for transparency about the limits, tradeoffs, and risks of making metaphysical claims, and a nuancing that anticipates the indeterminacies involved.

ER shows from a cognitive science perspective that even the concepts of "real," "exist," and "object" are metaphorical pluralisms and graded concepts, admitting to significant indeterminacy. Thus ER gives us permission (or requires us) to move beyond categorical treatments and investigate the degree or sense in which something is real. ER thus supports Bhaskars's claims that "the relevant question is not whether ideas are real, but what kind of reality they have, and whether ideas of different type (e.g. kind, epistemological or ethical status) have different kinds of reality" (OSI, p. 142). In contrast, many philosophies less developmentally...
sophisticated than IT and CR resort to rebukes, using terms like "illusory" or "epiphenomenal", because they constrain themselves to a strict categorical understanding of reality. 25

I will mention three approaches to nuancing "types of reality:" one from IT and another from CR; but first I will make a more general observation. We can note that linguists and philosophers have explored how each of these things are real in different ways: concrete individual objects (the dog); classes and abstractions over concrete objects (e.g. dogs, mammals); properties such as red or bigness; processes and gerunds (e.g. reproduction, running); so-called social constructs such as money and gender (see Searle, 1995); and natural laws and causal mechanisms such as gravitation and evolution (see RTS, Elster, 1999). Some scholars still hold onto the notion that "reality" can point to a single totalizing referent. From ER we can say that to ask whether of each of these things is real is uninteresting, but articulating in what sense each is real, or should be treated as real, is useful. 26

What I have yet to see worked out is an analysis of the specific types of indeterminacies, categorical errors, or fallacies that each of these facets of reality are naturally susceptible to. Such an analysis would allow us to move away from charging others with "commiting" the X fallacy, and work from a common understanding of the vulnerabilities inherent in making any ontological commitment.

IT's approach is the integral pluralism and integral postmetaphysics of Wilber and Esbjörn-Hargens, which involves reframing the question of whether something exists to ask how it exists for whom? IT says that what is perceived to exist depends on the methodology used to inquire and the developmentally-determined capacity of the observer/inquirer to perceive; and the methodology used (Wilber 2006; Esbjörn-Hargens, 2010; Wilber, in process). It proposes frameworks for classifying methodologies (using eight "primordial perspectives" or "methodological zones") and developmental capacity (Wilber's Levels of Consciousness stage model). (I have given a very brief summary of Integral Pluralism here and discuss it more in Murray, 2015, PME).

CR's approach uses transcendental arguments for the reality of a strata of hidden (non-concrete) causal entities such as mechanisms, structures, laws, and tendencies within nature. 27 CR is "neither empiricist nor positivist" and presupposes the existence of transcendental entities "assessable by implication" that are "neither empirical nor actual" (Price, p. 5), and "beyond observation and logic" (Marshall, 2012, p. 4). CR differentiates the nested domains of the empirical (experienced events), the actual (which includes non-experienced physical events), and the real (which includes processes and mechanisms underlying events) (Blakar, 1975, p. 13). In Critical Realism deep non-observable ("generative") structures, mechanisms, and tendencies have an equal ontological status to concrete objects and events (because they are "causally efficacious"). 28 Thus we can claim a type of reality (and thus a type of validity) for constructs like language, freedom, values or survival, which exists a particular levels.

Transcendental arguments posit what must be the case for empirical facts or observations to be possible. They often take the forms of "X is a necessary condition for the

25 Those who misappropriate quantum physics to explain consciousness fall into a similar trap in having no way to explain entities that are both real and non-physical. And those struggling to "solve the mind-body problem" have similarly painted themselves into a corner in treating mind and matter as discrete categories (a misplaced concreteness) that exist a-priori in nature.

26 For example, science struggles with the admission that, if probed deeply, it does not really know what a force is, or whether forces really exist. It also invents quasi-metaphysical objects such as "dark energy" to account for observed anomalies.

27 In addition, both IT and CR give subjective (transitive) processes equal ontological status with concrete reality, and both make claims about the reality of a radically empty non-dual source underlying manifest reality. CR's ontological justification for these claims is more rigorous, and builds on CR's arguments about the reality of negation and absence.

28 CR posits that within the domain of the real there are strata of emergence such as material (physics), living (biology), and rational (culture) (others, including Koestler (1967) and Wilson (1998), have proposed similar models of emergence, see Corning, 2002). It proposes that structures, mechanisms and tendencies exist in "layers of nature, and are ordered... [The] more basic layer will have more explanatory power [yet] we are [not] able to predict a higher level mechanism from our knowledge of a more basic one" (Collier, on Bhaskar's work, 1994, pp. 46, 110 ). (Similarly, Wilber (2000) notes that lower layers set the possibilities for higher ones, while higher layers set the probabilities for lower ones.)
possibility of Y." There are two variations of these arguments: a weak epistemological and a strong ontological. The epistemological version is what Habermas calls "rational reconstruction." This is an argument for the assumptions or thinking modes/structures that one necessarily, or always and already, makes when thinking, speaking or acting. For instance the "first gesture" mentioned above argues that, at least implicitly and unconsciously, people speak and act with the assumption that a reality exists independent of human thought and activity.

Bhaskar uses transcendental argumentation for many of his claims, including a stratified structured of reality that includes invisible mechanisms, as being necessary for the possibility of the scientific process, and more generally necessary for the intelligibility of experience. But it is not clear whether or how Bhaskar moves from the weaker claim about the nature of the (human) processes of experimental scientific inquiry to make claims about reality qua reality, independent of any knowing subject (i.e. alethic reality). Bhaskar showed that science (and other types of reason) make unexamined ontological presuppositions—unreflectively yet unescapably acting as if these were true. But is there any practical difference between an ontological claim that something must exist alethically and making the more epistemological claim that human reason always already must make such-and-such an assumption about reality; i.e. that the relationship between the structure of reality and the structure of human cognition is such that humans are constrained to have such-and-such an assumption? I would argue not, based on the already mentioned fallibilities explored in ER.

CR's transcendental realism is framed as curative to problems with Kant's transcendental idealism (Marshall, 2012). Kant proposed that categories such as space, time, and causality were the result of structures of consciousness and that, as Marshall puts it, "any attempt to venture beyond the bounds of actual and possible experience into the world for things in themselves will result in empty metaphysics" (p. 4). Marshall implicates this idealist attitude in a number of social and philosophical pathologies which CR means to correct, noting that this idealism inadvertently "moves humans to the center rather than the periphery," leading to the much maligned problems of post-modernity that "ended up separating the knowing subject from objective reality" (p. 5). CR's solution is the transcendental realist move of placing time, space, causality, structure, and mechanism back out into the world but within a (thus proposed) strata of reality that allows for such intransitives.

This "revindication of ontology" provides strong footholds for integrative meta-theories that attempt to include the strengths and jettison the weaknesses of modernist and postmodern philosophies, as CR and IT attempt to do. However, Embodied Realism offers an alternative solution that does not require strong ontological moves. The notion, shared today by most embodied approaches to cognition, argued scientifically, and unavailable in Kant's time, is that the structure of human cognition is determined by evolutionary forces and is deeply motivated by the structure and properties of physical reality. Animal survival depends on perception and reasoning producing a good-enough representation and interpretation of reality to promote survival and reproduction. The structures and laws of reality have molded cognition in both species/evolutionary ways in in individual/psycho-historical/developmental ways. We do not need to assume that time, space, causation, etc. subsist in reality with any fidelity to our perceptions, understanding, or theories of them—so long as the distortions, filters, and biases introduced by our wet-ware do not create levels of demi-reality that threatened the survival of our predecessors. From PITF: "Embodiment keeps [truth from having to be] purely subjective. Because we all have pretty much the same embodied basic-level and spatial-relationship concepts, there will be an enormous range of shared 'truths'...[in addition] social truths are based on an enormously wide [shared] understandings and experiences" (p. 107).

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29 The strengths and weaknesses of transcendental arguments are described in Taylor 1995, Chapter 1.
30 This category does not seem to be given a name by itself, but when combined with the actual and empirical strata which sublate it, is called "the real".
31 Theoretical physics is constantly illustrating ways in which our understanding of such basic structures as time, location, distance, order, dimensionality, etc. show only one possible valid way to represent reality (e.g. see Kuhlmann, 2013).
Mysticism, spirituality, and epistemic drives

Mystical vs. metaphysical claims. As noted in Marshall (2012, p. 2) CR and IT "both embrace spirituality, thus confronting a taboo that is deeply entrenched within the academy...and endorse a directionality in evolution toward the realization of Spirit (or the ground state)." Along the further reaches of the spiritual or psychological path to radical stages of freedom from conditioning one encounters certain types of well-documented experiences. These include profound states of emptiness, bliss, boundlessness, expansiveness, one-pointedness, oneness, and/or compassion. Bhaskar and Wilber, like many philosophers and spiritualists throughout time, incorporate the insights and pointing out injunctions sparked from deep encounters within this territory. Along the way IT and CR track deeply into metaphysical territory—despite that fact that both theories include sophisticated post-metaphysical arguments and attitudes. For example, Wilber makes claims about Spirit, Non-dual reality, The Absolute, Eros, and Involution; while Bhaskar speaks of the non-dual ground state, universal solidarity, and ultimate or alethic truth. In speaking persuasively to questions of "ultimate concern" it is impossible to ignore making claims about universals, totalities, essences, and foundations, i.e. metaphysics—but it is done at a price.

In Mysticism and Logic Bertrand Russell describes metaphysics as "the attempt to conceive the world as a whole by means of thought" (1917, p. 6). In philosophy this is usually done through the application of rational arguments, including transcendental arguments. Mystical claims, on the other hand, purport a direct access to universal knowledge of reality based on experience. The spiritual claims within IT and CR have both mystical and metaphysical elements.

The mystic "knows" and must struggle to articulate the intuitions gained through a privileged access to a deeper reality. The first problem in mystical knowledge is whether experience can allow for "direct access to reality" and to truths that are not subject to empirical or discursive validation. If this implies an ideal objective "view from nowhere," we can categorically reject the possibility (from the second "gesture" above). However, if what is implied is knowledge of a deeper reality, or more valid knowledge of reality, we can and should allow for the possibility (from the third gesture). Then with mystical knowledge the primary problem becomes how one bridges from intuitive or pre-symbolic knowledge to language that articulates an insight. We are left then with the plurality of problems with language, mentioned by many a mystic, some of which are explored from a cognitive science perspective in Embodied Realism. (We also face developmental issues of adequatio, i.e. whether the listener has built up (or taken down) structures that allow her to understand what is being referred to.)

Metaphysical claims have different (though overlapping) challenges vs. mystical claims. Many of these challenges have been summarized above. Foundations, essences, and universals such as consciousness, life, Spirit, Eros, Ground of Being are abstractions subject to significant indeterminacy, which implicate the certainty, precision with which they are professed more than their content. Metaphysical/mystical spiritual concepts have important meaning-generative potential. They provide linguistic footholds for those experiencing certain truths to deepen and share their understanding of this territory, and they are targets and boosts for those aspiring to new depths of wisdom. But, as is widely known, ideas containing flavors of totalization, fundamentalism, or essentialism can be 'dangerous in the wrong hands' and susceptible to distorted interpretation. Even in 'the right hands' they have a seductive pull on the ego.

In metaphysical arguments it is important to keep track of when new properties are implied with proposed entities, and whether new phenomena are disclosed or predicted. It is one thing to propose an abstract or general principle for some observed pattern of phenomena (such as gravity, Eros, evolution, etc.)—and quite another to impute new properties along with the abstraction. Actual objects in concrete reality are "replete" and cannot be completely described with a finite number of properties (they are also said to "withdraw" from begin captured by ideas

32 CR seems to distance itself from Habermas, despite many areas of overlap, and may not associate itself with the term post-metaphysical. However, it does fall under Habermas' definition of post-metaphysical as I understand it (Murray 2011).

33 The same issues arise in describing a mundane experience such as the taste of chocolate or what it is like to be a female to one who has never had this experience. Esoteric spiritual experiences are different in that they are rarer, and require non-normative practices to attain—but all experience is, in one sense, equally ineffable.
or other objects). If one proposes an abstraction or generality within the actual, then it must have an infinite number of properties, and thus reach beyond the basic pattern and abstraction one started with. For example, Eros may be a handle created to conceptualize a pattern observed in nature, and perhaps, like gravity, an underlying cause. But if one treats Eros or Spirit as part of the Actual, then it takes on a god-like character and becomes a mysterious entity with as-yet undiscovered (and undiscernable) properties. Also, generalities that allow us to predict new phenomena are to be distinguished form those that merely name or classify them. These considerations mark differences between scientific and post-metaphysical inferences vs. more traditional metaphysical and mystical inferences (see Elster, 1999).

Thus is it good to map out and present the possible limitations of metaphysical ideas. Totalizing or "reenchanting" types of claims may be inevitable in certain types of inquiry, and IT and CR go to great lengths to frame propositions and acknowledge fallibilities. They contain explicit critiques of reductionism, fundamentalism, and absolutism. Yet as meta-theories they are still vulnerable. One example is the "evolution (and involution) as Spirit in action" theme in IT. In importing teleological and intentional agencies into evolution one opens the door to a stream of mystical and magical thought.

As another example, Bhaskar's concept of metaReality might take on too much as this concept starts in ideas about radical (and everyday) transcendence-through-negation and expands into become an explanatory model of universal solidarity and transcendent love, and a basis for envisioning the eudaimonian society. The results lean from description and explanation into prescription. Doing so is valid given that fact and value interplay, but it seems problematic to build explanations of complex human phenomena from such elementary foundations. The significant "epistemic distance" from hard facts to an essence like non-duality allows for questionable conclusions such as the "principle of universal solidarity" which specifies that "in principle, any human being can empathize with and come to understand any other human being" (Bhaskar, 2010, p. 18). An embodied perspective would say that, as animals sharing the same emotional pallet, affective empathy is potentially universal, but cognitive empathy, and the ability for any to understand the ideas of any other, is not.

To further address questions of metaphysical and mystical and claims, I will broaden our scope to consider "epistemic drives," of which the symbolic impulse mentioned above is just one example.

**Epistemic Drives.** The symbolic impulse biases us to be blind to the prototype-structure, graded boundaries, and metaphorical pluralisms revealed in Embodied Realism. Sophisticated modern thinkers intellectually know that things do not exist according to black and white categories, and one's language often tries to compensate for the distortions introduced by this symbolic impulse with, for example, qualifiers and glosses. However, the symbolic impulse and its consequences go deeper than most imagine and have an insidious influence on all thought. Epistemic drive is an umbrella term I use for tendencies of thought that influence what is believed to be real or true (in everyday conversation and in philosophical arguments).

In PME (Table 2) I list over a dozen epistemic drives including drives toward purity, perfection, simplicity, generality, universals, abstraction, permanence, and fundamental/essential causes or roots. I propose that for each such drive there exists a balancing drive (for example the drives to concreteness, specificity, change, multiplicity, partiality, novelty, and imperfection). How one balances these drives in any moment is a function of personal style, context, culture, and many other things. It would seem that those drawn to meta-theories (often unreflectively) privilege the first set of drives listed over the other balancing drives (this seems true of Western thought in general).

I use the term "drive" to make the analogy to biologically innate "emotional" drives such as the reproductive drive, fight/flight/freeze responses, territoriality, and social...
dominance/submission, etc., though epistemic drives presumably involve higher brain centers. Like other drives, we experience a large number of epistemic drives (hard-wired urges or tendencies) that may or may not exhibit prominently at any given time, and often operate in competition with each other (in CR terms they are potentially dormant powers). Similar to other types of drives, one can experience and observe their phenomenology. For example there is a sense of ease, certainty, and mastery when one can ignore details and differences and trust a sturdy generality. There is a sense of elegance and wholeness when one can embrace many things into a circle of unity. There is a certain satisfaction in ordering things or collecting them into tidy groups, or in discovering the root cause, source, or foundation of things. One can observe the feelings of disorientation when things don't fit together, or when things that once fit together start to unravel. Like other drives, epistemic drives are largely unconscious processes that, on the one hand, can have unseen control over us, and on the other hand, can be observed, managed, and controlled to some degree through learned metacognitive (and meta-affect) skills.

Epistemic drives toward things such as generality, abstraction, purity, and wholeness can contribute to reliable understanding of reality but they can also over-function or function pathologically to generate demi-reality and the folly (or violence) which, in the extreme, leads to grandiosity, hegemony, elitism, absolutism, and proto-fascism. In less extreme ways the subtle (and not so subtle) influence of epistemic drives pervades the creation, consumption, and promotion of theories, models, and belief systems. The general need for meaning and certainty (and the avoidance of dissonance-incuring uncertainty, doubt, or unknowing) is an epistemic drives. As mentioned above the demi-real includes not only the content of ideas, but the certainty with which they are held.

Though philosophers and intellectuals may not be prone to its more primitive manifestations, they are not immune to the influence of epistemic drives, which manifest differently at different levels of abstraction and development (see PME, p. 108). Though it may seem unusual to ask scholars to reflect on how epistemic drives influences their ideas, the more mundane analogy to emotional drives is clear: in both social and scholarly communication one expects a more developed individual to reflect upon or have in-the-moment awareness of how emotions such as anger or jealously influence how they act, what they say, and what they believe, and to make balancing adjustments accordingly. We can extend this from psychosocial drives to epistemic drives.

In considering epistemic drives we shift our treatment of embodied philosophy into phenomenology. 36 Recall that the arguments I present in this chapter are oriented to self-emancipation. That is, ideas and modes of critique are offered as tools for practitioners in IT, CR, and any knowledge building community, to lessen the demi-reality of their models and to ease the process of reaching from one theory or community towards another. Self-emancipatory work necessarily mixes first, second, and third person perspectives. Self-inquiry includes moments of sensing into what it feels like to do philosophy, and observing the relationship between one's ideas and one's actions (this is yet another aspect of "embodied" philosophy). How does one's relationship to these drives influence self-understanding and the collective knowledge-building process? 37 This is a worthwhile meditation.

IT and CR are explicitly normative projects and both allow for a nuanced treatment of the fact/value distinction. IT and CR allow that value-judgments play a role in discovering and communicating factual truths; and that values (and morality) are motivated by and grounded in considerations of reality. These notions can be applied self-reflexively (toward self-emancipation) to ask how epistemic drives impact the models, claims, and modes of illocution enacted within the IT and CR communities. This is not a purely intellectual exercise, but a phenomenological process of feeling into the movement of such drives as sensations within the body, as they arise in the moments of thought and discourse.

36 This is in line with IT's principles of Methodological Pluralism (Esbjörn-Hargens, 2010), which recommends (or requires) approaching inquiry from multiple methodological perspectives.
37 Epistemic drives can be used in shoot-from-the-hip psychoanalysis of a scholar or community, for example: Is IT motivated by an unexamined need for the solace within a purposeful universe in which humans have an important role?; and Is CR driven by an unexamined need for the security of a knowable and stable reality? However it is more fruitful to apply these concepts in self-reflection as a means toward greater nuance and flexibility; rather than as weapons wielded in critique of others.
**Misplaced Concreteness.** *Misplaced concreteness* (coined by Whitehead) is an epistemic drive. It is related to what CR calls the ontic fallacy, and what IT refers to as the Myth of the Given or the Map-Territory confusion—*the tendency to imbue abstract concepts with the properties of concrete objects such as definitive boundaries. Misplaced concreteness was noted by Whitehead, and is further explained by Embodied Realism. ER illustrates cognitive mechanisms and biological/evolutionary origin’s of misplaced concreteness. Misplaced concreteness is further elaborated with epistemic drives, which helps explain the prevalence of cognitive biases in particular contexts (i.e. why misplaced concreteness might prevail despite its unmasking). (Collier (p. 47) frames misplaced concreteness, using CR terms, as treating something from the level of mechanisms and structures as if it were from the strata of the actual.)

**The feeling of truth about reality.** In Murray (2013, to appear) I examine Wilber's claims that perspectives are primordial, his narrative around the evolutionary impulse, and quasi-metaphysical statements such as “ultimate realization of the ever-present, spaceless and therefore infinite, timeless and therefore eternal, formless and therefore omnipresent, Condition of all conditions and Nature of all natures and radically groundless Ground of all grounds.” The aim is not to discredit these constructs and claims, since they have strong meaning-generative potential. As mystical claims they can be said to be pointing to insights stemming from profound experience (states), and from a stable realization of developmentally advanced territory (stages). But as totalizing metaphysical claims about the nature of reality they are still problematic, especially in terms of the styles of justification and confidence that are performed as idea memes flow into and through knowledge building communities and out into cultures at large.

As noted, mystical experiences, including those gained through contemplative practices, include felt senses of vast spaciousness, emptiness, boundarylessness, oneness, and single-pointedness. What could support the move from phenomenological experience to claims about ultimate reality? From an embodied perspective, the mind can neither experience nor properly conceive of (actual) infinities (including complete emptiness). Esoteric traditions are rife with adepts claiming to have discovered an even more infinite, essential, or totalizing reality than the ultimate truth that was previously understood—which are contradictions. If something feels infinite, omnipresent, empty, or universal is it? Our answer must be "no" in a post-metaphysical milieu. There is still room for mystical and metaphysical claims however. We could say that Wilber is trying his best, despite the limitations of language, to point to something that is more metaphorically than literally infinite. One who newly gains the experience and insight that Wilber points to might say that their usual and prior understanding of the word "infinite" does not apply, but that infinite is still the closest metaphor available that captures the experience.

We return to Russell's *"Mysticism and Logic."* Russell compares scientific/logical with mystical modalities and says that those great thinkers who skillfully blend the two represent "the highest eminence...that it is possible to achieve in the world of thought." Yet he also discusses at length the characteristics and risks of mystical claims. He notes the tendency for the passion of the mystic to conflate "the good with the truly real"; and that those who "are capable of absorption in an inward passion" can experience "the loss of contact with daily things [and] common objects." He says that "logic used in the defense of mysticism seems to be faulty as logic" and "[renders such] philosophers incapable of giving any account of the world of science and daily life" (p. 15). He concludes with "while fully developed mysticism seems to me [a mistaken outcome of the emotions], I yet believe that by sufficient restraint, there is an element of wisdom to be learned by the mystical way of feeling, which does not seem to be attainable in any other

38 And similar concepts including reification, hyostatatisation, concretism, and delusions of reference.
39 From Wilber's Excerpt A of the in-progress Volume 2 of the Kosmos Trilogy.
40 Contemporary scholars of Buddhist scholastic and scriptural texts are usually cautious to describe advanced states in terms of phenomenology rather than truths about reality (e.g. the viññānas or janas of the Satipathana Sutta).
41 Certainty and understanding are not only products of reason; they are feeling states that arise independently of rational validity. This is evidenced when one feels completely certain and turns out to be wrong, or when one leaves a lecture feeling that it was understood, soon to realize that one can’t explain it to another.
manner [and which is] to be commended as an attitude toward life, not as a creed about the world" (p. 12; emphasis is mine; see Murray 2010 for more on Russell and Mysticism).

**Toward construct aware meta-theories**

It is generally agreed that one area in which IT can contribute significantly to CR is IT’s articulation of interior development (strongest for individual development, but also substantial for cultural development). Though one might question the specific categories of stages and lines enumerated in IT’s AQAL model, the fact that human skill acquisition follows developmental trajectories has been rigorously demonstrated. Development has at least three implications for meta-theories motivated by emancipation and social change: first in strategies for applying them, second in strategies for promulgating them; and third, in self-reflexive modes of creating them.

As emancipatory projects motivated by visions of social change, IT and CR envision (four-quadrant and four-planar being) changes in socio-politico-economic systems and in the beliefs and capacities of individuals and collectives. It is critical that we understand and anticipate what individuals and groups are capable of in terms of idea and skill transformation, the speed at which it can be expected to happen, and the types of motivations and methods that are expected to support it. For most of the envisioned social changes it is not essential that individuals understand or use the principles and models in IT and CR—these models are means to an end.

However, these emancipatory meta-theories also have goals to promulgate specific ideas, skills, and world-views. It is generally understood that different levels of depth and nuance will be matched for different audiences, but developmental theory offers specific principles in this regard. (And in general, since education and learning are essential elements of social change, understandings of the learning process from the cognitive sciences are essential to emancipatory strategies.) From a developmental perspective we can say that many of CR’s and IT’s constructs require post-rational, vision-logic or construct-aware stages of development to be correctly understood (Wilber, 2006; Cooke-Greuter, 2005; or metasystematic/paradigmatic in Commons & Richards, 1984).

The understanding of models, theories, and principles can be framed in terms of "epistemic forms" that are grounded in concrete metaphors (Collins & Ferguson, 1993). Linear or categorical (black and white) structures are simpler than graded/spectral, network, or branching/manifold structures; which are in turn simpler than co-referential interpenetrating, paradoxical, fractal/recursive, constellations/mesh-works; meta-systematic, autopoetic or cybernetic, or massively interdependent/ecosystemic structures. Thus there is a developmental trajectory of the complexity with which one can understand the relationships, structures, systems, and co-dependent origination of entities. Clearly both Wilber and Bhaskar make use of complex epistemic forms in sections of their writing, introducing different levels of challenge for the reader. (Wilber, as a more populist writer, skillfully includes a range of epistemic forms, allowing access points for different developmental levels).

In this chapter we have grappled with ontological and epistemological nuances in meta-theory concepts including: enactment, panpsychism, negativity/absence, "direct access" to reality, primordial perspectives, categories (as constituent of reality), and nonduality. The inescapable gradedness and metaphorical pluralism of these language constructs means that we will perpetually be confronted with paradox and indeterminacy. The invitation is for a more fully construct-aware (post-formal or post-rational) holding of these concepts. Formal-operational thought will forever search for the best explanation with ever more refined differentiations, precision, and ever broader perspectives incorporated systematically, in a positivistic mode. Construct-aware thought includes more "negative capability" and sees the house of mirrors that

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42 Critical Realists have been aware of developmental factors. For example, Bhaskar describes "levels of rationality" (PIF, p. 157); and Price speaks of how the logical positivist perspective "simply cannot 'see' the non-empirical structures and mechanisms that help to construct our existence" (2013, p 7). But IT’s developmental theories add significantly to this.

43 Surprisingly, Lakoff and Johnson do not reference developmental modes in PITF. The inclusion of developmental considerations, like the addition of epistemic drives, extends the philosophy of Embodied Realism.
logic can construct, and make informed tradeoffs between pushing ahead and letting go. Cook-Greuter says of construct-aware thought:

[One becomes] cognizant of the pitfalls of the language habit [and starts] to realize the absurdity [or] limits of human map making. [The] linguistic process of splitting into polar opposites and the attending value judgments can become conscious...variables are now seen as interdependent, causality experienced as cyclical and boundaries of objects as open and flexible...[one remains] aware of the pseudo-reality created by words...[and becomes] aware of the profound splits and paradoxes inherent in rational thought...Good and evil, life and death, beauty and ugliness may now appear as two sides of the same coin, as mutually necessitating and defining each other” (Cook-Greuter, 2000, p. 21-30).

In working with the meta-theoretical concepts in CR and IT one encounters graded categories and claims that suggest that we should ask "To what extent" or "In what sense is [X] true (or real)? And in what sense not true (or real)?"—without compulsion to find a proposition (at that same level) that integrates the answers. One encounters apparent paradoxes, such as: “Is non-duality empty or full?” One encounters metaphorical pluralisms that confound attempts to square one theoretical system with another. One encounters fractal-like conceptual structures, and relationships among abstract or transitive objects that will not conform to sensorimotor metaphors. Is mind within matter or matter within mind? Is ontology within epistemology or is it the other way around? Is non-dual realization above and transcending regular consciousness or below and underpinning it? A theoretical framework may have a definitive answer to these questions. But the deeper truth is that reality goes sort of both ways, and that can be acceptable.

From ER and CR we can understand that reality is unitary and replete, and that paradox is a byproduct of embodied cognition and the symbolic impulse. When all one has to work with are metaphorically-based concepts such as full and empty, or wave and particle, then any reality that is not well described by the available concepts will appear paradoxical or otherwise confusing (or invisible). One might (in a formal-operational mode) pursue the question until one identifies more appropriate langue, but using construct-aware thought also allows for the play of language and its limitations.

CR constructs such as absence, negation, totality, and non-duality have developmental implications. These concepts can be understood as empty formal referents, but to fully understand them, they must be established within experience and intuition. CR grounds non-duality and mystical sensitivity in ubiquitous ordinary experience, e.g. Marshall speaks of the "non-dual states of everyday transcendence" (2013, p. 202). This orientation provides a needed complement to IT’s focus on "rarified" states and stages. But, as Terri O’Fallon (2013) is finding in her research extending Cook-Greuter’s work, turning the subjective experiences of emptiness, formlessness, and non-being; Kosmic connectedness and wholeness; or non-duality—into stable

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44 Studies indicate that an awareness of cultural embeddedness within belief systems and worldviews comes at the Pluralist stage which precedes Construct Aware. This awareness begins with seeing how other’s beliefs are so determined, and later includes an awareness of how one’s own beliefs are culturally determined. Cook-Greuter notes that “At the Construct-aware stage not just cultural conditioning is seen through, but the predicament of living in language” (p. 29).

45 Marshall notes that “Bhaskar discusses the problem of incommensurability in a number of places,” mentioning how meanings change and evolve within communities of practice (2012, p. 15).

46 Embodied Realism also provides an alternative approach the reality of non-duality. The apperception of Duality, in terms of categorical thinking, can be seen as a spurious outcome of the symbolic impulse. Most or all dualities do not exist in reality, which, for the most part, has a more complex and seamless structure than simple categories can capture. Thus non-duality need not be an esoteric state of consciousness or being but a natural state of affairs. To experience reality in this way feels esoteric and spiritual; as, for most of us, it is only in (often blissful feeling) non-ordinary states that the symbolic impulse is bypassed or disabled.
objects of awareness and dialogue (causal objects, in her terminology) requires a high developmental capacity.\footnote{From advanced developmental stages "reality is now understood as the undifferentiated phenomenological continuum or chaos, the creative ground...[in] this awareness of an underlying unity [they] experience themselves and others as part of ongoing humanity, embedded in the creative ground, [feeling] embedded in nature—birth, growth and death, joy and pain are seen as natural occurrences, patterns of change in the flux of time" (Cook-Greuter, 2005, p. 32).}

The above examples of post-rational thought were mostly third-person, but importantly, these skills can be applied to interiors as well. Self-understanding and reflexive capacity also develop. Included in Cook-Greuter's description of construct-aware thought is "the ego becomes transparent to itself; [one] looks at all experience fully in terms of change and evolution [and one becomes] aware of the ego's clever and vigilant machinations at self-preservation" [ibid]. The understanding of interiors includes increasingly deep understanding of the nature of language, thought, emotion, self/ego, and the influences of group/cultural identification and immersion on the self. The development of ego (including maturing and "wisdom skill") includes a deeper awareness of both interiors and exteriors and their interrelationship; leading to deepening integration of theory/ideation and practice. Empathy, compassion, and self-compassion also have developmental trajectories. Development includes transformations of value-systems and motivations that make it more likely (and easier) to let go of overly simple structures, open to new possibilities, tolerate dissonance and uncertainty, and actively seek critique. One is increasingly motivated to align one's being with one's capacity for complexity and depth, because the differences (absences) are felt more acutely.

Consistently in this chapter, the invitation has been to understand and experience these concepts, (and the claims that incorporate them) with softer boundaries, perspectival pluralism, and indeterminacy. The dance between boring headlong into finer distinctions and grander generalizations, vs. letting go and opening up to (actual) unknowing, requires skill that each theorist develops with her own style. The invitation is not to the acclaimed originators of our meta-theories, but to members of the knowledge building communities surrounding them. As individuals many of us have the "second tier" skills required to interpret complex and nuanced philosophical ideas skillfully, but we, and the species as a whole, have barely scratched the surface of what it might be like for entire communities to embody these capacities. Esbjörn-Hargens echoes this sentiment in his call for "theoretical shadow work." For example, it is not yet clear what reflection on the embodied nature of ideas and theories might look like if done regularly within a collective inquiry or discipline, and thus we also don't have much experience navigating the tradeoffs that avoids the paralysis of recursive reflection while being generative and self-emancipatory.

**Conclusions**

Lakoff and Johnson, argue that "reason is not 'universal' in the transcendent sense; that is, it is not part of the structure of the universe...it is [however] a structure shared universally by all human beings...." (PITF, p. 4-8). They continue with the more radical claim that, "What we take truth to be is...a matter for cognitive science because it depends on the nature of human understanding" (p. 108).

Though CR and IT are correct in pointing out the dangers and fallacies possible in epistemological and constructivist orientations to reason and reality, a realist approach to philosophy must incorporate the hard facts about the embodied nature of cognition. The bio-psycho-evolutionary perspective on reason and cognitive biases was unavailable to classical and post-structuralist philosophies that CR and IT are designed to rectify, and was just emerging as Wilber and Bhaskar developed their theories. This chapter offers some small steps toward integrating the emerging embodied perspective into meta-theoretical work.

The implications are important beyond academic philosophy, because as Lakoff and Johnson say, "radical change in our understanding of reason [leads to] a radical change in our understanding of ourselves" (p. 3). Embodied approaches open up avenues for personal and community-wide self-emancipation, and a more stable link between experiential truths revealed
through mystical encounters with reality and metaphysical ideas developed through the dance of rational deliberation.

In *The Art of Waiting*, Martin Keogh says: "When myriad possibilities appear in each moment, the opportunities for self-criticism [diminish and] the pathway you end up taking is simply what you are contributing to the dance...How do we increase our capacity to live in the unresolved? ...let the animal brain and body have a stronger voice...letting the river flow [and as James Hillman suggests] 'learn to accept a self that remains ambiguous no matter how closely it is scrutinized" (p. 15).

**References**


