



ORIGINAL ARTICLE

Clarifying the conception of consciousness: Lonergan, Chalmers, and confounded epistemology

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Applying Bernard Lonergan's (1957/1992, 1972) analysis of intentional consciousness and its concomitant epistemology, this paper highlights epistemological confusion in contemporary consciousness studies as exemplified mostly in David Chalmers's (1996) position. In ideal types, a first section outlines two epistemologies—sensate-modeled and intelligence-based—whose difference significantly explains the different positions. In subsequent sections, this paper documents the sensate-modeled epistemology in Chalmers's position and consciousness studies in general. Tellingly, this model of knowing is at odds with the formal-operational theorizing in twentieth-century science. This paper then links this epistemology with functionalism and its focus on descriptive efficient causality in external behaviors and its oversight of explanatory formal causality; highlights the theoretical incoherence of the understanding of science in the functionalist approach; connects it with the construal of consciousness as primarily intentional (i.e., directed toward an object) to the neglect of consciousness as conscious (i.e., constituted by a non-objectified self-presence); and relates this outcome to the reduction of human consciousness to animal-like perception and mechanistic interactions. A brief conclusion summarizes these multiple, subtle, and interconnected considerations and suggests how only an intellectual epistemology would be adequate to the intellectual nature of human consciousness and the world of meaning, not of mere bodies, in which humans exist.

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INTRODUCTION¹

David Chalmers (1996) has argued that consciousness is a kind of reality in its own right—so much so, in fact, that he is among the few contemporary theorists who would accept the label “dualist” (p.245). His point is that there are more than one kind of reality, the material, in our universe. Body and mind are different realities. The challenge, then, is to explicate what this conscious reality is.

Chalmers also insists that there can be a science of consciousness, that consciousness is a natural phenomenon amenable in some way to natural scientific explanation (p.xiii). The challenge in this case becomes the traditional Cartesian “mind-body” problem: How can something spiritual result from something material and then affect each other? Beyond the scope of this paper, theories of “emergence” offer a viable answer (Helminiak, 2015, pp.171-206). But in light of this question, a stream of specialized consciousness studies focuses on neuroscience

and attempts to explain the mind as a byproduct (Griffin, 1991, p.60) or a property (Searle, 1997, pp.13, 18, 194-195) or a feature (pp.xiv, 8, 17, 18) or an emergence (Cahoone, 2008; Clayton and Davies, 2006; Henriques, 2004) of the brain. Little consensus exists in these matters, and little lucidity about what these terms mean.

In *The Conscious Mind* Chalmers (1996) offers a sustained argument for his position. He feels forced to hold it. In honest self-revelation, he reports, “Temperamentally, I am strongly inclined toward materialist reductive explanation, and I have no strong spiritual or religious inclinations” (p.xiv). Yet, committed to taking both science and the undeniable experience of consciousness seriously, he holds “consciousness to be a natural phenomenon, falling under the sway of natural laws” (p.xiii).

It is true that “consciousness is not directly observable in experimental contexts” (p.215), he writes. But “we each have access to a rich source

of *data* in our own case. We *know* about our own detailed and specific conscious *experiences*” (pp.215-216, emphases added). “The main *intuition* at work is that there is something to be explained—some phenomenon associated with first-person experience that presents a problem not presented by observation of cognition from the third-person point of view” (p.110, emphasis added).

Doggedly engaging considerable detail on these matters, Chalmers’s presentation also opens itself to many points of criticism. These initial quotations, for example, already exhibit an entangled use of the terms *data*, *knowledge*, *experience*, and *intuition* and evince an undifferentiated conception of consciousness and knowing. Are data and experience the same, for example? Or does experience also include intuition and knowledge? Is our access to data on conscious experiences tantamount to knowledge of them? Is knowledge more than experience or intuition, and if so, what? What role might intuition have in knowing? (Osbeck and Held, 2014). Chalmers’s statements appear direct and standard enough until one begins to question them in light of more nuanced analyses. Then one can wonder what exactly they mean. Perhaps in other arenas such seeming nitpicking would be mere perversity; but when the topic is consciousness, these minor issues become pivotal because consciousness is inherently linked with knowing, and knowing with ontology.

The “more nuanced analyses” I invoke come from Bernard Lonergan’s (1957/1992, 1972, 1980/1990) lifelong study of human consciousness and the cognitive process and epistemology inherent in it. Without Lonergan’s theory at hand, one would surely be hard-pressed to sort through these subtle matters and posit definitions, distinctions, and interrelationships. But given Lonergan’s theory, the need for clarification becomes obvious. As with all science, impenetrable problems become lucid once a breakthrough is made (McCarthy, 1990, 1997; Webb, 1988). Accordingly, the goal of this paper is to illustrate the epistemological confusion in contemporary consciousness studies as exemplified in David Chalmers’s position—citing him only as one highly documented case, not making of

him the whipping boy for opinions that are pervasive and entrenched—and to suggest how the epistemology of Bernard Lonergan could bring some clarity to this field (Helminiak, 2014, 2015). The paper unfolds as outlined in the Abstract.

TWO EPISTEMOLOGIES: PERCEPTUAL AND INTELLECTUAL

Ultimately at stake in the focus on epistemology in consciousness studies is the question, “Is the mind or consciousness real?” Determination of the reality, an ontological conclusion, depends on the epistemology one employs. Knowing specifies reality. So when theories of knowledge differ, the ability to coherently handle questions about the mind will differ, and claims for the reality of the mind will also differ. Risking oversimplification but underlining my point by projecting “ideal types” (Weber, 1904/1997), as it were, I contrast two basic approaches to knowledge: a sensate-modeled or perceptual, and an intelligence-based epistemology. My overall argument is that much of the confusion in consciousness studies derives from the inadequacy of the epistemology being applied. The application is usually implicit, and the epistemology is basically a sensate-modeled one, but usually also mixed with intellectual elements.

For a sensate-modeled epistemology, the real is what can be perceived, and, perforce, the real is usually limited to physical matter. In this case, knowing is usually modeled on vision; to know is to take a good look: “the spectator theory of knowing” (McCarthy, 1997, pp.8, 21), “the perceptualist paradigm of knowing” (Webb, 1988, p.58), “the epistemology of the naked look” (Webb, p.74), “an epistemological confrontationism” (Braman, 2008, p.61). One knows immediately by direct experience. A notorious example is Samuel Johnson’s kicking a stone to “refute” George Berkeley’s idealism. Similarly, for Ken Wilber (1996) knowing depends on “illuminative seeing” so that “To know if it’s raining, go and look” (Wilber, 1996, pp.31- 32). Likewise, John Searle (1998) insists that “we perceive the real world ... In the normal perceptual situation, you just see the object directly. Your perception reaches right up to the object ... When you’re

looking at the object at point blank range in good light, you directly see the object” (lecture 7).

Mentally, this sensate-modeled epistemology operates via picture thinking; imagined images guide the thought. Said otherwise, at stake is Jean Piaget’s (1936/1963) concrete-operational thinking. Typical of pre-pubescent children but dominating also the thinking of most adults, such thinking deals superbly well with matters that are “at hand,” that is, available for inspection and manipulation. However, although they might be part of a mix, such thinking does not explicitly acknowledge either the abstract, hypothetical thinking of Piaget’s formal operations—which can solve problems without having specific, concrete cases to play with—or the developmental, unitive thinking of postformal-operational thinking (e.g., Campbell and Bickhard, 1986; Commons et al., 1984; Sinnott, 2010).

On the basis of this sensate-modeled epistemology, the mind could not be real because it is invisible. By the same token, however, it is instructive to note, the quarks and leptons, the forces and fields, of current physics (Goldman, 2007) could not be real either because none of them is perceptible. I know I present a caricature of this materialist or narrow empiricist position, but already an inconsistency has appeared, and I will also point out other clear examples of such sensate-modeled epistemology at work.

In contrast, for an intelligence-based epistemology, the real is what can be reasonably affirmed on the basis of relevant evidence. Not perceptible encounter, but validated insightful understanding determines what is real. In this matter I follow Bernard Lonergan (1957/1992, 1972, 1980-1990). To understand the mind and its knowing, thoroughly empirical in his own way, committed to “generalized empirical method” (pp.95-96, 268), he turns to the phenomenon itself. He begins with an empirical question, “What am I doing when I am knowing?” (p.779, n. f). This phrasing, using the singular “I,” is accurate because, in the nature of the matter, I can approach an answer only through my own experience. I cannot examine what transpires in other people’s minds. The instances of human knowing to which I have access are uniquely my own.

The general answer to that question is as fol-

lows. As a knower, in the pursuit of knowledge, I attempt to make sense of, to understand, the puzzling given that I encounter. (a) Awareness that prompts wonder or awe is the starting point of every intellectual endeavor. (b) When awareness turns to question and, after appropriate effort, insight occurs, I generate a concept or an idea, and I formulate it in a statement, a hypothesis, a theory, a proposed explanation. Naturally concerned that my understanding actually be correct, (c) I check it against the given data; and via another kind of insight whereby I grasp—hopefully, in collaboration with others—that my understanding does indeed account for all the data and that no further relevant questions remain, I am constrained by the very demands of my own mind to affirm my explanation: It all fits. Eureka! I have correct understanding. I know something. I have achieved a sliver of knowledge.

More technically and summarily formulated, human intellectual knowing entails three components: (a) experience, (b) understanding, and (c) judgment. These three correlate with (a) data, (b) ideas, and (c) facts or knowledge. It is useful to contrast this theory of knowing with the sensate-modeled theory. It usually stops with experience, and in the undifferentiated term *experience* it bottles up all the components of human conscious activity, and the supposition is that we know by encounter. Thus, Wilber (1996, pp.31-32) could suggest that we know it is raining by going to the window and taking a look. To be sure, in many everyday, prosaic cases, knowledge might appear to be such an instantaneous production. In those cases we take for granted and overlook the intellectual components of our knowing. To say that it’s raining, for example, requires more than the sensation of light reflecting off of falling water and impinging on the retina. One must also understand the consensual meaning of the term *rain*; make the connection between the percept and that defined meaning; conclude that the two match; eliminate, perhaps, the possibility that someone on the roof is spraying water from a hose, and so on. What appears immediate (i.e., un-mediated) and instantaneous is actually a complicated process. Sensate-modeled theories of knowing oversimplify the process.

It is hardly coincidental that Lonergan's three-part formulation of knowing parallels the textbook presentation of scientific method: observation, hypothesis, and verification. Modern science has hit upon the most credible ideal of knowing to date, and achievements of science provide our best examples of human knowing (Lonergan, 1980/1990, pp.6-13): We can claim knowledge when we can (c) reasonably ground our (b) ideas in relevant (a) data.

Lonergan's theory is a critical realism. It holds that what is known through this three-step process is reality, that which exists, what is there to be known. Hence, epistemology leads into ontology. Technically said, the object of such distinctively human knowing is being (Lonergan, 1957/1992, pp.372-398), and the project of human knowing thus understood is an ever-self-refining, cumulative process that would terminate, in the ideal, only when we understood everything about everything. The reality known in this way is not merely—and sometimes not at all—material; for in addition to data, our knowns include meaning, intelligibility, some understanding; and in addition to data and understanding, our knowns include actuality, a basis for correct affirmation. To be sure, most of what we know is material things, and their materiality is part of the intelligibility that pertains to them as instances of being, actualities of particular kinds that can be correctly affirmed—as in the case of rain. But we also routinely encounter data that appear not to pertain to material things—emotions, insights, ideas, ideals, and other intra-mental phenomena, for example. The point is that one and the same epistemology, as formulated by Lonergan, can apply to material and non-material realities alike and on the basis of the same criteria can claim knowledge of them all. Succinctly stated, human knowledge is a composite of (a) data, (b) understanding, and (c) judgment, and “the real is the verified; it is what is to be known by the knowing constituted by experience and inquiry, insight and hypothesis, reflection and verification” (Lonergan, 1957/1992, p.277).

On this basis, the mind can be deemed real. To posit mind is to offer a reasonable accounting for the data of consciousness (p.299; also pp.95, 260, 358; 1972, pp.8-9, 201-202; see also James,

1902/1961, pp.59-63), that is, the inner subjective “intuition” or the “experiences” that Chalmers (1996, pp.110, 216) cannot deny. If the data of consciousness are deemed evidence as valid as are the data of the senses, to which physical science limits its concern, then valid data plus understanding plus judgment ground the affirmation of the reality of the mind as surely as these three components of knowledge do in any other case. Startlingly, however, to posit mind is to conclude to the reality of some non-material being. Given twentieth-century science, this conclusion should hardly be novel. Quarks and leptons are deemed real, but in no way are they palpable. To posit them is to provide reasonable accounts of the available, relevant data of the senses. Imperceptible in themselves, these physical entities are the conclusions of reasoning; they are meanings that must be affirmed to coherently account for the relevant evidence. Not palpability, then, but meaning reasonably grounded in relevant evidence is the criterion of the real, explicitly so in Lonergan's theory and implicitly in twentieth-century physics.

The epistemology that Lonergan (1972) elaborates is to be a formulation of the very process at work in the human mind, “the native spontaneities and inevitabilities of our consciousness” (p.18) or “transcendental method” (pp.13-20), that inherent way of knowing that unavoidably applies in every human case. Hence, this epistemology applies equally to physical being and non-physical being—because its intent is to characterize the very process of human knowing, not the myriad objects that could be known. On this basis of a reasonable account for relevant data, both mind and matter are real—although they are different kinds of reality, different kinds of being, different expressions of what can accurately be affirmed to exist. The challenge in understanding human consciousness is that the human being is a remarkable composite of many different kinds of being, but the material body and its physical senses, because they are palpable and develop early, tend to dominate our theories (pp.488, 494, 497-498).

Of course, Lonergan's epistemology has a potential drawback. It is a foundational theory of knowledge. That is, it claims to elaborate a basis

on which all knowledge is justified (cf. Braman, 2008, pp.80–81, 86–91). But after the failures of Descartes, Kant, Hegel, logical positivism, linguistic analysis, and phenomenology and in light of the resultant relativism of radical postmodernism (cf. Rosenau, 1992, for discussion), late-twentieth-century philosophers have generally deemed any foundationalism an impossibility. As philosopher Lawrence Cahoon (2010) reports, for example, “The most famous American contributor to postmodernist philosophy, [Richard] Rorty argued that the search for the foundations of knowledge is a bankrupt enterprise...; knowledge is simply whatever the verification procedures of a society say it is” (p.85). However, most foundational theories propose a set of fundamental propositions or beliefs on the basis of which all other knowledge could be logically justified (Poston, 2014). Gödel’s incompleteness theorem categorically discredits any such logic-based endeavor (Penrose, 1994). In contrast, as intimated at the beginning of the prior paragraph, via “self-appropriation” (Lonergan, 1980/1990, pp.2-21)—earlier and more descriptively called “reflection on performance” (1967, p. xiii)—Lonergan appeals to the intelligent nature of consciousness as the very engine that generates all propositions and beliefs. Lonergan’s (1972) foundation is deeper than the others (pp. 260-270). Thus, Lonergan (1957/1992, pp.364-366) claims to have resolved the Kantian problem of knowing the thing in itself, yet that claim garners only a slowly growing hearing. Today’s commonsense philosophies and what-works pragmatism might not even recognize the Kantian problem as a problem anymore. My attention to Chalmers’s theory of consciousness attempts to support my assessment.

CHALMERS’S OPTION FOR PERCEPTUAL REALITY

Chalmers (1996) frequently evinces a sensate-modeled working theory of knowledge and reality. For him it is as if, for something to be real, it must be visible, perceptible in some way, or at least imaginable; reality has to have some intrinsic properties that one could almost get one’s hands on. The contrasting understanding is telling, so I must digress briefly to make my point.

Especially in the twentieth century, science has broken through to a more subtle, a purely intellectual, mode of explanation. In terms of what David Hilbert (1902/1971) called “implicit definition,” science explains things, not by saying what they truly look or feel like to us, not by saying what use they are to us, but by relating them to one another to express what intelligibility they entail, what can be understood about them. “What they are” does not mean how they appear but, rather, what explains their functioning, what makes sense of our experience of them, what accounts for their being what they are, what natures they possess. For this reason, equations, statements of interrelationships such as $a^2 + b^2 = c^2$ in the case of a Euclidean right triangle expressed algebraically—equations become the coinage of perfected science. Engaging the data, inquiry and insight make the breakthrough and finally determine the necessary and sufficient elements to account for things. Then, prescinding from any particular case and speaking in complete abstract generality, scientists express that breakthrough with absolute precision by formulating the relationship among these elements. More stunningly than Pythagoras, for example, but exemplifying the very same intellectual “trick,” Einstein proposed $E = mc^2$. In this usage, terms and relations mutually imply, constrain, specify, indeed, they define one another. The relations dictate what terms must be in question, and the terms in question require what the relations must be (Lonergan 1967/1992, pp.36-37, 417, 515). If a , b , and c are the sides of a particular plane figure and $a^2 + b^2 = c^2$, this figure is and could only be a right triangle. The suggestion from Einstein is that the very natures of energy, mass, and light are precisely such that they lock together in the specific relationship, $E = mc^2$. It expresses what is there to be understood; it expresses the realities that are there. Energy, for example, is precisely that which exhibits certain characteristics, namely, these specific relations with mass and light. Science attempts to provide an exact account of the intrinsic nature of things. Notice, however, that as understood, the characteristics are not perceptual; they are relational, purely intellectual, grasped by understanding and confirmed by judgments. “No thing

itself, no thing as explained, can be imagined ... Once one enters upon the way of explanation by relating things to one another, one has stepped out of the path that yields valid representative images" (Lonergan, 1957/1992, p.275). And the formulations of these explained characteristics, as in the case of the right triangle, look nothing like what is being explained.

Now, Chalmers (1996) is uncomfortable with this scientific state of affairs—as is fully understandable: Refined explanation often counters common sense and challenges assumptions in the everyday world. The sun is not moving, but the earth. This metal and this wood are the same temperature although the metal feels cooler than the wood. It is strange to think that the solid materials in our world would be mostly empty space, as physicists suggest. In computerese, Chalmers depicts the scientific account as a theory of "It from Bit": Reality is "a world of pure information" (p.303), a "pure causal flux." He accurately notes that "physical theory only characterizes its basic entities *relationally* ... The picture of the physical world that this yields is that of a giant causal flux" (p.153). His discomfort is that he wants something more "substantive." In this case I see emerging a sensate-modeled epistemology, geared to perceptions, demanding palpable satisfaction.

Chalmers thinks contemporary physics leads to "a strangely insubstantial view" (p.153), "too lacking in substance to *be* a world" (p.304). He looks for "the very 'massiveness' of mass, for example" (p.153). He wants, as if, something to get his hands on. A purely intellectual accounting of our world does not seem to treat reality. Indeed, who could know by just looking that $a^2 + b^2 = c^2$ really depicts a right triangle? But at this point, it seems that for Chalmers the real must be palpable in some way; it seems that reality must be what is sensitively encountered. What cannot be somehow perceived could hardly be human reality. Besides, missing the point of implicit definition, Chalmers opines that this causal flux "tells us nothing about what all this causation relates. Reference to the proton is fixed as the thing that causes interactions of a certain kind, that combines in certain ways with other entities, and so on; but what is the thing that is doing

the causing and combining?" (p.153), he asks. Supposedly, "this view subtracted the world of all intrinsic qualities, leaving a world of causal relations, with nothing, it seems, to do the causing ... One might find this picture of the world without intrinsic nature not to be a picture of the world at all." (p.304)

When scientists propose the intrinsic qualities of things, they formulate the inherent intelligibilities of the things—what can be understood about them and validly affirmed. Accordingly, with Lonergan reality is the object of correct judgment, and with Hilbert reality is precisely articulated through implicit definition. The relational product that results is hardly the bodies that eyes could see and hands could grasp. Human knowing opens onto a universe that with Plato, Aristotle, and Aquinas transcends the perceptual, that with Einstein de-absolutizes space and time. Stunningly, being is of a whole other order in comparison to what we tend to think in our daily commonsensical comings and goings. (As I re-read this sentence, I am struck by how glibly it rolls by, but its point is monumental.) But when Chalmers asks for intrinsic qualities, he means perceptible characteristics. He imagines realities to be amenable to human sense experience. His innocent but repeated use of the metaphor "picture" is itself revealing. It's as if it requires seeing something.

Chalmers (1996) wants the entities of physics to have some internal qualities, some intrinsic properties; but, he objects, physicists "tell us nothing directly about what those properties might be" (p.153). The elaborate specifications that physics gives about a proton, for example, are not enough. The mass of an electron *relative* to other particles, accurate to the twelfth decimal point, is not enough. Seeming at this point to rely on a sensate-modeled epistemology, searching underneath the scientific explanations for something perceptible or, at least, imaginable, Chalmers opines, "Intuitively, it is more reasonable to suppose that the basic entities that all this causation relates have some internal nature of their own, some *intrinsic* properties, so that the world has some substance to it" (p.153). Seemingly, reality should be palpable.

Chalmers's concern is not without valid ba-

sis. Not only does science often discredit commonsensical understanding—as regards the movement of the earth rather than the sun or the emptiness of matter rather than its solidity, for example. But science also deals “merely” in explanation and intelligibility, and they entail generalization. Scientific explanation pertains to whole swaths of individual entities, “all things being equal” and only insofar as they are equal. On the principle that similars are similarly understood (Lonergan, 1957/1992, pp.61-62, 313), science proposes one abstracted understanding that applies to all individuals of a particular kind. In this situation, it is as if the individuals get lost because the specificity of this one, rather than that one, is irrelevant for explanation. So Chalmers is correct to protest that the world is composed of particulars and is not simply a “pure causal flux” because there are particular entities existing and interacting within that system of theoretical explanation. The question is, “How does one account for the individualities?”

Chalmers (1996) would account for them by attributing to all entities the sensate qualities that allow us to experience material things in the everyday world: They have colors, shapes, textures, densities, and all the qualities that our sense organs perceive (pp.4, 220). He would attribute such qualities even to those entities that are fully imperceptible—surely mistakenly, because of their natures and because of the well understood mechanisms and limitations of human sensation and perception. Subatomic particles simply cannot be perceived *per se*—although with cleverness they can be understood and in popularized picture-thinking they can be imagined. Individualities cannot depend on perceptual characteristics, for these, too, can fall into categories and have explanations that apply across individuals. Perceptual characteristics, even if oxymoronicly posited in non-perceptual entities, fall under scientific explanation and, thus, become once again just aspects of generalized understanding. What does not fall under explanation are the mere matters of fact—that this is this one, and that is that one; that this one is here, and that one is there; that this one is now, and that one was then. We may have before us two maple trees, but their locations are irrelevant for under-

standing what a maple is. In this regard, Chalmers (1996) invokes the standard philosophical notion of “indexicality” (pp.84–85). More explanatorily, Lonergan (1957/1992) refers to the intellectually irrelevant characteristics of material beings as “the empirical residue” (pp.50-55). It is part of empirical facticity—a matter of judgment, not of understanding; facticity is not amenable to explanation; facticity deals in sheer givens. “Inasmuch as we are understanding, we are grasping the universal apart from its instances,... the invariant apart from particular places and times” (p.540). Recognition of the nature of explanation grounds the generalizations of science in their instantiations in particular instances and then can apply the generalizations to understand the particular instances. The particularity of individuals does not get lost in the whole multifaceted enterprise of explanation.

Recognition of the empirical residue would seem to respond to the need for what, I suspect, Chalmers imaginatively wants to call “intrinsic properties,” “substance,” and the “internal nature” pertaining to particular entities. But Chalmers’s solution evinces a way of knowing that is significantly entangled with sensate-modeled epistemology. It would deem real what can be experienced perceptually, so to give individual identity even to subatomic particles, to make them real, Chalmers (1996) attributes to them “protophenomenal” or “microphenomenal properties” (p.305). In the process he must believe that science “tells us nothing about what all [its] causation *relates*” (p.153) as if the implicitly defined explanations of things do not say what they really are, as if $a^2 + b^2 = c^2$ does not really define, characterize, and explicate a Euclidean right triangle. A sensate-modeled epistemology controls Chalmers’s thinking at this point.

SALVAGING CONSCIOUSNESS BY POSITING PERCEPTS IN ALL THINGS

By *intrinsic* or *substantial* Chalmers means perceptually discerned, not intellectually concluded. He ventures to suggest what those intrinsic properties might be: phenomenal properties (p.154), that is, those properties that characterize our conscious experiences of things—for example, the experience of red and blue or heavy and

light. In other words, said succinctly, the primordial properties of matter are supposedly percepts. Or, if this is too much, although picture-thinking must have its due, “an alternative is that the relevant properties are protophenomenal properties” (p.154). These could in some way perhaps aggregate to explain how we experience, say, redness in the everyday world: “Microphenomenal properties add up to macrophenomenology” (p.307). And yes, then, as somehow entailing percepts, supposedly all entities must somehow also have consciousness. After all, supposedly, if the essence of consciousness is the occurrence of perceptual properties; where there are perceptual properties, there must also be consciousness. (This conclusion is unwarranted. The fact that I can consciously perceive a leaf as green in no way necessitates that the leaf or its color itself also enjoys perception of any kind or that their constitutive atomic elements are colored in any way.) The suggestion is that “every time a feature such as mass and charge is realized, there is an intrinsic property behind it: a phenomenal or protophenomenal property, or a *microphenomenal* property for short” (p.305).

By positing these microphenomenal properties in the entities of physics, Chalmers now has bodies to relate in that causal flux, dots of matter that could be connected by causal lines, as it were—and all could be pictured. And, by positing these microphenomenal properties in the entities of physics, he has also supposedly supplied a basis for our conscious, perceptual experiences in the macrophenomenal world, namely, bits of perceptions that accumulate as we move up from subatomic particles to objects in our everyday world. Supposedly, we have perceptions because even quarks and leptons have percepts attached to them, and these microphenomenal qualities build up until we are able to experience them with our eyes, ears, fingers, noses, and tongues and, thus, know what is real.

Thus, Chalmers has provided a theory of consciousness under the name of ubiquitous percepts. Disappointing for me to realize, this panpsychism is the substance of Chalmers’s insistence that consciousness is natural and real. He saves consciousness by positing it as a natural principle of the universe that parallels material-

ity. But to do so, he has turned theoretical science into a matter of sensations and perceptions. He has reduced consciousness to perception; and finding percepts, and then perception, everywhere, he also finds consciousness everywhere.

More accurately, he has mixed science and common sense, theory and perceptions. He has a notion of science that struggles against itself—beholden simultaneously to intelligence and to perception, determined to be truly scientific but committed first and foremost to behaviors in the everyday world, called a theory but beholden to concrete-operational thinking. But, at least, this notion leaves the world “substantial,” not mostly empty space; and this theory “saves” consciousness by positing it as a fundamental principle in the form of universal percepts. Even entities that are beyond the possibility of sense experience are imagined to have perceptual qualities, so the criterion of reality must be perceptibility. Perforce, all reality must somehow be material. Although dualistically Chalmers affirms consciousness as a kind of reality in itself, his working epistemological presuppositions appear to disqualify the reality of anything non-perceptual and, therefore, non-material.

Chalmers is using a sensate-modeled epistemology to determine the reality even of the invisible, imperceptible entities discovered by contemporary physics. He would insert perceptual contents back into the intellectual account of science. Routinely appealing to science and struggling to propose a “scientific” theory of consciousness, he would, nonetheless, make perception, not confirmed understanding, the criterion of reality. His suggestion is that quarks and leptons and all those others must have something perceptible about them if they are real.

FUNCTIONALIST EFFICIENT CAUSALITY VERSUS INTELLIGENTLY DISCOVERED FORMAL CAUSALITY

Such a perception-beholden view is closely linked to a particular understanding of causality, namely, that of the perceptible push-pull interaction of efficient causality in the everyday world. Physicists are content—if they speculate about it at all—to understand causality as the relation of mutual interdependence among the empiri-

cally verified elements named in their equations. Thus, for example, *a*, *b*, and *c* in a particular relationship determine a plane right triangle. These elements specify one another; they interactively require what one another must be. In this sense, they *cause* one another. But the causality in question is hardly palpable; it is not the effect of one body reacting against another body. Rather, the elements *a*, *b*, and *c* are constrained by their relationship, namely, the hard-won relationship that intelligence discovered in this case. This causality is a matter of pure intelligibility, so it is Aristotle's formal causality—that which makes things what they are. In contrast, Chalmers wants causality to be more perceptible and to entail palpable bodies that can interact. Causality is to be the tug and pull among some kind of imaginable substantive properties, miniature lumps of stuff, micro-perceptibles, primordial bits of conscious contents, lying behind or within the physicists' equations. The problem is confounded epistemology: Two notions of knowing vie for dominance.

Chalmers (1996) provides a striking example of the pervasive trend in contemporary philosophy to reverse the priority of intelligence over perception, to revert from theoretical commitments to commonsensical speculation. This reversal is related to the rejection of all foundationalism. Contemporary philosophy has despaired of ever being able to give a coherent account of human knowing, to provide a cognitive foundation on which all knowledge would rest. Current thinking settles for attention to “public action” in the everyday world (American Pragmatism) or else focuses on clarifying natural-language usage (Linguistic Analysis) or else attends to the specific contents of commonplace, intra-subjective experiences (Phenomenology) (Cahoone, 2010, p.47). Under the name of functionalism (on “psycho-functionalism” see Spalding, Stedman, Hancock and Gagné, 2014), Chalmers employs an uneven mix of all three. Accordingly, functionalism focuses on what things do, how they interact, and what behaviors result, and the arena of this activity is the everyday world, available to human perception (plus some *overlooked* measure of human intelligence). Thus, for example, the external behaviors of a consciousness-

less zombie are all that matter, bafflingly presumed to be indistinguishable in every way from the behaviors of a conscious human (Chalmers, 1996, pp.94-95, 120-121, 156, 158-160; Dennett, 1991, pp.76, 311, 406; see Blackmore, 2012). As supposed empirical science, on the basis of what evidence does this presumption rest? Who has studied these zombies and documented their characteristics so that appeal to them could ground an argument about consciousness and the lack thereof? Supposedly, science is to attend only to external behaviors, and an account of their functioning would constitute the genuine contribution of science. Said otherwise, explanation is a matter of causal roles, a matter of how these things make those things happen, yet, tellingly, the causality in question appears to be the tug and pull of imagined efficient causality.

Chalmers (1996) offers striking examples. Heat “is the kind of thing that expands metals, is caused by fire, and leads to a particular sort of sensation” (pp.44-45; I ignore the mix of commonsense and science in this list). That is, what is most important about heat, what is primary, is how we experience it “in the actual world” (p.45), the world of everyday interactions. In this work-a-day world of commonplace experiences, what heat means is what it does or could be used for. Of course, modern science has gone to the heart of the matter and actually explained heat in itself and, on this basis, explains why heat does what it does: The “motion of molecules is what plays the relevant causal role in the actual world” (p.45). That is, we now know that the motion of molecules is what results from fire, makes metals expand, and makes skin hurt. But for Chalmers this scientific explanation is not the primary meaning of heat, not what defines *heat*. The scientific explanation is secondary. What defines *heat* is what it means *to us*, what heat does *to us* and *around us*, not what heat is *in itself*. “*Explaining* heat involves explaining the fulfillment of the causal role ... Once we discover how that causal role is played, we have an explanation of the phenomenon. As a bonus, we know what heat *is*” (p.45).

Although he plays both sides of the field by acknowledging that “causal role,” for Chalmers explanation fundamentally means to understand

our encounters with heat in the everyday world, the spatio-temporal, material world of physical and perceptual push-pull interactions—“the actual world,” that is, the one we perceive around us: Heat is what burns us; the real is what we bump into. The explanatory contribution of science is just “a bonus.”

Similar considerations apply to water. For Chalmers, primarily, first and foremost, *water* names “the dominant clear drinkable liquid in the oceans and lakes”; it is “the *watery stuff* in a world” (Chalmers, 1996, p.57). Only secondarily and as another extra, water is H₂O. It might as well be XYZ. This fact would not matter as long as it *functions* as “the dominant clear, drinkable liquid in the environment” (Chalmers, 1996, p.57). Realities are defined by the everyday, human experience and use of them—what they are to us, not what they are in themselves. Personal experience displaces any need for implicit definition.

In passing, note how Chalmers’s terminological usage contrasts with Lonergan’s and depreciates the meaning of explanation. For Lonergan (1957/192) *description* names our account of how things relate to us and our senses. On the other hand, *explanation*, the task of science, understands how things relate to one another (pp.316-317, 368-369); and as a purely intellectual enterprise, perfected science expresses those relationships via implicit definition, as discussed above. It is critical to emphasize that, along with agnostic postmodern philosophy that despairs of any foundational account of knowledge, functionalism opts for personal engagement in the work-a-day world, characterized by organic vitality and animal perception, as the prime concern of human knowing. Human distinctiveness gets lost.

FUNCTIONALISM: SCIENCE AT WAR WITH ITSELF

The point to be made here is simple enough. The notion of science in much of contemporary consciousness studies and psychology overall (Spalding et al., 2014) is incoherent. Consciousness studies is committed to being as scientific as modern science stunningly is, yet in practice consciousness studies rejects the contemporary intellectualist understanding of science. As best I understand them (Helminiak, 2015), current

studies of consciousness in philosophy, psychology, and computer science aim toward some scientific account; yet the presuppositions of this enterprise run counter to contemporary science in its most successful forms—physics and chemistry.

- Whereas the “hard sciences” opt for a theoretical explanation of things, functionalism prioritizes a commonsensical, perceptualist understanding.
- Whereas the hard sciences are well aware that what they can reasonably affirm is hardly palpable, functionalism sets up palpable interactions “in the actual world” as a controlling criterion.
- Whereas the hard sciences see H₂O and molecular motion as the primary explanations of water and heat, functionalism focuses primarily on “watery stuff” that we drink and the “no-no” that causes burns.
- Whereas science proposes fully theoretical explanations from which the explanations of everyday events follow, functionalism prizes everyday interactions and relegates the achievements of science to the secondary status of a bonus.
- Whereas the hard sciences understand mass within an explanatory web of relationships with other fundamental realities, functionalism would suppose as “intuitively ... more reasonable...that the basic entities that all this causation relates have some internal nature of their own, some *intrinsic* properties ... [such as] the very ‘massiveness’ of mass” (Chalmers, 1996, p.153), and mass becomes humanly experienced heaviness—although it is still matters in weightless space!
- Whereas science relies on intelligence reasonably grounded in evidence and with Einstein even transcends the particularities of space and time, functionalism appeals to perception and attends to personal experiences of push-pull encounters in the spatial, temporal world.

In brief, science opts for an intellectual epistemology, but a sensate-modeled epistemology controls functionalism.

CONSCIOUSNESS LIMITED TO INTENTIONALITY AND CHARACTERIZED BY PERCEPTUAL EXPERIENCES (*QUALIA*)

Chalmers (1996) stands as a rare philosophical voice defining consciousness as something distinct in itself and willing even to wear the la-

bel “dualist.” Nonetheless, Chalmers still overlooks the essence of the uniqueness he would defend. Overwhelmingly, he characterizes consciousness as intentional. In this usage, the term *intentional* has nothing to do with current psychotherapeutic jargon that emphasizes deliberation, choice, or planning; rather, the term expresses the root Latin meaning of directionality (*in + tendere* = to stretch toward). Applied to consciousness, it implies a subject-object duality. Intentionality means that the subject is attending *to*, directed *toward*, reflecting *on*, *intending* some object. Almost ubiquitously, consciousness studies identify human consciousness with intentionality (see Blackmore, 2012). The slogan holds that consciousness is always consciousness of something. Thomas Natsoulas (1978) emphatically makes this point: “It is arguably our most basic concept of consciousness. One’s being conscious, whatever more it might mean, must include one’s being aware of something” (p.910).

To be precise, in Chalmers’s (1996) case the matter is not black and white—or, at least, it is not easily determinable. Chalmers does speak repeatedly of “conscious experience” in the singular. Referring to the biological processes that neuroscience can specify, he writes, “When we perceive, think, and act, there is a whirl of causation and information processing, but this processing does not usually go on in the dark. There is also an internal aspect; there is something it feels like to be a cognitive agent. This internal aspect is conscious experience.” (p.4)

By “conscious experience” Chalmers might be alluding to “non-reflecting consciousness” (Helminiak, 1996, p.45; see also 1984, 2014, 2015), that is, to consciousness as “conscious,” not merely to consciousness as “intentional” (Loneragan, 1972, pp.6-9; also 1957/1992, pp.299-300, 344-346). In question might be the distinctively human experience of subjectivity itself, the self-consciousness of the subject *qua* subject, sometimes called “consciousness of consciousness” or “awareness of awareness.” It would be a constant that pertains across the diverse experiences of different contents of consciousness. James (1890/1950) referred to it, in contrast to the experience of objects, as “an obscurer feeling of

something more; ... of nothing objective at all but rather of subjectivity as such” (p.305). Noting a commonplace in Eastern thought, Tarthang Tulku (1979) relates that: “according to the Buddhist way of looking, ...mind is not just ‘being aware of’ an object ... There is a more pervasive substratum of consciousness, termed *kun-gzhi* in Tibetan, which is a kind of intrinsic awareness which is not involved in any subject-object duality” (pp.41-42). If by “conscious experience” in the present case Chalmers might be referring to *kun-gzhi*, the allusion is quickly obscured.

Chalmers’s (1996) singular *conscious experience* quickly drifts into a plural, a multiplicity of conscious experiences, and they and their respective particularities become the actual focus of his concern about consciousness (pp.4, 6). This drift appears deliberate. Chalmers asserts, “The subject matter [consciousness or conscious experience] is perhaps best characterized as ‘the subjective quality of experience.’” This phrase is a perfect parallel to Nagel’s (1974) putative “subjective character of experience” in bats and other creatures (p.444). When Chalmers (1996) elaborates this experience, he shows that he does, indeed, take it to be multiple: “Conscious experiences [plural] range from vivid color sensations to...aromas; from...pains to...thoughts on the tip of the tongue; from sounds and smells to ... musical experience ... All these have a distinct experienced quality” (p.4). Clearly, now, the experienced quality in question, that “subjective quality of experience,” is that quality proper respectively to each of the specific contents of awareness.

Moreover, Chalmers makes this focus central to his theory of consciousness. In addition to the very existence of consciousness as his first theoretical concern, Chalmers’s second object of theoretical concern is “the specific character of conscious experiences” (Chalmers, 1996, p.5)—in the plural. That character is red, rather than blue (p.5); book, rather than dagger (p.220). Thus, this singular “specific character” of the plural “conscious experiences” unfolds into a catalog of many different experiences with specific characteristics: touch, smell, taste, temperature, pain, bodily sensations, mental imagery, thoughts, and emotions (pp.7-10).

Clearly, Chalmers's attention is not on the experience of the very presence of these contents "to" the experiencing subject, not on the consistent experience "of" experience itself. The quotation marks around the prepositions are to indicate that, in this peculiar case, the preposition does not take an object but references a psychological subject. The presence of a subject "to" him- or herself is not, in the first instance, an objectifying presence—e.g., thinking *about* oneself—but is only a raw experience amenable to subsequent objectification (see Helminiak, 1996, pp.46-47, 2014, 2015). But Chalmers's attention is on the intentional dimension of consciousness, namely, the particular and diverse characteristics of whatever object is being experienced. Pervasively in the field (see Blackmore, 2012), an alternative term for the experience in question is "*qualia*," a Latin neuter plural adjective used substantively to mean "such-ness-es." Supposedly, *qualia* actually specify consciousness: "We can say that a mental state is conscious if it has a qualitative feel—an associated quality of experience. These *qualitative* feels are also known as phenomenal qualities, or *qualia* for short" (Chalmers, 1996, p.4).

Rightly renowned for faulting theorists for avoiding the hard problem of consciousness, Chalmers writes, "The problem of explaining these phenomenal qualities is just the problem of explaining consciousness. This is the really hard part of the mind-body problem" (Chalmers, 1996, p.4). Chalmers is correct to this extent: Accounting for the varied experienced qualities of any particular objects of experience is a hard problem of consciousness—because, I would insist, the very experience of *qualia* is, indeed, something different, if inseparable, from the underlying brain processes (Helminiak, 2015, pp.281-302). However, Chalmers overlooks the even harder problem of accounting for the subjective experience *per se* of any experience whatsoever, regardless of its particular *qualia*. He does acknowledge this problem but ever only in passing. Chalmers (1996) would call this dimension of conscious experience "acquaintance" (p.197). He elaborates, "One sometimes feels that there is something to conscious experience that transcends all these specific elements: a kind of background hum, for instance, that is

fundamental to consciousness ... the phenomenology of the self ... very hard to pin down" (p.10; see also passing allusions pp.4, 27, 204, 246, 270).

Indeed! This "background hum" is the very matter that constitutes the distinctiveness of human self-consciousness. The distinctiveness is not the everyday experience of one's becoming to oneself an object of awareness or concern; it is not about adverting to oneself or thinking about oneself; it is not about reflecting on oneself; it is not about becoming the object, "me," of one's own awareness. It is about being a subject, "I," present non-reflectingly "to" oneself within the very act of being present reflectingly to any object. It is the matter of subjectivity. Nonetheless, the perceptualist interpretation is the understanding that theorists most commonly give to consciousness: awareness of an object.

Again I discern a sensate-modeled theory of knowing operative in that mainline interpretation. As if consciousness were another version of sensation wherein a physical stimulus encounters a physical receptor, consciousness is also imagined to be the confrontation of the subject and some object, body against body. So the novelty of human consciousness that emerged in natural history, over and above the responsiveness of animal sensation and perception—human uniqueness goes unnoticed.

Chalmers (1996) identifies consciousness with the diverse experiences of *qualia*. He characterizes consciousness, not in itself, but by the characteristics of the multiple contents that awareness might have. His understanding of consciousness is merely intentional and, what is more, almost uniquely perceptual. Why so?

A controlling concern in consciousness studies (see Blackmore, 2012) is the mind-body problem, the challenge of linking consciousness with brain processes. We already know a good bit about some of them, visual perception, for example, although knowledge even of this best understood of mental phenomena quickly breaks down as neuroscience moves up the levels of visual processing in the brain. But wonder, awe, question, insight, judgment, decision—all the distinctively human mental acts—are still pure mystery to neuroscience, still virtually the proverbial ghost in the machine. "Despite defini-

tional complexities, consciousness is an active area of study with many competing theoretical models but not, at yet, much hard physiological data” (Breedlove and Watson, 2013, p. 584; but see Kounios and Beeman, 2009, 2014). Accordingly, proposing experiential parallels to neuroscientific findings and even literally identifying consciousness with them (e.g., Churchland, 1996; Dennett, 1991), consciousness studies focuses on “conscious experience” in terms of its contents. Of course, percepts offer a ready and—well, relatively—easy topic. So emphasis on *qualia* is pervasive in consciousness studies. But this emphasis on subjective or qualitative “feels” is a distraction. It diverts attention from consciousness itself to the many objects of awareness and their particular experienced qualities.

To link perceptions and *qualia* is to overlook the distinctiveness of human consciousness and to posit *qualia* and, perforce, consciousness wherever perception occurs. But a unique kind of consciousness is proper to humans (following a very welcome and useful suggestion of Roy, 2003, p.27, I use, and throughout this paper have used, the terms *consciousness* or *conscious* in this unique sense, and *awareness* or *aware* to refer to intentionality). We humans not only have perceptions, as do other animals; we can also be reflectingly aware of our perceptions; then we can name them, characterize them, and even talk about them as objects of interest *per se*, even as I am doing now. Besides, my talk is hardly a mere perceptual phenomenon. Talk carries meaning. Although you would not grasp my ideas apart from the words and signs I produce, the ideas you grasp are not those words and signs. The ideas we share are not at all perceptible *per se*; their actuality depends on acts of conscious understanding within human intelligence. The meaningful exchange we are engaging right now is a product of human consciousness at work. Our exchange is real, but it is not perceptible.

HUMAN CONSCIOUSNESS MODELED ON ANIMAL PERCEPTION

Almost inevitably, the examples of *qualia* in consciousness studies are perceptual, for example, the sensate experience of seeing red (Blackmore, 2012). Then, because animals exhibit

sensation, they supposedly experience *qualia*. Then, because humans actually do experience *qualia* in percepts and because the human experience of *qualia* (but only the human experience) is correctly linked with consciousness, animals are said to have consciousness, too—as are, also, computers, thermostats, and anything that effectively interacts with its environment (e.g., Chalmers, 1996, pp.219-222, 225-229, 293-297; Dennett, 1991, pp.431-433; Griffin, 1991, p.55; compare Penrose, 1994, p.56; Searle, 1980, 1997, pp.11-14).

This line of reasoning ignores human distinctiveness. It overlooks the fact that humans know *qualia* only because humans are conscious. The logical priority (“causality,” in another way of speaking) is this: Consciousness explains *qualia*; *qualia* do not explain consciousness.

The explanatory consciousness in question is not merely intentional. To be aware, to be consciously intentional, the consciousness in question must also, and with a logical priority, be conscious. Thus, James (1890/1950) spoke of that “obscurer feeling of something more” (p.305) as “the indispensable subjective condition of their [the objective contents of the mind] being experienced at all” (p.304). Intentional awareness must enjoy the self-consciousness that constitutes subjectivity, an abiding presence “to” oneself, not as an object of one’s concern, but as the concerned subject, as the one experiencing the object.

Confusion arises easily because intentionality—agent-object interaction—occurs in different kinds: Intentionality pertains both to animal sensation and to human awareness. Both involve directedness of an agent toward some object. When consciousness is identified with intentionality and when the stock examples are limited to perception, the intentionality of sensation is easily conflated with the intentionality of awareness. Two kinds of intentionality are confounded. The perceptual response of animals is equated with the intellectual response of persons. Yet intentional awareness, reflecting consciousness, reflection on one’s experiences as such, must first and foremost be conscious, non-reflecting. Consciousness as conscious is the condition for the possibility of awareness as intentional.

Whatever is reflected on must first be in con-

consciousness as conscious for that content to then become an object of intentional awareness. Unless I am present “to” myself when present to an object, I could not, then, experience my awareness of the object. Only a unique kind of self-presence presents to us humans data within consciousness to be reflected upon as such, namely, as internal, mental experience: Humans can reflect upon their experience as “experiencers,” conceptualize the experience, and, then, even think about ideas. Only the potential self-reflectivity of awareness allows us humans to step back from conscious experiential input and, by stepping back and inquiring, to discern differences—*qualia*—within the input. The experience of *qualia* depends on the experience of consciousness. The misidentification of consciousness with the intentional experience of *qualia* allows for oversight of the genuine uniqueness of human consciousness as primordially non-intentional, namely, conscious.

To make my overall point, consciousness studies controlled by a sensate-modeled epistemology will only be able to conceive of consciousness as intentional awareness. The unexamined presuppositions within the epistemology, so congenial to the materialistic *Zeitgeist* of contemporary scholarship (Spalding and Gagné, 2013; Spalding, et al., 2014), prevent the understanding of consciousness as conscious.

SUMMARY AND CONCLUSION

I have focused on aspects of David Chalmers’s (1996) theory of consciousness to exemplify pervasive shortcomings in current consciousness studies insofar as I know them. I discerned those shortcomings by applying the purely intellectual epistemology formulated by Bernard Lonergan (1957/1991, 1972, 1980/1990). The pivotal issue in this discernment was the difference between a sensate-modeled epistemology, which conceives knowing as a kind of perceiving, and an intellectual epistemology, which conceives knowing as reasonable judgment, that is, the affirmation of an idea on the basis of the relevant evidence. Arguably, reliance on a sensate-modeled epistemology and the functionalism compatible with it is the source of the many anomalies, peculiarities, and whimsies within contemporary con-

sciousness studies: the inability to affirm the reality of the invisible mind, the predilection for merely perceptual examples of objects of conscious experience, the focus on *qualia* that supposedly exemplifies consciousness in non-human animals, the limitation of consciousness to the subject-object interaction of intentionality, the projection of palpable properties into the theoretically defined entities of contemporary physics, the imaginative construal of explanatory or formal causality as the tug and pull of efficient causality in the work-a-day world, the argument based on unconscious zombies gratuitously asserted to be indistinguishable from conscious human beings in their every external behavior, the attribution of consciousness even to inanimate interactive machines, and the panpsychism that salvages consciousness by finding it everywhere without its making a discernible difference (Chalmers, 1996, pp.177, 295-296; Dennett, 1991). Oversight of the genuine nature of human consciousness is at one with the controlling sensate-modeled epistemology. Both reduce consciousness to perception and, perforce, report nothing more.

In contrast, allowance of Lonergan’s purely intellectual epistemology, grounded in attention to the full range of human mental acts (Helminiak, 2014), entails acknowledgment of the non-material, non-perceptual nature of human consciousness. Concomitantly and illustratively, an intellectual epistemology also recognizes the meaningful nature of the human world. The realities we know—including plains and mountains, organisms, emotions, memories, images, minds, insights, thoughts, and values—are only sometimes perceptible bodies. Not all that exists is material and palpable. On the selfsame criterion of reasonable judgment about an understanding of experienced data, the mental can be deemed as real as the physical; consciousness can be deemed as real as the brain; the spiritual can be deemed as real as the material; causality can be understood as a fully intellectual explanatory agency. Indeed, overall, meaning—not materiality or sensibility—is the distinctive characteristic of human reality and the universe we share, though it also be material in part. Ours is a world “mediated by meaning and motivated by value”

(Lonergan, 1972, p.265). In this world, objectivity in knowing is not a spatially conceived matter of grappling with bodies lying “out there” in the material world or with images and feelings encountered “in here” in the mental world. Neither is objectivity an oxymoronic matter of somehow eliminating from human knowledge all “subjective” input on the part of the knower. Rather, “objectivity is simply the consequence of authentic subjectivity, of genuine attention, genuine intelligence, genuine reasonableness, genuine responsibility” (p.265). Distinctively human intellectual knowing is a product of human consciousness. An adequate theory of consciousness and an adequate epistemology go hand in hand. Affirming the one entails affirming the other. To be sure, this understanding challenges postmodern sensitivities by implicating a *sui generis*, a non-material or spiritual, nature of consciousness. At least, however, the results are coherent. Without requiring anyone to affirm other-worldly or non-empirically-based entities—including zombies!—the results are also arguably true to the phenomenon in question, and the results welcomingly confirm Chalmers’s “intuition” of the reality and uniqueness of human consciousness.

Endnotes

1: This article reports one major theme of Helminiak (2015) and, thus, includes long excerpts, sometimes highly edited, used with permission of SUNY Press.

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