A Buddhist Critique of Cartesian Dualism in the Cognitive Sciences

Naturalizing Mind and Qualia

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 $T_{\rm HE\ TASK}$ of "naturalizing mind" has been underway for some decades now and its assumptions either explicitly or implicitly underlie nearly all research in the brain sciences. "Naturalizing mind" refers to the attempt to understand how mind and mental phenomena work by reference to nothing but the material processes measurable, in principle, by the natural sciences. On the face of it, this is a promising direction. As technology keeps improving, so too does our ability to probe into neurological processes, revealing more and more about how the brain works. Unfortunately, the notion of "naturalization" carries with it certain philosophical assumptions about the relation between mind and matter that make it much more problematic than first appears.

This is because the idea of "naturalization"—that the only relevant facts are material facts, and may well be the only real facts—is itself a vestige of Cartesian dualism. The usual version of this is "substance dualism," the idea that mind and matter are two distinct substances with ontologically distinct natures. This attempt to isolate the material part of experience from the mental part, however, in large part accounts for the intractable nature of the mind-body problem. We cannot readily put back together what we have posited as ontologically apart. If, as sub-

stance dualism maintains, the material elements are completely insentient and the sentient elements are completely immaterial, how could there be any relation or interaction between them? In short, insofar as material means nonmental, the project of "naturalizing mind" cannot avoid reductionism—reducing the mental to the material.

We face the same ontological gulf when we attempt to isolate mind as a distinct entity or essence, or—a more recent development—to think of subjective experience as having an intrinsic nature or irreducible quality, dubbed "qualia," what it feels like to experience something. This is due to the assumption that the "essence" or "intrinsic" nature of mind or experience somehow exists apart from the causal conditions within which it occurs. For implicit (and often explicit) in the notions of "essence" or "intrinsic nature" is the idea that these are not causally dependent, that they are not involved in a complex web of causal interrelations with material processes. So, once again, either we have matter without mind, or we have mind without matter.

But neither of these options will help us understand the relationship between mind and matter, or to clearly and non-reductively relate the varieties of human experience, particularly spiritual experience, to the body/ brain. The twin ghosts of Cartesian dualism—still alive and well in the notions of qualia and naturalizing the mind—arguably prevent further progress. Is there any way beyond this? Can we use different categories, different ways of cutting up the world, that might avoid these problems?

Buddhist modes of analyzing experience suggest one way, because the starting point for Buddhist analysis of mind is not the ontological distinction separating mind and body, but the causal relationship uniting them. Consciousness, in mainstream Indian Buddhist thought, is a process that occurs with the coming together of objects and their respective sense faculties; as such, it is a function of a pattern of interaction between them and not an intrinsic property of one of them. In this specific way, Indian Buddhist thought is commensurate with scientific approaches to consciousness in a way that substance dualism (and its multiple descendents) is not: for it defines consciousness in terms of causal relations rather than in terms of essential or intrinsic natures.

Indian Buddhist thinkers, in fact, argue that the very notion of an essential entity or intrinsic nature is incompatible with a causal view of

things. It leads, they argue, to just the kind of conundrums we find in the mind-body problem. This critique of essentialism is, I believe, one reason that traditional Buddhist thought, however ancient, remains relevant to our discussions today. For we will only seriously seek alternative paradigms once we are convinced that Cartesian dualism (in all its varieties) is unworkable. We will first discuss the general Buddhist critique of essence, before applying that mode of criticism to the problems of materialism and qualia.

MADHYAMAKA CRITIQUES OF ESSENTIALISM

The two major schools of Mahāyāna Buddhist philosophy in India, Madhyamaka and Yogācāra, have complementary approaches to these problems. The basic ideas of the Madhyamakan school were initially developed by the philosopher Nāgārjuna (ca. 1st c. CE), who argued that something that is or has an unchanging essence (svabhāva), existing independently in its own right, could not play a causal role in how things come to be. This is because "coming to be" is a temporal process and an independent and unchanging nature is—by definition—not involved in the temporal processes of change and interaction that we call causality. (On the other hand, if its unchanging essence were that of a cause, then, since this causal nature is unchanging, it would be eternally causing for ever and ever.) It therefore makes no sense to speak of an unchanging essence within a temporal pattern of causal interaction; essences and causality are simply incompatible. Accordingly, if mind actually were an essence, it would exist outside the realm of causation, rendering mindbody interaction inconceivable. The mind-body problem thus remains intractable as long as we think in terms of essences.

Similar problems occur with the idea of an essential characteristic, defined, again, as an unchanging quality that exists on its own, independent of anything else. Take, for example, the claim that the essential characteristic of mind is intentionality, defined as having an object or being "about" something. These two are incompatible: an essential nature is not dependent on something else, yet intentionality—by definition—requires something else, viz. an object. So either this essential

intentionality is indeed *not* dependent on something else, in which case it would exist independently of an object (but then it would no longer be intentional); or else it is dependent on something else, in which case intentionality would not—by definition—be its essential characteristic. The notion of "intrinsic intentionality" is therefore incoherent, it does not hold together. It is an artifact or vestige of substantialist or essentialist thinking. In short, mind or consciousness, like any other phenomena, is better understood as part of an integrated pattern of causal interaction rather than an essential entity existing in solipsistic isolation.

ESSENTIALISM OR NOMINALISM?

One might object that no one nowadays seriously believes in an "essential entity or nature" that is truly independent of causal processes, and that this is just a straw-man used for rhetorical purposes. There are indeed many people who readily accept the notion that "entities" and their "natures" are merely convenient names for concatenations of conditions and are not real entities in themselves. A market, for example, is nothing more than a name we give for the time and place where buyers and sellers meet to exchange goods; the same is true for all "entities." Indeed, the influential philosopher of science, Karl Popper, not only distinguishes between a "nominalist interpretation, as opposed to an Aristotelian or essentialist interpretation" of scientific concepts, but also argues that "in modern science, only nominalist definitions occur, that is to say, shorthand symbols or labels are introduced in order to cut a long story short." In other words, what we normally think of as an essential entity or nature is, strictly speaking, merely a designated part of some larger pattern of causally interrelated phenomena—the "long story" these shorthand symbols conveniently abbreviate. For the most part Buddhists concur, calling all apparent entities "conventional designations" (prajñapti).

Popper"s claim is also exemplified in evolutionary biology. Not only had "Darwinism... banished essentialism—the idea that species members

I. POPPER, The Open Society and its Enemies, 1952, II, p. 14; cited in GOMBRICH, How Buddhism Began, 1996, p. 2. Emphasis added.

instantiated immutable types,"2 but, according to prominent evolutionist, Ernst Mayr, "the ability to make the switch from essentialist thinking to population thinking is what made the theory of evolution through natural selection possible." "Essentialist thinking," in his view, had to be abandoned precisely because essences are—by definition—removed from the causal patterns of interaction wherein and whereby things "come to be;" in other words, a species essence does not and cannot evolve. This shift from thinking in terms of essences to thinking in terms of interaction has occurred and is still occurring, albeit unevenly, in nearly all the disciplines. Indeed, it effectively characterizes modern thought.

Yogācāra: Overcoming Essentialism AS AN EPISTEMOLOGICAL CHALLENGE

This "switch from essentialist thinking to [interactional] thinking" is also the focus of the second school of Indian Buddhist Mahāyāna philosophy, Yogācāra (4-7th c. CE). Grounded in the logical critiques of essentialism articulated by the Mādhyamikans, Yogācārin philosophers emphasized their epistemological implications. They argued that the basic epistemological problem—and hence the basic spiritual problem—is that we falsely imagine (abhuta-parikalpita) that the subjective dimension of experience is truly separable from the objective dimension, that we actually *are* independently existing subjects distinct and separate from equally independently existing objects. They claim, moreover, that we ordinarily and nearly universally reify our experiences into exactly this kind of subject-object dualism, and that, to our detriment, we think and act as if we were isolated, reified entities rather than thoroughly embedded in complex causal relations.

This "imagining the nonexistent" not only imagines that we are separate from the larger causal networks in which we are embedded, it also encourages us to ignore the effects of our actions (karma) on the larger

^{2.} Richards, Darwin and the Emergence of Evolutionary Theories of Mind and Behavior, 1987, p. 4.

^{3.} Mayr, Toward a New Philosophy of Biology, 1988, p. 15f.

world. That is, the Yogācārins argue that such reifications, and the philosophies articulating them, like Cartesian dualism (and its derivative, reductive materialism), are not only incoherent, they are also harmful. We can, they argue, see more clearly, think more coherently, and act more constructively when we fully comprehend the causal embeddedness of our lives and adjust our actions accordingly. An important part of this constructive program is developing conceptions of mind and world that reflect this causal embeddedness. In this process, one eventually comes to recognize that both subject and object are "dependent on others" (paratantra), a realization that, when "fully perfected" (parinispanna), becomes the ultimate realization in Yogacara thought. Hence, well conceived causal models are not only important for understanding the world, but for Indian Buddhists at any rate they also have a spiritual dimension as well.

MATERIALISM AND QUALIA AS SUBJECT-OBJECT DUALISM

Applying these "Buddhistic" analyses to our current conundrums, we could say that the mind-body problem arises from conceptually separating two of the components of any experiential process—the bodily and mental dimensions—and then reifying them as ontologically independent entities or natures. Despite many modifications, most scientific and philosophical approaches to mind preserve certain aspects of essentialist thinking from Cartesian dualism, i.e. the assumption that subjective and objective realms remain altogether distinct. 4 The arena of this dualism, though, has shifted from the relatively gross level of body and mind to the more subtle level of brains and experience, that is, of neurons and qualia. The basic issues, however, remain much the same: if the brain is "dead matter" (as if neurons were not living cells), then

^{4.} I have benefitted immensely, especially in this portion of the paper, from Edward Feser's incisive Philosophy of Mind, 2006, although not agreeing with him on all points.

how could what is *essentially* material ever give rise to what is *essentially* subjective?

In order to avoid these difficulties with substance dualism, many have argued for "property dualism," a view that holds there is only one real substance, one kind of "stuff" as it were, but it has two distinct properties, one material and one mental. Our experience of color, for example, can be understood in these two ways. The wavelengths involved are physical properties detectable by objective measurement and fully implicated in material causal mechanisms. Color, on the other hand, is a qualia, an experiential property accessible only to the experiencing subject (which is why color blindness can easily go undetected); it is only indirectly amenable to qualitative analysis. In other words, physical properties are susceptible to objective, public, third-person analyses, while experiential properties—qualia—are only accessible through subjective, private, firstperson accounts. It is how we know them that differs, not what they are.

Notice the underlying structure of this. We have shifted from substance dualism, which is ontological, to property dualism, which is, in effect, epistemological: "experience" is the private, subjectively accessible dimension while neurons, etc., are the public, objectively accessible dimension. We have replaced a mind-body dualism with a subject-object dualism. But in contrast to Yogācāra Buddhist analyses of the interdependence of subject and object, which operate only in interaction, these two are typically seen as independent—or even incommensurate—epistemologies. Moreover, one or the other of them is typically considered paramount.

Eliminative or reductive materialism, for example, claims that the subjective realm of experience only appears to be independent, but even this can be effectively eliminated: once we know enough about the brain we will be able to exhaustively explain experience in material terms, the only real terms there are. This is a modern version of the old appearancereality problem. Qualia, what we appear to experience, have no truly independent reality and hence require no nonmaterial explanation—they are purely epiphenomenal, mere by-products of the material processes which alone are real. In effect, all first-person accounts are valid only insofar as they directly reflect, or may be wholly reduced to, third-person accounts. In this view, we can never truly explain our behavior by appealing to direct experience—to our desires, feelings, or intentions—since these are merely epiphenomenal. Explanations of experience must —in principle—be couched in terms of their material substrate. Indeed, not only is our desire to understand our minds itself a mere by-product of these exclusively real material processes, but so is any desire we might entertain to the contrary! We are in effect automatons only imagining we are agents—such is the logic of reductive materialism.

In part as a response to this unappealing (and ultimately incoherent) vision, many posit an intrinsic subjectivity, the counterpart to the objective side of the subject-object dichotomy. If mind is intrinsically intentional, if it is intrinsically "about something," then it possesses its own nature and properties independently of its material substrate. As FESER (2006, 172) succinctly explains: brain processes, composed as they are of meaningless chemical components, seem as inherently devoid of intentionality as sound-waves or ink marks. Any intentionality they do have would have to be derived from something else. But if everything that is physical is devoid of intentionality, then whatever has intentionality would have to be nonphysical. It follows then that since mind does have intrinsic intentionality it must be nonphysical.

But this too has its problems. If our intentional objects, our qualia, were truly independent of any material basis, they would not be involved in causal interactions with the body. We could neither explain why we seem to experience red when we drive up to a stop sign, since the qualia of this seeing should occur independent of our retinas and visual faculties; nor could we explain how this seeming experience of red is connected to our actually stopping, since, again, the seeing is intrinsically nonphysical and hence—by definition—unconnected to our nervous system or muscles.

The notion of qualia thus resembles a Cartesian immaterial essence, which rendered causal interaction between body and mind so inexplicable. And insofar as the notion of qualia assumes an underlying ontological dualism between body and mind or an epistemological dualism between first and third person modes of knowing, it has not yet resolved the mind-body problem. Indeed, insofar as subjectivity is exclusively defined as first person and private, and science depends on what is third person and public, subjectivity in principle remains outside the purview of materialist science (FESER 2006, 105). The unbridgeable gap still remains, but the boundaries have now been drawn between subjective and objective aspects of experience. And, unfortunately, our respective methodologies for studying mind-body interaction both reflect and reinforce these distinctions.

REUNITING OR REINFORCING FIRST AND THIRD PERSON DISCOURSES?

This subject-object dichotomy seems to be enshrined—rather than overcome—in the search for "neural correlates of consciousness," particularly in the investigation of meditation practices. While this approach promises to bridge the gap between subjective and objective aspects of experience, it typically assumes the very subject-object dichotomy we have found problematic. It often (though not always) takes third person, neurological accounts of the brain, on the one hand, and correlates them with first person, "subjective" accounts of experience, on the other—as if neither of these accounts were problematic, as if both of them simply "tell it like it is" and all we need to do is match them up. (This is undoubtedly an oversimplification; my apologies.) But neither of these—first person and third person accounts—are as independent of each other as they first appear.

First, we need to question some of our assumptions about scientific knowledge in general and neuroscientific knowledge in particular. As we are well aware, science is a human enterprise, driven by human interests, and both inspired and constrained by human intelligence and ingenuity. In this respect, the third person perspective championed by most scientists, as successful as it clearly is, is nevertheless a subset of all human perspectives. Every scientific statement is simultaneously and unavoidably a human statement about the world. However occluded, "first person" experiential perspectives are always implicitly, even consensually, present. The interdependence between subject and object, our being-in-theworld, is not negated by a methodological objectivism.

Even in terms of theory construction, all our findings about mindbrain are only intelligible within certain frameworks of understanding. They rely on theories and paradigms—always open to provision—that tell us how to interpret data, how to synthesize data, that tell us what even counts as data. In short, scientific knowledge is itself a kind of interpretation—valid, useful, and rigorous, but nevertheless an interpretation—of the world that depends upon our tools of measurement, our modes of understanding, and our means of explanation.

All this is no less true for the subjective side of experience, particularly when investigating religious or spiritual traditions. We need to question the assumption that Buddhist monks, for example, give us an accurate and literal description of first person "meditative experience," as if their descriptions unproblematically mapped onto the world, albeit their "inner world," without distortion, interpretation or perspective.⁵ Rather, as with any conceptual system (with language itself), monks superimpose a set of terms—with purportedly precise, clear and stable meanings onto the flux and flow of their own individual experiences. They can do this not simply because they are trained in introspective meditation, but because they are trained in the traditional terms used to describe such meditation. How useful would it be if they used completely idiosyncratic terms to describe their experiences? How could they have learned meditation if their teachers had used such terms? Rather, the monks unavoidably and necessarily use conventional and consensual terms precisely because they have been acculturated as "Buddhist meditators." And such learning, like language learning and a host of other interpersonal skills, is inescapably intersubjective. There is no purely subjective, nor purely objective, mode of communication. Their "accurate descriptions," like our scientific findings, unavoidably mediate experience, world and word in that inseparable, intersubjective mélange we call culture.

This is no less true for our most common experimental subjects, the "average" undergraduate. They have all been socialized and acculturated for twenty years or more and their brains have radically changed from the time they were born. Their current brains process complex language, social cues, and cultural symbols almost instantaneously and mostly auto-

^{5.} Most Buddhist traditions reject this simple kind of correspondence theory of truth, as evidenced, for example, by the long-running disputes regarding the qualities, content and epistemic claims of various meditative practices.

matically. It seems impossible, therefore, to ever examine an unsocialized or a nonlinguistified adult brain. And what could they tell us if we did? Even at the neurological level we are inescapably permeated by culture.

Thus, to the extent that these three considerations are pertinent that neuroscience is a theory-laden human enterprise, that meditators are not innocent informants but acculturated individuals, and that all adult brains are radically socialized and linguistified—we cannot assume a truly autonomous third-person knowledge set up against an equally autonomous first-person knowledge, the correlation of which will give us indubitably accurate knowledge about the relation between brain and experience. All of these are inescapably intersubjective; that is, they are related in their very origins. It is not enough for us to perceive them coming together after the fact, as it were; we need to conceive of them as together from the beginning.

This is our next challenge.

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