



HOW TO BE A HOLIST WHO REJECTS THE BIOPSYCHOSOCIAL MODEL

Diane O'Leary¹

¹Center for Philosophy of Science, University of Pittsburgh

Original scientific article – Received: 27/02/2021 Accepted: 27/05/2021

ABSTRACT

*After nearly fifty years of mea culpas and explanatory additions, the biopsychosocial model is no closer to a life of its own. Bolton and Gillett give it a strong philosophical boost in *The Biopsychosocial Model of Health and Disease*, but they overlook the model's deeply inconsistent position on dualism. Moreover, because metaphysical confusion has clinical ramifications in medicine, their solution sidesteps the model's most pressing clinical faults. But the news is not all bad. We can maintain the merits of holism as we let go of the inchoate bag of platitudes that is the biopsychosocial model. We can accept holism as the metaphysical open door that it is, just a willingness to recognize the reality of human experience, and the sense in which that reality forces medicine to address biological, psychological, and social aspects of health. This allows us to finally characterize Engel's driving idea in accurate philosophical terms, as acceptance of (phenomenal) consciousness in the context of medical science. This will not entirely pin down medicine's stance on dualism, but it will position it clearly enough to readily improve patient care.*

Keywords: *Biopsychosocial model; holism; dualism; philosophy of medicine; psychosomatic medicine*

1. Introduction

The biopsychosocial model (BPSM) has two central problems: one philosophical and one clinical. First, while the model turns away from reductive physicalism, proposing an alternative that brings subjective experience into the scope of medical science, its ontological position is, at best, unclear and, at worst, incoherent. Second, while the model demands a radical change in everyday practice—again, a broadening that will range over not only biological, but also psychological and social considerations—it fails to provide guidance as to what, exactly, a clinician should do to practice in a biopsychosocial way.

In *The Biopsychosocial Model of Health and Disease*, Bolton and Gillett offer a convincing presentation of the BPSM, highlighting these fundamental problems in their own terms, then they set out to resolve them. The result, they suggest, is a BPSM rethought and reinvigorated, one with far more substantial ties to philosophy. The need for this kind of rethinking is very real, as the BPSM has become a kind of dogma for medicine, even if only in marketing, while its shortcomings remain severe. As Bolton and Gillett aptly put it, the result is a crisis for medicine's foundations, one long in the making.

Engel could not have hoped for a more enthusiastic effort at redemption, nearly fifty years into medicine's biopsychosocial journey, and in many ways the effort is invaluable, even ingenious. Where Engel was vague (to put it kindly) about causal connections, Bolton and Gillett fill in the gaps, and in a way that brings the BPSM into current philosophical focus. Most valuable, I think, is their discussion of embodied cognition as a tool for fleshing out the scientific meaning of slogans like "mind-body integration". More than that, authors provide a detailed and wide-ranging account of the kind of complex causal interdependence that can make the BPSM work as a matter of science. Even if we find fault with their account and its idiosyncrasies, its value will remain. The BPSM is so often framed as medicine's softer side, while the evidence-based model fills the slot for hard science. That understanding is a mistake, and Bolton and Gillett will have made that clear even if their particular account of the science can be challenged.

The BPSM, however, is not redeemed by this ingenuity. Philosophically speaking, while Bolton and Gillett devote most of the book to the intricacies of their causal picture across the biopsychosocial spectrum, the model's most glaring, and most pressing, ontological failures are not recognized. Moreover, because medicine's metaphysical confusions have powerful clinical ramifications, Bolton and Gillett's solution to the clinical

problem also sidesteps the BPSM's most pressing faults. I will address each of these issues in turn.

In the end of the day, I will not suggest that Bolton and Gillett's efforts have been wasted. I will suggest that they've been wasted on the BPSM. Nassir Ghaemi (2010, 213) is right, I think, that the BPSM is more a slogan than a model, and we've spent almost fifty years tacking on *mea culpas* and explanatory additions. None of these has begun to give the thing life as a model, because none have addressed, or could address, the radical inconsistencies that have grown out of Engel's original philosophical confusions. But the news is not all bad. There is no reason why we cannot begin anew with a form of holism that takes what works from Engel and lets go of what fails. There is no reason why we cannot, from a clean slate, build a new model for holism that is philosophically sound, scientifically substantial and, above all, optimal for patient care.

2. The Philosophical Problem

Philosophically speaking, the simplest and most salient feature of the BPSM is an ontological expansion of medicine's conceptual foundations. Whatever else we might say about the model as Engel presented it, it is clear that, according to the BPSM, traditional medicine's exclusive focus on the physical body is misguided. To improve things, medicine must expand to recognize the inextricable place for mind, for experience, in the health of the whole person.

From the perspective of current philosophy of mind, this idea is uncomplicated. It is a rejection of reductive physicalism in favor of some form of property dualism or nonreductive physicalism. Practically speaking, however—and in spite abundant research in philosophy since Engel's time on alternatives to reductive physicalism—medicine's conceptual foundations were not clarified by the BPSM. They were confused to an extent that the model itself cannot remedy.

First, there is deep, pervasive inconsistency about the BPSM's most basic ontological position—that is, its position on dualism (O'Leary 2020). On one hand, in the simplest and most obvious terms, many in philosophy of medicine understand the model to be dualistic. For example, Marcum suggests, citing Foss (2002), that “biomedicine is composed of a metaphysical position best defined as mechanistic monism”, while “the biomedical worldview is modified in humane medicine with a metaphysical position that is generally dualistic” (Marcum 2008, 394-95). Borrell-Carrio and colleagues see a similar picture in their twenty-five-

year retrospective on the BPSM, concluding that “George Engel formulated the biopsychosocial model as a dynamic, interactional, but dualistic view of human experience” (Borrell-Carrio 2004, 581).

On the other hand, in the borderlands between medicine and psychiatry, the BPSM is generally assumed to be defined by rejection of dualism. In “The persistence of mind-brain dualism in psychiatric reasoning about clinical scenarios”, for example, Miresco and Kirmayer explain that “Despite attempts in psychiatry to adopt an integrative biopsychosocial model (...) psychiatrists continue to operate according to a mind-brain dichotomy” (Miresco and Kirmayer 2006, 913). More than that, they define dualism as “the idea that the mind is somehow distinct from the brain and that its essence cannot be reduced to purely material and deterministic neurological mechanisms” (Miresco and Kirmayer 2006, 913). For those who see the model from this perspective, BPS ontology is characterized by opposition to dualism, by the idea that mind can “be reduced to purely material and deterministic neurological mechanisms”.

Though Bolton and Gillett very clearly understand dualism as a problem to be overcome, and a problem that they do overcome with a “new post-dualist framework”, the book provides no definition of dualism, no acknowledgement of the common perception that the BPSM is dualistic, and no effort to explain why that perception might be mistaken.

Second, because inconsistency about dualism poses such a decisive threat to the coherence of the BPSM, we must investigate whether it can be understood in a way that accommodates both perspectives. Is it possible for one medical model to both accept and reject dualism? Perhaps, if it accepts one form of dualism while it rejects another, but a picture of that kind would require a clear and well-defined account of its position. Do we find such an account in Engel? Definitely not. In fact, when we take a closer look at Engel’s original characterization of the biomedical model, we can actually see how we’ve ended up with such deep ontological confusion. Engel straightforwardly insisted—not once, but consistently in all of his writings—that

the biomedical model embraces both reductionism, the philosophic view that complex phenomena are ultimately derived from a single primary principle, and mind-body dualism, the doctrine that separates the mental from the somatic. (Engel 1977, 130)

This, unequivocally, is the malady that Engel sets out to remedy with the BPSM: not reductionism on its own, but reductionism in combination with dualism.

Broadly speaking, these are diametrically opposed views. In the broadest, most unrefined sense, reductive physicalism and Cartesian dualism are mutually exclusive, so it's not possible for Engel to be correct in framing the BMM as reductive dualism, or dualistic reductionism. In the broadest sense, then, the BPSM is aiming for an incoherent goal, setting out to reverse a position that was impossible in the first place.¹

Of course as proponents of the BPSM, we could take a more refined view of our ontological options. We could position ourselves between the poles of reductionism and Cartesian dualism with some form of property dualism, for example. Such a position would be a fine antidote to both of those polarities—but again, this would require quite a lot of philosophical refinement. We'd need to clarify, as Susan Schneider does, that while

contemporary philosophy of mind sees the question of the nature of substance as being settled in favor of the physicalist (...) dualism about properties, by contrast, is regarded as being a live option. (Schneider 2012, 51)

We'd need an explanation of the difference between Cartesian realism about minds and current realism about mental properties. Then we'd need a discussion of the difference between nonreductive physicalism (where we accept that mental properties are distinct from physical properties, but reject dualism), and naturalistic dualism (where we accept that mental properties are distinct from physical properties and accept dualism).

Does Engel provide an account of this kind, where we can make sense of the model's contradictory views on dualism through a more contemporary, more refined account of nonreductive alternatives? No, though these options really had not been laid out in clear terms when Engel was formulating the BPSM. Do we get an account of this kind in the "biopsychosocial ontology" that Bolton and Gillett promise to provide? Still, no. In fact, Bolton and Gillett fail to mention property dualism even once. In the brief passage that mentions nonreductive physicalism, they

¹ Bolton and Gillett eloquently explain that "physicalism and dualism are twins, one born straight after the other, combative from the start, each refuting the other, the one supported by the great edifice of modern mechanics, the other known immediately by experience, battling ever since" (Bolton and Gillett 2019, 27). Unfortunately, while they often describe the pairing in the BMM as "physicalist reductionism aided by dualism", they do not explain how it might be possible to hold both positions simultaneously.

dismiss the view, inexplicably, as a “purely ‘metaphysical’ doctrine”, one that “probably has given up on being much or anything to do with the sciences” (Bolton and Gillett 2019, 161).

Third, we have been unable to resolve the BPSM’s ontological inconsistency because the term ‘dualism’ has been defined in a way that makes philosophical clarification impossible. This problem can be traced directly from Engel to Bolton and Gillett.

The only way to make sense of the idea that reductionism and Cartesian dualism go hand and hand is to fudge the definition of dualism a bit. For Engel, as for his colleagues, as for most of those who’ve worked with the BPSM for the last forty years, dualism is not an ontological position, not a view on how many kinds of substances or properties exist. Engel’s brand of dualism is an epistemological position, a choice each of us can make in our thinking. When we separate mind and body in our thinking, we are dualists, and when we integrate them, we defeat dualism. Unfortunately, dualism is actually not an epistemological position. Dualism does not come and go depending on the ideas we prefer or the words we choose. If the world is dualistic, then two kinds of things exist in the world, no matter what we say or think or do in medical practice.

Bolton and Gillett’s book is a productive example of this confusion and its catastrophic impact on medicine’s foundational clarity. Though authors promise at the start to provide a new ontology for the BPSM, and later they take themselves to have made good on that promise, like Engel, they pair dualism with reductionism, almost as a habit. Like Engel, they feel sure they’ve conquered dualism “when physical and mental health conditions are brought together (...) rather than being axiomatically separate” (Bolton and Gillett 2019, 109). Moreover, because, like Engel, they believe we settle the question of dualism when we choose not to separate mind and body in our language or practice, they entirely overlook the actual question of dualism, that is, the question of whether minds, or mental properties, exist.

It’s important to be clear about why it’s philosophically problematic to define dualism as separation of mind and body in our thinking rather than as the existence of minds or mental properties. After all, dualists always do separate mind and body, so it will work out just fine to define it that way as long as we’re affirming dualism. The trouble arises when we reject dualism—because we can choose to reject separation of mind and body in our thinking as dualists, or as monists. Marcum (2008) and Borrell-Carrio et al. (2004), for example, both insist that while the BPSM is a dualistic model, one that recognizes both mind and body, it also demands that we

recognize them as unified, rather than separated, in the whole person. Miresco and Kirmayer (2006), on the other hand, insist that the BPSM is a monistic model. From their perspective, it's a mistake to separate mind and body because all the world is physical.

This is the source of the BPSM's philosophical incoherence. We cannot begin to determine whether medicine is or is not dualistic unless we're clear what that question means: does medicine's understanding of health and healthcare require the existence of minds or, alternatively, mental properties? Once we're clear about that, nonreductive physicalism and naturalistic dualism become instant candidates for holism's ontological foundation. While it's certainly possible to argue that both fail to make sense of the whole person in the way that Engel intended, or the way that medicine actually requires, these are the most widely accepted ways to make sense of a holistic vision in contemporary philosophy of mind. We cannot sort out medicine's ontological foundations without considering them.

Admirable as Bolton and Gillett's picture of BPS causes may be, it will not stand as an account of BPS ontology until authors make direct use of it to resolve the BPSM's pervasive inconsistency about dualism. To do so they'd need to recognize that, in the twenty-first century, the question of dualism is serious and meaningful, especially for medicine. It is the hard problem of accounting for the reality of experience in the context of science (Chalmers 1995). More than that, they'd need to acknowledge that, like Engel, they do help themselves to the reality of experience as central to a sound understanding of health and healthcare.

Fourth and finally, any effort to provide a workable ontology for the BPSM must address incoherence in its central claims about mind and body.

(a) The first step and most important step toward an ontologically coherent picture of the BPSM is to clarify a consistent definition of dualism within the terrain that characterizes contemporary philosophy of mind. That, on its own, would be a monumental accomplishment for philosophy of medicine, one that would reverberate productively through all the medical professions.

(b) Second, we need an explanation of why medicine should reject dualism, if, in fact, it should—because rejection of dualism does not go without saying in philosophy of mind, surprising as that may be to many in the medical professions. Because the question on the table in philosophy is about

property dualism rather than substance dualism (generally speaking), and, generally speaking, philosophy of mind has accepted the reality of mental properties, rejection of dualism does now require clarification and support. In any area of discourse that depends on recognition of experience *qua* experience, as the BPSM certainly does, it is absurd to proceed as if rejection of dualism goes without saying.

(c) Third, because separating mind and body certainly does not make us dualists, not in philosophy of mind, we need a discussion of the merits and drawbacks of separating them in medicine. The fact is that, by and large, philosophers of mind are comfortable distinguishing mental properties from physical properties. To put that a different way, by and large, philosophy of mind has accepted a real distinction between experiences and the brain states with which they're correlated. "Separation of mind and body", is not a problem in philosophy, at least not *prima facie*. If we want to propose that it's a problem for medicine, either metaphysically or clinically, that idea that will require clarification and support.

While it is certainly possible to address these three issues, it is hard to imagine any way that we might institute revisions on these points in everyday thinking about the BPSM in medicine, psychiatry or bioethics. After fifty years of incoherent wrangling about mind and body, that is to say, the BPSM has come to be defined by its entrenched philosophical inconsistency. Though we surely can repair medicine's conceptual foundations, we will need to see the result as an alternative form of holism, a better form of holism than what we get with the BPSM. I will make some broad points about that project in Part 4, but first it's important to track the BPSM's ontological confusion as it actually plays out at the level of clinical practice.

3. The Clinical Problem

In addition to the formidable challenge of ontological incoherence, the BPSM also faces a practical challenge, that it "lacks specific content, is too general and vague" (Bolton and Gillett 2019, 29) at the level of clinical application. Ghaemi suggests that while the addition of psychological and social considerations do provide greater freedom and complexity in diagnosis and treatment

[t]his eclectic freedom borders on anarchy: one can emphasise the 'bio' if one wishes, or the 'psycho' (...) or the 'social'. But there is no rationale why one heads in one direction or the other: by going to a restaurant and getting a list of ingredients, rather than a recipe, one can put it all together however one likes. (Ghaemi 2009, 3)

The new options are certainly reasonable (maybe reasonable enough to be obvious for psychiatry), but they're not useful without general guidance as to how they should be used.

Bolton and Gillett propose that this problem can be resolved at the level of research, where new evidence for the relevance of psychosocial factors in specific conditions has now been developed. Clinicians can do without general principles for choosing between bio, psycho, and social options, they suggest. BPS practice can be accomplished purely by applying information from research about specific psychosocial factors for specific conditions. This approach goes a long way toward aligning the BPSM with evidence-based medicine, and I am very much in favor of that kind of effort. In the process, however, it overlooks Engel's vision for BPS practice, the risk it creates in providing diagnostic options without diagnostic guidance, and the sense in which that gap has been filled by ontological confusion.

First, discourse about the BPSM, including Bolton and Gillette's, often fails to appreciate Engel's rich picture of the clinical interview. In "How much longer must medicine's science be bound by a seventeenth century world view?" Engel directly opposes the idea that the clinical relevance of the BPSM could play out purely through the application of research, and his arguments on this point may be the most convincing we find in his work. He explains in detail exactly how the clinical interview is a "means of data collection and processing" (Engel 1992, 338) that's central to BPS practice. When our understanding of medical science excludes "information that is only accessible through the medium of human exchange" (Engel 1992, 338), he insists, we have misapplied the seventeenth-century paradigm in a way that compromises the goals of medical science.

This material is very helpful when it comes to the order of explanation between medical science and medical humanism. It's not that the BPSM advances a humanistic vision of patient as person, and then insists that medical science should adapt to humanism. On the contrary, Engel suggests that "appeals to humanism" are "ephemeral and insubstantial (...) when not based on rational principles" (Engel 1977, 135). We begin with

conceptual foundations, in other words, at the point where we clarify the scope and methods of medicine as a science, then this scientific vision forces us toward humanism (O’Leary 2021). Good medical science recognizes the relevance of biological, psychological and social factors, then it gathers data about those factors through a scientific approach to the clinical interview. That approach best succeeds when it humanizes patient and doctor, and in this sense, good science actually demands good ethics.

To my mind, this is Engel at his best, and all of this richness dissolves when we imagine that BPS practice could be a matter of simply applying psychosocial research in the clinic. Unfortunately, Engel’s account of the clinical interview still leaves us entirely unclear about how to distinguish between biological, psychological and social explanations in the diagnostic process. Bolton and Gillett actually frame the question perfectly in Chapter 4:

While disease is contextualised in the person as a whole, the immediate question is where the dysfunctional process is located: which system within the whole is dysfunctional, causing problems for the whole? (Bolton and Gillett 2019, 256)

Second, discourse about the BPSM, including Bolton and Gillette’s, often fails to recognize how the lack of clinical guidance poses a threat to patient safety. When the model opens the door to psychosocial diagnosis for bodily symptoms in everyday practice, clearly it opens the door to a new and threatening form of diagnostic error.

Diagnostic clarity is not the norm in medicine, surprising as that may be, at least not in outpatient care. In fact, as the UK’s National Health Service understands things, “on average, 52% of patients accessing outpatient services have medically unexplained symptoms” (Joint Commissioning Panel for Mental Health 2017, 6-7). And while medical research and education are intensely focused on diagnosis, and treatment implied by diagnosis, they are essentially silent when it comes to developing directives for managing this very sizeable portion of cases.

Bolton and Gillett trust that “medical and clinical psychological textbooks” contain “scientific details” (Bolton and Gillett 2019, 119) that tell clinicians how to safely manage cases where biomedical and psychosocial explanations both remain possible, but that faith is wholly unfounded. Since the advent of the BPSM, recommendations for managing these cases have not been based on medical science at all, and they have not been evaluated by medical researchers for safety or reliability. Instead, practice in this area has been guided by research in psychiatry, specifically, research

produced and reviewed within the small subdiscipline of psychiatry known as psychosomatic medicine (or sometimes “consultation-liaison psychiatry”).

Third, the need for clinical guidance has been met in psychosomatic medicine not by safety-tested science, but by wrangling about dualism. What makes the clinical problem so pressing, in other words, is that it combines in disastrous ways with the problem of ontological incoherence. In 1984, Schwab explained, for example, that according to “the established principles of psychosomatic medicine”, in the great many cases where diagnosis remains elusive, clinicians should avoid “viewing the patient dichotomously as being ‘organic or functional’” (Schwab 1985, 584). Instead of seeking clarity about the presence of disease, that is to say, a good BPS clinician will “conceptualize the patient as a total person, a psychobiological unit” (Schwab 1985, 584).

More recently, Creed and colleagues clarify the importance of avoiding “dualistic thinking” where we “regard symptoms as either organic or nonorganic/psychological”. Instead, the BPS clinician should manage unexplained symptoms with deliberate diagnostic vagueness, making sure never to “force these disorders into either a ‘mental’ or ‘physical’ classification” (Creed et al. 2010, 5).

It is certainly possible for philosophical ideas to play a useful role in the challenge of distinguishing conditions with primarily biological causes from those with primarily psychosocial causes. Indeed, it’s hard to see how we can understand that question without philosophical ideas about mind and body. Philosophy can be productive for medicine, though, only to the extent that it’s supported with sound reasoning that’s continuous with, and consistent with, science. In the borderlands between medicine and psychiatry, however, the BPSM’s ontological confusion reaches its most incoherent pitch. Here Engel’s defining demand to extend medicine’s focus beyond body has somehow become a demand to equate mind with body at all times. The recommendation to see both mind and body as vital contributors to health has become a demand never to engage in practices that distinguish one from the other.

Even if we could defend these ideas in their own right, we cannot possibly defend them as consistent with the defining ideas of holism. More importantly, we cannot defend them as consistent with even the lowest standards for safety in medical science. By definition, cases of diagnostic uncertainty are cases where the possibility of biological disease remains, so these are cases where a recommendation to avoid biological clarity requires an extraordinarily high bar of scientific evidence. What it needs is

a consistent standard for determining when the possibility of biological disease can reasonably be set aside, and biomedical research that rigorously evaluates the safety of that standard for the wide range of patients who suffer from undiagnosed symptoms. What it has is the boogeyman of “dualism”, an imagined imperative, borne of Engel’s own confusion, to avoid diagnostic practice that “separates mind and body” at all costs.

Though medicine’s research review system would root out these recommendations, research in psychosomatic medicine is not reviewed in the medical system. While medical textbooks and practice standards defer to psychosomatic medicine when it comes to principles for practice with medically unexplained symptoms, the research that drives these principles circumvents the filtering process for medical science. This too is the result of ontological incoherence. Because the BPSM proposes that biological and psychosocial factors are both relevant for medical practice, but it fails to provide guidance on how to manage that distinction, we have imagined that we can hand off vital matters of biomedical safety—for a very substantial portion of outpatients—to research and review within a subdiscipline of psychiatry. That, quite clearly, is a scientific mistake.

It should not be surprising that in the area where BPS ontology is poised to play its most direct and substantial clinical role, right there in the mind-body borderlands, we find recommendations for practice that are demonstrably problematic. Deep conceptual confusion rarely leads to empirical success for any science, and medicine is no exception to that rule.

4. Conclusions: New Holism

Bolton and Gillett’s book is probably the best we can do when it comes to propping up the BPSM as a model for medical science. In that sense it may be most instructive by example. On the basis of the model itself, even with considerable philosophical ingenuity, we cannot escape the BPSM’s entrenched philosophical confusions, and we cannot avoid the dangerous ramifications of those confusions in everyday practice.

Fortunately, we can reject the BPSM without accepting the biomedical model. In fact, we can reject it even as we accept that biological, psychological and social factors each play an inextricable role in human health. To do so is just to put our collective foot down, to insist that as holists we can do better, that the inchoate bag of ideas put forth by George Engel is both wise and inadequate, both essential and utterly absurd.

When a holist rejects the BPSM she does not advance a version of medicine where the patient becomes, once again, a body, where autonomy yields, once again, to parentalism. On the contrary, as a holist she holds those ideas in such high regard that she demands a sound foundation for them, a conceptual depth and consistency that's worthy of the task at hand. This demand is entirely in keeping with Engel's vision, with his suggestion that "appeals to humanism" are "ephemeral and insubstantial (...) when not based on rational principles" (Engel 1977, 135). Because humanism matters, we cannot achieve it on the cheap. To understand its roots, and its necessity, medicine needs to get its philosophical house in order.

The defining idea of holism is that medicine makes no sense, not in its humanity and not in its science, without the reality of human experience. We pursue the practice of medicine, and indeed we recognize it as morally imperative, because disease causes terrible experiences, and ultimately the cessation of experience. This point is so deeply obvious to those in the medical professions that it's a struggle even to imagine what it would mean for philosophers to question it, and to reject it, as they often do. It is helpful to note, too, that the reality of experience was no less obvious in medicine before Engel than it has been since. Regardless of the BMM's commitment to objective scientific methods, and regardless of its consensus that the realm of experience lies outside the scope of medicine, the medical profession has never denied, or even imagined denying, the reality of experience. It has always pursued medicine for the purpose of improving and protecting experience. It has always accepted facts of first-person experience as medicine's motivating data (O'Leary 2021).

In this sense, Engel's holistic vision was more a confession than a revelation. Without metaphysical specifics, it simply and broadly pointed out that human beings are experiencing beings, and that somehow, maintaining medicine's scientific commitment, we must recognize that in order for medicine to succeed. In effect, holism set out to position medicine's foundation somewhere within the framework of philosophy of mind, but with the BPSM that effort could not have been a more colossal failure. Not only has the BPSM failed to clarify medicine's philosophical position on mind and body. It has created, and in fact entrenched, a compendium of pseudo-philosophical jargon so incoherent as to make medical holism anathema to philosophy.

Holism should have inspired a conjoining of medicine with philosophy, a unified effort to understand experience in the context of medical science, and to apply that understanding to improve clinical practice. Instead, the language of the BPSM so distorted medicine's mind-body position that we now find ourselves demanding and rejecting dualism in the same breath—

not now and then, but as a defining feature of medicine's conceptual dogma (O'Leary 2020).

If we let go of the jumble of platitudes that is the BPSM—the equivocation on dualism, the unsupported prohibition on “separation”, the imperative to “integrate” as if we have the power to change how mind and body are related—we can begin to fix this problem. We can accept medical holism as the metaphysical open door that it is, just a willingness to recognize the reality of experience, and the sense in which that reality forces medicine to address biological, psychological and social aspects of health. And we can finally characterize that perspective in accurate philosophical terms: as acceptance of consciousness in the context of medical science.²

This will not entirely resolve the question of medicine's position on dualism, and it will not explain how subjective experience can play a central role in objective medical science, but it will position medicine in the territory of nonreductive physicalism and property dualism, and that will make it possible to address medicine's basic ontological questions in a serious way. More than that, regardless of our answers to those questions, medical practice can readily be improved purely through recognition that a holist does distinguish conscious states from the brain states (or body states) with which they're correlated. This clarity makes it possible to develop practice recommendations for unexplained symptoms that are based on medical science rather than unsupported dogma about avoiding separation of mind and body.

In truth, we work with a placeholder in all fields where a sound philosophico-scientific picture of consciousness should be, and in this sense perhaps medicine can make an invaluable contribution. As an effort to improve and protect embodied experience through science, medicine is the mind-body problem writ large, with stakes that make the difference between wellness and suffering, health and disease, life and death for real persons. In a sense, medicine is the conscience of consciousness studies—or at least it would be if it took part. We are the applied science that keeps it real, the science that absolutely cannot do without experience as experience, the science where misunderstanding of mind and body will play out as real human suffering in the real world.

Bolton and Gillett are entirely right that “Engel's proposal of the biopsychosocial model was audacious” (Bolton and Gillett 2019, 89).

² By ‘consciousness’ I mean, specifically, phenomenal consciousness, following Block: “Phenomenal consciousness is experience; the phenomenally conscious aspect of a state is what it is like to be in that state. The mark of access-consciousness, by contrast, is availability for use in reasoning and rationally guiding speech and action” (Block 1995, 228).

What's audacious about it, though, is easy to miss. We take the reality of experience for granted in the context of medicine, and we take the possibility of medical science for granted, as well we should. What we should learn from Engel, most audaciously and most profoundly, is that we have work to do in sorting out how those truths fit together.

REFERENCES

- Block, Ned. 1995. 'On a Confusion about a Function of Consciousness'. *Behavioral and Brain Sciences*, 18 (2), 227-87.
<https://doi.org/10.1017/S0140525X00038188>.
- Bolton, Derek and Grant Gillet. 2019. *The Biopsychosocial Model of Health and Disease New Philosophical and Scientific Developments*. Cham, Switzerland: Palgrave.
<https://doi.org/10.1007/978-3-030-11899-0>.
- Borrell-Carrió, Francesc, Anthony L. Suchman, and Ronald M. Epstein. 2004. 'The Biopsychosocial Model 25 Years Later: Principles, Practice, and Scientific Inquiry'. *Annals of Family Medicine* 2 (6): 576-82.
<https://doi.org/10.1370/afm.245>.
- Chalmers, David. 1995. 'Facing up to the Problem of Consciousness'. *Journal of Consciousness Studies* 2 (3): 200-219.
- Creed, Francis, Elspeth Guthrie, Per Fink, Peter Henningsen, Winfried Rief, Michael Sharpe, and Peter White. 2010. 'Is there a Better Term than "Medically Unexplained Symptoms"?' *Journal of Psychosomatic Research* 68 (1): 5-8.
<https://doi.org/10.1016/j.jpsychores.2009.09.004>.
- Engel, George. 1977. 'The Need for a New Medical Model'. *Science*, 196 (4286): 129-36.
<https://doi.org/10.1126/science>.
- Engel, George. 1992. 'How Much Longer Must Medicine's Science be Bound by a Seventeenth Century World View?' *Family Systems Medicine* 10 (3): 333-45.
<http://dx.doi.org/10.1037/h0089296>.
- Foss, Laurence. 2002. *The End of Modern Medicine: Biomedicine Under a Microscope*. Albany: SUNY University Press.
- Ghaemi, S. Nassir. 2009. 'The Rise and Fall of The Biopsychosocial Model'. *British Journal of Psychiatry* 195, 3-4.
<https://doi.org/10.1192/bjp.bp.109.063859>.
- Ghaemi, S. Nassir. 2010. *The Rise and Fall of the Biopsychosocial Model: Reconciling Art and Science in Psychiatry*. Baltimore: Johns Hopkins University Press.
<https://doi.org/10.1353/book.3501>.

- Joint Commissioning Panel for Mental Health. 2017. 'Guidance for Commissioners of Services for People with Medically Unexplained Symptoms'.
<https://www.jcpmh.info/wp-content/uploads/jcpmh-mus-guide.pdf>.
- Marcum, James A. 2008. 'Reflections on Humanizing Biomedicine'. *Perspectives in Biology and Medicine* 51 (3): 392-405.
<https://doi.org/10.1353/pbm.0.0023>.
- Miresco, Mark J., and Laurence J. Kirmayer. 2006. 'The Persistence of Mind-Brain Dualism in Psychiatric Reasoning about Clinical Scenarios'. *American Journal of Psychiatry* 163 (5): 913-18.
<https://doi.org/10.1176/ajp.2006.163.5.913>.
- O'Leary, Diane. 2020. 'Medicine's Metaphysical Morass: How Confusion about Dualism Threatens Public Health'. *Synthese*.
<https://doi.org/10.1007/s11229-020-02869-9>.
- O'Leary, Diane. 2021. 'The Value of Consciousness in Medicine'. In *Oxford Studies in Philosophy of Mind, Volume 1*, edited by Uriah Kriegel, 65-85. Oxford: Oxford University Press.
- Schneider, Susan. 2012. 'Why Property Dualists Must Reject Substance Physicalism'. *Philosophical Studies* 157 (1): 61-76.
- Schwab, John J. 1985. 'Psychosomatic Medicine: Its Past and Present'. *Psychosomatics* 26 (7): 583-85, 588-89, 592-93.
[https://doi.org/10.1016/S0033-3182\(85\)72821-6](https://doi.org/10.1016/S0033-3182(85)72821-6).