Is intuitive psychology bad for psychology? Reply to Krueger

In *The Blind Storyteller* (Berent, 2020), I suggest that Dualism and Essentialism conspire to meddle with our intuitive psychological understanding, and possibly, with psychological science. Much like the slaves in Plato's cave, our self-understanding is bound by the shackles of our own psyche.

In his thoughtful review, Joachim Krueger (in press) gently pokes holes in my doomsday scenario. Dualism and Essentialism, he suggests, are a liability only if they are false. And Krueger questions whether they are.

Concerning, Dualism, Krueger questions the notion that "there is nothing that is immaterial" (p. 5), and he points out that, without mentalism, there would be no story, and we—scientists--would all be reduced to mere "stamp collectors" (p. 4).

Essentialism, he continues, is not such a bad idea either, as it allows one to contrast the essential and the accidental. Moreover, much of the damage I attribute to Essentialism arises because, in my account, the perceived essence of living things is material. It is only if, per Essentialism, innate traits are material, whereas, per Dualism, minds are immaterial, that Dualism and Essentialism collide. But if we were to relax the materiality assumption, then this "perfect psychological storm" would quickly dissipate—no damage done.

In what follows, I wish to clarify why I believe these principles are false, and how they wreak havoc on our mental life. At the outset, let me point out that, in my analysis, Dualism and Essentialism are *psychological* (not ontological) principles. Moreover, these principles appear to be rooted in innate core cognition—in the tacit notions that guide young infants' understanding of objects, agents, the minds of others and living things (Spelke & Kinzler, 2007). So while Dualism (and possibly, Essentialism) is neither innate nor adaptive, its core knowledge roots possibly are.

Viewed in this manner, Dualism, specifically, does not merely entail that the mind is immaterial, distinct from the material body. Rather, it specifically commits us to the notions of body and mind *as suggested to us by our core knowledge* (of objects and the minds of others). And that understanding is inconsistent with modern science not only with respect to its depiction of the mind—the topic of much controversy in professional psychology-- but, perhaps more clearly so, with respect to its portrayal of matter.

As Noam Chomsky puts it, [Cartesian metaphysical Dualism] was proven wrong when Newton undermined the mechanical philosophy of early modern science by demonstrating that one of the Cartesian substances—body—does not exist, thereby eliminating the mind-body problem, at least in its Cartesian form, and leaving open the question of what the "physical" or "material" is supposed to be" (2016 p. 30). "Matter", here, is the presumption that physical bodies can only interact by contact, and Newton's discovery of gravity—a force that applies at a distance—showed this notion to be wrong, to Newton's own dismay, and the chagrin of his contemporaries. Modern day children are equally dismayed, and the reason is clear: gravity violates our core knowledge that objects interact by contact—a belief seen already in newborn infants. Intuitive Dualism embodies this premise, and for this reason, it is false.

Given that our understanding of the mind arises, in part by contrast to "matter", and since our understanding of "matter" is plainly false, the intuitive notion of "mind" is highly suspect as well. So putting aside Krueger's ontological question of whether "there is nothing but matter" (which I do not aspire to settle), the psychological notion of Dualism is clearly false.

By the same token, psychological Essentialism, concerns our intuitive understanding of biological inheritance. While people can certainly talk about the essence of diverse kinds—biological or not (e.g., the essence of America), I propose that, when it comes to *biological inheritance* specifically, here, we view the essence as not only immutable but also as material. I discuss a large literature (from past and recent findings) to support this proposal.

Is this intuitive notion of Essentialism false? The materiality bit—at least in the broad sense that the essence must form part of the physical body—certainly isn't (although the intuitive and scientific notions of "matter" differ). But modern evolution tells us that our view of essence as *immutable* is clearly wrong, and it is this presumption that is to blame for much of our troubles with the notion of biological evolution, much like our intuitive notion of "object" derails our understanding of Newtonian physics, let alone quantum mechanics (e.g., Shtulman, 2017).

So it appears that our intuitive notions of Dualism and Essentialism are indeed false. And if our intuitive understanding of our own psyche is channeled through the prism of these two principles, then our conclusions are bound to be skewed.

In *The Blind Storyteller*, however, I show that our psychological troubles arise not only from the shortcomings of each principle, individually, but, primarily from their collision. If Essentialism demands that innate biological traits be material, and if per Dualism, minds are immaterial, then two psychological biases should follow. First, people should be negatively biased against the innateness of psychological traits that they attribute to the mind—this is the case for epistemic states (ideas, such as "helping others is good", "objects are cohesive")—people should deny that knowledge of such propositions *could be* possibly innate. Second, people should be positively biased to assume that traits that are readily linked to the body *are* innate—the presumed innateness of facial expressions of emotions is a case in point. Throughout the book, I document these very biases in a wide array of cases. If Dualism and Essentialism wreak havoc on laypeople's self-understanding, and if people are scientists, could similar biases taint scientists? Although my concern is firmly with laypeople, there are interesting parallelisms between laypeople's intuitions and the corresponding debates in psychological science. Since Krueger touches on these issues, I briefly respond.

Krueger believes that "soft dualism shows itself whenever we talk about the brain and mental life". He points out, that without mentalism, we would have no satisfactory story of what brain activation means, reducing us all to mere "stamp collectors".

While I agree that it is, indeed, the cognitive (mental) "horse" that pulls the neuroscience "cart", from this it doesn't follow that cognitive science entails "soft dualism" any more than chemistry is "dualist physics". Indeed, just as "matter" acquires distinct meanings in naïve physics and science, so does "mind" have different interpretations in naïve psychology and cognitive science. The scientific notion of "mental" assumes that *mental structures are physically realized* (Fodor & Pylyshyn, 1988)-- they correspond to putative brain structures. "Mental", then, is merely a level of analysis, not a commitment to mind-matter Dualism.

A similar tension also arises in the literature on the innateness of emotional facial expressions. My "beef" here is not with insufficient innateness, as Krueger assumes. I don't claim that the facial expressions of emotions are innate. Rather, my real qualm is with the presumption that emotions *are* facial expressions, and thus, the question of innate emotions is a question about innate facial expressions.

Why does the affective science literature often conflate the two? As it turns out, laypeople presume the same—they equate emotions with bodily (e.g., facial) expressions, which they presume are innate (Berent, Barrett, & Platt, 2019). Perhaps this correspondence is not coincidental.

So these two examples—from cognition and affective science—reveal an interesting parallelism between some of the burning debates in psychological science and laypeople's intuitions. Whether this correlation reflects causation is not for me to say. But this correspondence certainly gives reason for concern. Putting psychological science asides, I believe that, when it comes to our intuitive psychology, our reasoning is systematically biased, and our mistakes arise from the false presumptions of Dualism and Essentialism.

I wish to thank Joachim Krueger for his attentive reading of my book, his kind words of praise, and his constructive criticism. It is through such measured critiques that we learn, reconsider our positions, and advance science.

References

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