On that basis denying (TP) would indeed involve a contradiction. The trouble is that (A) provides no support for the view that what makes the pain conscious is that it is the object of a higher-order state. However, Gennaro may have in mind a different sense of being aware of a conscious state, in which the point is that:

(B) If someone supposedly in pain is unaware of the fact that he or she is in pain, then the pain is not conscious.

(B) entails that a subject cannot be in pain unless they conceptualize it as pain. Read in that way (TP) does seem to support the HOT thesis. The trouble now is that it also ensures that (TP) is contentious and question-begging, and still doesn't help to explain why the targeting of a lower-order unconscious state by a higher-order unconscious state should result in a conscious state. Given (TP)'s vital role in the overall argument, I was surprised to find it so shakily defended. So although there is much that I admire in this book, I am not persuaded by its defence of the HOT theory and the associated claim that a version of the theory solves the hard problem. However, Gennaro makes a good case for the mutual consistency of the theses supposed to constitute the paradox.

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## The Sources of Intentionality

By Uriah Kriegel

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In The Sources of Intentionality Uriah Kriegel constructs a framework in which he develops the beginnings of a general theory of intentionality. The framework is founded on the assumption (defended in Ch. 1) that the concept of intentionality is not only a natural kind concept but an observational natural kind concept, one that we acquire on the basis of introspective access to instances of it. He argues that the only instances of intentionality that we encounter during our formation of the concept are 'experiential-intentional' states, that is, intentional states that are intentional in virtue of being experiential. This is the 'experiential origin thesis': 'our conception of intentionality is grounded in our grasp of experiential intentionality, and that to that extent, experiential intentionality is the origin of all intentionality' (9). More precisely, something has intentionality if and only if it either shares a nature with most encountered experiential-intentional states or bears a special relation to something that does (42). Kriegel assumes that there is such a thing as experiential intentionality and, moreover, that it includes non-sensuous purely cognitive or intellectual experience as well as purely sensory experience (50). Kriegel's argument for the claim that we have 'observational contact', as he often puts it, only with such experiential-intentional states begins with the claim that there is an epistemological asymmetry in our ascription to ourselves of experiential-intentional states and ascriptions of all other

intentional states; normative principles of charity apply to all of the latter but not to any of the former. He then argues that the best explanation for this alleged asymmetry is that experiential-intentional states are known to us directly through first-person observation (introspection), whereas non-experiential intentional states are indirect third-person theoretical-explanatory posits based on data that are the 'vector of two forces' (typically belief and desire, in something like the way Davidson sees the 'holding-true' of sentences as the datum for radical interpretation, a datum that is the joint product of belief and meaning).

Having established to his satisfaction the experiential origins of intentionality, Kriegel goes on to fill in the rest of the framework by presenting (in Chapters 2 and 3) two different accounts of experiential intentionality (more on why there are two in a moment), one account of non-experiential intentionality (Ch. 4), and finally, a unified general theory of intentionality in which non-experiential intentionality is grounded, via the special relation mentioned either, in experiential intentionality (Ch. 5).

Kriegel's framework has two interesting and novel features. The first is that it 'gives pride of place to both consciousness and naturalization' (6). That is, it attempts to provide a reconciliation of what Kriegel sees as a tension in contemporary philosophy of mind between, on the one hand, the naturalistic approach to intentionality – which tends to ignore phenomenal consciousness in its third-person approach to intentionality by grounding it in tracking relations between agents and their environments – with what, on the other hand, he calls the 'phenomenal intentionality research program' - a relatively new (at least in the analytic tradition), first-person approach to intentionality, which has been receiving increasing attention as of late, and which, far from ignoring consciousness, maintains that the so-called 'phenomenal intentionality' allegedly possessed (and only possessed) by phenomenally conscious mental states is the ultimate source of all intentionality. Since Kriegel finds both views plausible but prima facie at odds with each other, he is 'interested in finding ways to place phenomenal consciousness at the heart of the theory of intentionality while at the same time priming intentionality for its eventual naturalization and demystification' (6).

Although at one point he describes his result as 'a framework where all intentionality is naturalized, but also where the naturalized non-experiential intentionality is seen to be grounded in a naturalized experiential intentionality' (6), one interesting peculiarity of the book is that Kriegel develops and defends alongside this general naturalistic theory a general non-naturalistic alternative. The former is based on a naturalistic theory of experiential intentionality (discussed in Chapter 2) that takes the form of a higher-order tracking theory, according to which a state has experiential intentionality in virtue of possessing the relational property of being suitably higherorder tracked to track something, whereas the latter is based on an adverbial modification theory of experiential intentionality (discussed in Chapter 3), according to which something has experiential-intentional content in virtue of possessing the non-relational property of 'being-intentionally-directed-somehow'. Higher-order tracking and being-intentionally-directed-somehow are, presumably, the eponymous 'sources of intentionality'.

Kriegel thinks that, ultimately, naturalistic theories are to be preferred ever so slightly over non-naturalistic theories and so (half-jokingly) professes a degree of belief of 55 per cent in the higher-order tracking theory over 45% in the adverbial theory (173). The all-but-a-standoff here is between a naturalistic theory that is allegedly incapable of coping with reference failure and a non-naturalistic theory that allegedly is capable of coping with it. (This verdict turns on the not implausible assumption that naturalistic theories are necessarily relational theories and reference failure is precisely the failure of intentional relationality). Since – in line with the phenomenal intentionality research programme and the experiential origin thesis – experiential intentionality grounds non-experiential intentionality, Kriegel sketches two versions of a final comprehensive theory of intentionality: Adverbialism plus Interpretivism and Higher-Order Tracking Theory plus Interpretivism. Although Kriegel finds both attractive, if you put a gun to his head and forced him to choose, he would, as is obvious from what was said previously, opt for the latter, because of the overarching importance he accords to naturalizing intentionality.

Phenomenal consciousness is at the heart of his general framework for understanding intentionality, as we have seen, because it grounds non-experiential intentionality in experiential intentionality – which brings us to the second interesting, and highly original, feature of Kriegel's framework, namely, its attempt to combine a kind of irrealist interpretivism about non-experiential intentionality – based on, but departing significantly from, Dennett's notion of the intentional stance and Davidson's theory of radical interpretation – with a realist account of experiential intentionality. The result is an 'experiential-intentional stance' account of non-experiential intentionality, according to which 'non-experiential intentionality occurs when, and only when, an ideal interpreter would consciously interpret an item to have a certain non-experiential-intentional content' (218). Kriegel readily embraces a well-known consequence of most forms of interpretivism, namely, that it 'entails that [an] item's content [may be] indeterminate' because there may be 'ideal conditions under which there is no single best interpretation' (210). He tries to mitigate this by claiming that the indeterminacy is not 'corrosive' but at best infrequent and therefore 'harmless'.

He rebuts the standard objection to interpretivism that it is too irrealist, first, by maintaining that non-experiential intentionality is merely *derived* intentionality, whereas experiential intentionality is *underived*; secondly, by holding that the derived/underived distinction is a matter of degree; and thirdly, by being realist about experiential intentionality, which, together with the thesis that the former is grounded in the latter, produces an overall realist foundation for intentionality. According to Kriegel, all that pre-theoretic intuitions demand anyway is that *some*, not all, intentionality is 'real'. So Kriegel finds the combination of irrealism about non-experiential intentionality and realism about experiential intentionality 'quite unproblematic' (215).

While there is much to be said about each of these lucidly presented and rigorously argued five chapters, I will have to restrict my critical comments to a brief expression of reservation about the cogency of the interpretivist part of the overall system. To be sure, irrealism about derived non-experiential intentionality is arguably more plausible than irrealism about underived experiential intentionality, but given that the former is nevertheless still a highly deflationary and contentious position, it is not clear that Kriegel really does enough to motivate and defend it, and so the comprehensiveness of the overall theory (or theories) of intentionality can, I think, be reasonably called into question.

Kriegel thinks that what counts primarily in favour of interpretivism about non-experiential intentionality is, first, that (unlike the three alternative contenders

he considers on pages 190-200) it gets the pre-theoretic extension of intentionality right, including as it (allegedly) should, various kinds of unconscious intentional states, such as the sub-personal states of cognitive psychology; and secondly, that interpretivism 'captures well' the epistemological asymmetry of intentional ascription mentioned earlier. He says that, 'This suggests that while non-experiential intentionality is merely a theoretical posit, the reality of experiential intentionality foists itself upon us pre-theoretically' (217). So far as I can see, however, both of these things are equally well captured by the less controversial and very familiar and venerable realist view in philosophy of mind according to which conscious and unconscious non-experiential intentional states - for example, the personal-level propositional representational states of commonsense as well as the sub-personal non-propositional representational states of cognitive science – are indeed postulated unobservable theoretical entities, but are for all that no less metaphysically real than those things we are 'directly acquainted' with. On this realist view, such representational states are objective and mind-independent natural kinds, some of which are recognized pre-theoretically by commonsense and some of which are not, and whose nature in particular, the laws governing them and their relation to neurophysiological states and processes – is more fully revealed by scientific investigation. Although I hesitate to say so, Kriegel's case for interpretivism seems to come down to an undefended and rather naïve type of scientific anti-realism or instrumentalism about theoretical entities, according to which anything we are not directly acquainted with is deemed irreal, 'merely' an explanatory posit. Does he also maintain that leptons (mentioned in passing on page 11 as an example of a non-observational natural kind) and atoms and all the other non-observables postulated by the various sciences are 'merely' explanatory posits? Moreover, it is not entirely clear that Kriegel's interpretivism as opposed to the commonsense-cum-scientific realism just adumbrated – is consistent with his central assumption that our concept of intentionality is a natural kind concept. Recall that his interpretivism countenances content indeterminacy. But can intentional content be both a natural kind and yet in some cases indeterminate owing to there being no single correct constitutive interpretation of the state's content? Perhaps it can - but it seems to me that Kriegel does not do as much as he might to convince readers that there is no real tension between his naturalizing ambitions and his penchant for interpretivism.

Nevertheless, while one can be sceptical about the success of Kriegel's attempt to incorporate interpretivism about non-experiential intentionality into a general naturalistic framework in which it is grounded in 'real' experiential intentionality, this book is an important and original contribution to the theory of intentionality, with many rich and interesting discussions, one that rewards close study and deserves a place on every philosopher of mind's bookshelf.

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