

it serves to build something. Taking philosophical analysis as primary, it may seem that the removal of "conceptual confusions" is our first aim, and that their presence must be fatal to empirical and engineering work, and so on.

Systematic argument in favour of any of these positions is of course possible, but if they are to be maintained it is also necessary, and in the teaching of cognitive science it is important to go into these issues, rather than leave such decisions to possible methodological chauvinism.

6 Conclusion

Whether or not we regard cognitive science as a single unified discipline is largely a matter of definition. However its methodological plurality has to be acknowledged, and is perhaps its greatest strength, since it carries the possibility of mutual enrichment. This can be seen, for example, in the teaching of philosophy in a cognitive science context. The abstract issues addressed often echo issues which arose long ago in the history of philosophy, but their pursuit in this context provides 'input' in the form of concrete examples, applications and analogies, which is productive to the point of casting doubt on the teaching of "pure philosophy".

References

- von Eckardt B. 1993, *What is Cognitive Science?*, Cambridge, MA: MIT Press.
 Gardner 1985, *The Mind's New Science*, New York: Basic Books.
 Johnson-Laird 1988, *The Computer and the Mind*, London: Fontana.
 Peterson 1990, *Wittgenstein's Early Philosophy: Three Sides of the Mirror*, Harvester.
 Smolensky 1988, "The Proper Treatment of Connectionism", *Behavioural and Brain Sciences* 11, 1-74.

Chisholm on Psychological Attributes

Karl Pfeifer

University of Saskatchewan

pfeifer@sask.usask.ca

What is it for an attribute to be psychological? One clever and inventive, albeit somewhat Byzantine answer to this vexing philosophical question has lately been proposed by Roderick M. Chisholm.¹ Chisholm's approach is to take a small number of technical philosophical notions as given and then employ these in a series of definitions which together yield an account of the psychological. In what follows I take a quick look at Chisholm's account, showing that it doesn't work.

Chisholm begins by indicating a number of psychological attributes he regards as paradigmatic, viz. *judging, being sad about something, feeling depressed, seeming to oneself to have a headache, and being appeared to redly*, among others. In contrast, such attributes as *being extended, wearing a hat, being green, and being such that all men are mortal* are paradigmatically nonpsychological. He claims that what the paradigmatically psychological have in common to distinguish them from the nonpsychological is expressed by the formula (call it 'SC' for 'sufficient condition'):

SC Any property which is possibly such that it is exemplified by just one thing and which includes every property it implies or involves is psychological.

The key terms in this formula are to be understood according to these definitions:

- D1** P is an attribute =_{df} P is possibly such that there is something that exemplifies it.
D2 P is a property =_{df} P is an attribute which is such that: (a) only individual things can have it; (b) anything that can have it can have it, or fail to have it, at any time it exists; and (c) it can be such that some individuals have it and some do not.
D3 P implies Q =_{df} P is necessarily such that if anything has it then something has Q.
D4 P includes Q =_{df} P is necessarily such that whatever has it has Q.

¹Chisholm (1983)

D5 P involves Q =_{df} P is necessarily such that whoever conceives it conceives Q.²

Implicit in SC is Chisholm's contention that his paradigmatic psychological attributes are also properties in the sense stipulated by D2. Chisholm does not explicitly say whether all psychological attributes must be properties. Reading him, one does however get the impression that he supposes them all to be properties. I touch again, passingly, on this question below.

Does SC indeed capture the paradigmatic psychological attributes? I think not. In particular, contrary to Chisholm's contention, *being appeared to redly* does not satisfy SC. What is it to be appeared to redly, anyway? Surely it must be to have an experience *as of* something red. I submit that *being appeared to redly* is necessarily such that whoever conceives it conceives of the attribute of *being red* – at least to the same extent that one conceives *being red* when one conceives *being nonred* or *being possibly red* or *being red or round*, to cite some of Chisholm's own examples of involvement. So *being appeared to redly* involves, in the sense of D5, but does not include the property of *being red*. So contra Chisholm, and no doubt surprisingly, *being appeared to redly* is not among the attributes marked as paradigmatically psychological by SC.

Such a result need not be ruinous, though, other things being equal. We have after all been considering what is supposed to be a merely sufficient condition for the psychological, and one need not identify the paradigmatic cases as such with only those that meet this particular sufficient condition. It is conceivable that Chisholm has just made a slip with his particular examples here, without thereby compromising his overall account. In any case, Chisholm goes on to develop a broad definition for the psychological which he claims to be both necessary and sufficient. The situation will only be serious if the proposed definition too fails to capture *being appeared to redly* as psychological.

Chisholm has undertaken not only to provide an account of the nature of the psychological but also to provide an interpretation of "one traditional thesis – namely, that whatever is 'purely qualitative' is psychological." To this end, Chisholm suggests that attributes which satisfy SC be called 'purely qualitative' as per D6 below, while the rest of his definitions exploit this suggested notion of pure qualitiveness:

D6 P is a purely qualitative attribute =_{df} P is an attribute which (a) is possibly such that it is exemplified by just one thing and (b) includes every property it implies or involves.

D7 P is a qualitative attribute =_{df} Either (a) P is a purely qualitative attribute or (b) P is equivalent to a disjunction of attributes each of which is purely qualitative.

²Since *conceiving* is itself psychological, Chisholm's account of the psychological is in a sense nonreductive. Many philosophers (though I'm not among them) would find it inadequate on that ground alone. The issue of reductive adequacy need not detain us, however, for I am arguing that the account is just plain false. For a defence of a nonreductive criterion in another area, see Pfeifer (1989), chap. 8.

D8 P is a psychological attribute =_{df} P includes an attribute that is qualitative.

D9 P is purely psychological =_{df} P is psychological and every property it implies involves something qualitative.

To determine whether *being appeared to redly* is psychological, then, we must determine whether it is covered by any of D7, D8, or D9. Since *being appeared to redly* does not satisfy SC, it does not satisfy either D6 or D7(a). So for D7 to be satisfied, its disjunct D7(b) would have to be satisfied. But unless some fancy paraphrase I can't begin to imagine is in the offing, that is not on the cards. Hence *being appeared to redly* is, oddly, not even (merely or impurely) qualitative. Fortunately, though, *being appeared to redly* can be viewed as including the attribute of *being appeared to*, which is purely qualitative. Thus *being appeared to redly* satisfies D8 and at least comes out as psychological, if not qualitative.

As already indicated, Chisholm sees his account as providing an interpretation of the thesis that whatever is purely qualitative is psychological. But his is a pickwickian interpretation, no matter how one looks at it. Whenever philosophers speak of certain psychological states as qualitative (purely or otherwise), it is generally in virtue of the 'content' of such states. Qualitative (or experiential or phenomenological) content is contrasted with propositional (or representational) content, and both are prescinded from any actual external factors that might be causes or intentional objects of the psychological states in question (e.g. *being appeared to redly* is *having an appearance as of something red*, but not necessarily *having an appearance of something red*). Chisholm seems to have managed the prescission at the expense of the usual contrast.

On his account the psychological propositional attitude modes such as *wanting* or *judging*, divorced from their propositional content, are perversely held to be purely qualitative, while *being appeared to redly* upon closer examination ironically turns out not to be qualitative at all. The oddity of this state of affairs is brought home by the fact that *judging* and *wanting* simpliciter only exist *in intellectu* and as such there is nothing qualitative (in any familiar sense) to distinguish them. It is only as fleshed out with content that the possibility of relevant qualitative aspects of the familiar sort arises, and even when there are such qualitative aspects (or qualia), they are usually held to be concomitants accidental to the propositional attitudes as such.

Another soft spot in Chisholm's account is his treatment of tensed attributes. On his account, *being such that it did walk* and *being such that it will walk* (to use his examples) are not properties because they violate condition (b) of D2. *Being such that it did walk*, for instance, is not an attribute that an individual thing can have at the first moment of its existence. Now Chisholm makes no mention of tensed *psychological* attributes like *being such that it did want a sloop* or *being such that it judged that sloops are fun*; but by the same reasoning these are not properties either. In answer to our earlier question, then, it is now clear that not all psychological attributes are properties. So if Chisholm meant

his stipulative definition of property to express a necessary condition for psychological attributes, he hasn't succeeded. But we need not decide this here.

However these tensed psychological attributes turn out not to be purely or merely qualitative attributes a la D6 or D7 either, since they involve properties they do not include. For example, *being such that it did want a sloop* involves but does not include the property of *wanting a sloop*, on Chisholm's account, since one can have wanted a sloop in the past without wanting one in the present. Since *being such that it was appeared to redly* is another such example, one should now anticipate the worst. These tensed psychological attributes will not even be psychological on Chisholm's account, for they don't include a qualitative attribute. The move by which we were able to retain psychological status for *being appeared to redly* will not work here. *Being such that it was appeared to, being such that it wanted*, etc. cannot be construed as qualitative even in Chisholm's Pickwickian sense. So these tensed psychological attributes are, surprisingly, not psychological at all according to Chisholm's definitions.

This outcome may be thought troubling, for past states of individuals do figure heavily in psychological explanation, and expressions for tensed attributes are ubiquitous in psychological explanations. However, for purposes of such explanation, tensed-attribute language can be paraphrased into language about the cognate untensed attributes and the times at which these are or aren't exemplified; any residual distortion of English due to such paraphrase would likely be inconsequential to the task of psychological explanation. So it seems Chisholm can safely ignore these tensed attributes that we would intuitively take to be psychological but that come out as nonpsychological on his account. Tensed attributes are not needed, for the cognate untensed attributes can do the same job and be reckoned psychological properties to boot.

The trouble with this solution is that tense is not the only way in which a psychological attribute might be temporally indexed. Consider the attribute of *remembering being appeared to redly*. No attribute that includes *remembering* is an attribute that an individual thing can have at the first moment of its existence (merely *seeming to remember* is perhaps another matter); so any such attribute violates D2(b) and thereby fails to be a property. Moreover *remembering being appeared to redly* involves the attribute of *being appeared to redly* but does not include it, thereby violating D6(b). Since D7(a) subsumes D6, the qualitative attribute of *being appeared to* is not included either. So some other qualitative attribute must be found if the status of *remembering being appeared to redly* as psychological is to be preserved within Chisholm's account. But where would we look for one? I conclude therefore that in *remembering being appeared to redly* we have a counterexample to Chisholm's account of the psychological.

This state of affairs may have a farther reaching upshot than is at first apparent. In particular, it is not at all obvious that one can make a judgment, want something, or believe something, without knowing certain

things that one has learned and remembered; many such psychological states seem to presuppose the workings of memory in some shape or form. If this is indeed the case, many attributes that include, imply, or involve *judging, wanting, or believing* will also be compromised to the extent that they include, imply, or involve *remembering*.

Finally, we might note that there may be other kinds of psychological attributes – attributes that don't primarily hinge on temporal relationships – that run afoul of Chisholm's definitions as well. The gender-indexed psychological attribute of *being such that she envies her sibling's penis*, for example, is not an attribute an individual can have at any time of its existence that it's male, perverse uses of 'she' in certain subcultures notwithstanding. In fact this might even be held to be true of the corresponding seemingly gender-neutral attribute of *being such that it envies its sibling's penis*, if penis envy is understood in the classical Freudian sense. Here we must however admit that the status of such attributes within Chisholm's account cannot be settled unless we are told more about his operative conception of *de re* modality.

References

- Roderick M. Chisholm (1983), "On the Nature of the Psychological", *Philosophical Studies* 43 155-164. Reprinted in Roderick M. Chisholm, *On Metaphysics* (Minneapolis: University of Minnesota Press, 1989).
- Karl Pfeifer (1989), *Actions and Other Events: The Unifier-Multiplier Controversy* (New York, Bern, Frankfurt am Main, Paris: Peter Lang).