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SEEMING TO SEE RED

In "Understanding the Language of Thought," John Pollock offers a semantics for Mentalese. Along the way, he raises many deep issues concerning, among other things, the indexicality of thought, the relations between thought and communication, the function of 'that'-clauses and the nature of introspection. Regrettably, I must pass over these issues here. Instead, I shall focus on Pollock's views on the nature of appearance and its role in interpreting the language of thought.¹

I shall examine two aspects of Pollock's views: (i) the distinction between comparative and noncomparative senses of 'red,' and (ii) the construal of narrow content in terms of input states and rational architecture. Consideration of the former will call into question the coherence of the distinction; consideration of the latter will suggest that comparative appearance states cannot play the theoretical role that Pollock assigns to them.

COMPARATIVE/NONCOMPARATIVE

Pollock presents a four-fold hierarchical classification of thoughts, at the base of which is a distinction between comparative and noncomparative (or "qualitative") appearance states. One is "appeared to redly" in a comparative sense when in a state typically elicited by red objects; this comparative sense of 'red,' however, is said to be parasitic on a noncomparative sense of 'red.'

One knows that one is "appeared to redly" in a noncomparative sense solely on the basis of introspection: "Experiencing blue qualia versus red qualia is connected in rational architecture to the thought that something *looks* blue (in the noncomparative sense) or *looks* red. . . . [T]he epistemic agent can introspect which he is having." (p. 12, ms) Although one can not know what qualia another person is experiencing, the "real possibility" (p. 8, ms) of inverted spectra indicates that there is

a fact of the matter as to what quale another is experiencing, whether we can know it or not.²

My question is this: Under what conditions does one experience *red* qualia, as opposed to *blue* qualia or *magenta* qualia, in the noncomparative sense? I see only two possible options: (i) One's qualia are red iff they have a particular phenomenal property; or (ii) One's qualia are red iff they tend to be elicited by red things.³ Since the sense in which qualia would be red on the second option is explicitly comparative, and hence can not yield a *noncomparative* sense of 'red,' let us examine the first.

Suppose that one's qualia are red iff they have a certain phenomenal property. According to Pollock, one can introspect which phenomenal properties her qualia have. But what one can introspect, on Pollock's view of introspection, are only the *syntactical* properties of one's states: "[I]ntrospectible categories are syntactical rather than semantical." (p. 14, ms) Is the difference between a quale's being red and a quale's being blue a syntactical difference?

Perhaps, on Pollock's account of introspection, I can know that THIS is different from THAT (with appropriate private demonstrative references to two qualia),⁴ but how can introspection alone determine which is red or blue or magenta (independently of knowledge of environmental causes of it)? What *syntactical* difference between my two thoughts makes the referent of THIS a red quale and the referent of THAT a blue quale, instead of the other way around? To answer that the difference can not be put into words would have the surprising consequence that syntactical differences can not be expressed in language. In any case, the question here is metaphysical: what is the putative difference between 'red' in the noncomparative sense and 'blue' in the noncomparative sense? I see no "logical space" in Pollock's view for an answer.

The ability to discriminate syntactical differences introspectively does not seem to suffice to determine which qualia are red, as opposed to blue or magenta, and thus offers no grounding for a noncomparative sense of 'red'. Prima facie, it seems to me, phenomenal properties are not just syntactical; if that is right, then either phenomenal properties are not introspectible, or introspectible properties are more than syntactical.⁵

From another angle: Suppose that half the human population had

brains that responded to red(blue) stimuli the way that the brains of the other half responded to blue(red) stimuli, but that there were no difference in their uses of color words. Take one person from each half, A and B, and present them both with red stimuli. Of course, if asked, they both *report* experiencing red qualia. But what would make it the case that the qualia either or both experienced were, in fact, red qualia? By hypothesis, their brain differences result in their experiencing qualia with different phenomenal characteristics; but since qualia are "defined" by their phenomenal properties on this first option (and not by the phenomena that tend to elicit them), A and B are not *both* experiencing red qualia.

Let me pause here to entertain an objection. One may suppose, contrary to what I have just claimed, that A and B are both experiencing red qualia, but in different noncomparative senses: A's are red to her; and B's are red to her. In that case, I reply, there is not just one noncomparative sense of 'red,' but indefinitely many. The same question asked earlier reappears — only now it concerns not qualia that are red in *the* noncomparative sense, but qualia that are red-in-the-same-noncomparative-sense. Instead of asking under what conditions are qualia red?, the question is just relativized to noncomparative senses of red: Under what conditions are qualia red in the same noncomparative sense? What makes A's qualia red to her, as opposed to blue to her? These latter questions just return us to the original two options. If syntactic properties alone fail to distinguish which of A's thoughts concern red qualia, as opposed to blue qualia, syntactic properties alone also fail to distinguish which of A's thoughts concern qualia that are red-to-her, as opposed to qualia that are blue-to-her.⁶ Hence, there is no advantage in proliferating noncomparative senses of 'red.'

So, let us return to the idea that there is a single phenomenal property by virtue of which certain qualia are red (in the noncomparative sense). In that case, by hypothesis, A and B are not both experiencing red qualia. Nor are there any differences between A and B that would make it the case that one, but not the other, is experiencing red qualia. That leaves only the option that *neither* is experiencing red qualia. But if neither is experiencing red qualia under *these* circumstances, when would anybody ever experience red qualia (in the noncomparative sense)? I see no answer.

The difficulty here is not just epistemic. It is not only that Pollock's

private phenomenal properties are unreportable, but also that there seems to be no fact of the matter that could make it the case that my qualia (or anyone else's) are red in the noncomparative sense. This point may be missed, I think, because we automatically use 'red' in a comparative sense even when we try to use it in a noncomparative sense. I suspect that 'red qualia' is an oxymoron in that 'red' cannot be used in English *except* in a comparative sense; yet as a term that modifies 'qualia', 'red' is intended in a (nonexistent) noncomparative sense.

Part of the point that Pollock wants to make, I think, may be put like this: Introspectively, I distinguish between my qualia on the basis of their phenomenal characteristics, which turn out to be (something like) differences in "shape." Experience teaches me that one of these shapes (call it S) tends to be elicited by red things and another (call it S') by blue things. Someone whose spectrum is inverted relative to mine may discover that in her, S tends to be elicited by blue things and S' by red things.

I should note that neither S nor S' (considered in isolation from the environment) should be considered red or blue in any noncomparative sense; otherwise, the same old question reappears: Is S red in the noncomparative sense? Is S'? Although my reformulation is consistent with Pollock's syntactic view of introspection, it has the consequence that red and blue are *not* phenomenal properties of qualia at all.

To speak, as Pollock does, as if there is a sense in which one can introspect that something looks red (as opposed to blue or magenta or something else) on the basis of syntax alone suggests a harmony between appearance states as supervening on brain states and appearance states as fixed by environmental causes. But this suggestion just covers up a deep incongruity, which I shall try to expose in the next section.

NARROW CONTENT

The interpretation of the language of thought, as I understand Pollock, really begins with narrow content. Narrow content is the content "shared by thoughts put in correspondence by rational input isomorphisms." (p. 16, ms) A rational input isomorphism is a mapping that

preserves both rational architecture and input correlations, where input correlations are determined by relations to the environment, by *comparative* appearance states. "[W]hat makes a state of me the state of seeming to see something red is a combination of the way it enters into my rational architecture and the fact that it tends to be elicited by the presence of red objects."⁷ I shall summarize this view of narrow content as (NC):

(NC) Narrow content = rational architecture + comparative appearance state

Let me bring out what I take to be difficulties in (NC) by means of a thought experiment that I have described in detail elsewhere.⁸ Consider three individuals, E, M, and V (an Earthian, a Martian, and a Venusian), who, as part of a psychological experiment are placed in empty rooms on Earth, Mars and Venus, respectively.

The differences among Earth, Mars and Venus are differences in atmosphere: On Mars the atmosphere transforms wavelengths normally emitted by blue things on Earth to wavelengths normally emitted by red things Earth; on Venus, the atmosphere transforms wavelengths normally emitted by red things on Earth to wavelengths normally emitted by blue things on Earth. M's room has walls that would emit blue wavelengths on Earth; V's room has walls that would emit red wavelengths on Earth.

To simplify, assume that E, M, and V all have the same rational architecture. So, although there are no red things on Mars, M's visual system is affected the way that E's is affected in the red room on Earth; and although there are no blue things on Venus, V's visual system is affected that way that E's would be affected by a blue room on Earth. Now, compare the narrow contents of E, M, and V.

First, consider E and M. Do they share narrow contents? Suppose so. Since E and M have the same rational architecture, then by (NC), they must be in the same comparative appearance state. Since E's state is one typically elicited by red objects, it is a *red* comparative appearance state, and since M's state is one typically elicited by blue objects, it is a *blue* comparative appearance state. So, if we said that E and M have the same narrow contents, the state in question is one elicited by things that emit red wavelengths on Earth *or* by things that emit blue

wavelengths on Mars. Now we have something akin to what Fodor has called the *disjunction problem*. For the state in question is not a red state or a blue state, but a "red-or-blue" state. Worse, it is also elicited by the presence of things of *any* color (given suitable adjustments in atmosphere), or even of things emitting energy of wavelengths of the nonvisible portions of the spectrum.⁹

Since color simply drops out of consideration on this option, let us consider the other option. Suppose that we take E and M to differ in narrow contents. Unfortunately, this would be a straightforward violation of the constraint that narrow contents supervene on neurological states, a constraint that Pollock endorses when he takes narrow content "in the official sense that two people who are molecular duplicates ("twins") will automatically have thoughts of the same content." (p. 16, ms) In the case described, E and M may well be molecular duplicates, in which case the supervenience condition would be violated.

Thus, on the affirmative answer to the question — Do E and M share narrow contents? — appeal to comparative appearance states in terms of what elicits them is irrelevant to the state in question. But on the negative answer, the basic constraint that narrow contents supervene on internal physical states is violated

Now consider E and V. Do they share narrow contents? Suppose so. Assuming the E and V have the same rational architecture and the same narrow contents, then by (NC), they must be in the same comparative appearance states. This option also detaches comparative appearance states from neurological states. For on this option, different neurological states subserve the same comparative appearance states. Indeed, the example easily may be modified to show that indefinitely many neurological states can subserve the same comparative appearance states, because comparative appearance states are identified by what elicits them.

So, suppose that E and V differ in their narrow contents. Since E and V share rational architecture, if they differ in narrow content, then by (NC), they must differ in comparative appearance state. But the identity of comparative appearance states is determined by what elicits them, and both E and V are in states elicited by red objects (in locally normal conditions). Thus, as long as we take input states to be comparative appearance states, we can not suppose that E and V differ in narrow content without violating (NC).

Thus, as in the question concerning E and M, neither answer to the question — Do E and V share narrow contents? — is tenable. I think that the difficulties in both cases are generated because Pollock implicitly invokes two criteria of identity for input states at the same time:

- (1) Sameness of internal physical state → sameness of input state
- (2) Sameness of same comparative appearance state → sameness of input state

There would be no problem if on these two criteria were extensionally equivalent, but we have seen that they are not. Since the conjunction of (1) and (2) leads to incoherence, perhaps Pollock should just abandon one of them. But to give up (1) would be to give up the supervenience that constrains narrow content “in the official sense;” and to give up (2) would be to give up Pollock’s account of narrow content in terms of comparative appearance states.¹⁰

NOTES

¹ This is a response substantially different from the one I gave at the Greensboro Conference to a paper substantially different from the one Professor Pollock read at the Greensboro Conference. In reply to the paper Pollock actually read, I argued that, on his view, we can never literally say what we think. Pollock’s current paper refines the classification schemes for thought and thus complicates (but not, I think, eliminates) the objection about expressibility of thought. However, I have not had time to think through the complications.

² If one knew that two individuals were molecular duplicates, I think that Pollock would say that one would know that they do have the same qualia; otherwise, I think that Pollock’s physicalism would be jeopardized. So, when Pollock says that it is “in principle impossible to become justified in believing that others experience the same qualia as you” (p. 8, ms), I think that he is overstating. Rather, as he puts it elsewhere, it may be in fact impossible to become so justified.

³ I take red objects to be objects that emit energies of certain wavelengths (around 5,000 Angstrom units, I think). Redness, in this sense, is a physical property of objects.

⁴ I put it this way in order to show that I take Pollock’s view to be; I am not endorsing the intelligibility of private demonstrative reference. I am much more impressed with Wittgenstein’s general line against private ostension than Pollock is.

⁵ I suspect that Pollock is moved to hold the view that introspectible properties are nonsemantic by his desire to preserve mind/brain supervenience for narrow content.

⁶ Actually, following out the implications of the idea of qualia that are red-to-me may be another avenue for showing the incoherence of private demonstrative reference. By virtue of what would today’s qualia be red-to-me in the same noncomparative sense as yesterday’s qualia? Is there any room for me to be right or wrong here?

⁷ p. 14, ms. Pollock notes that to avoid difficulties I raised in “Content by Courtesy” (*Journal of Philosophy* 84, 1987: 197–213), these input correlations “must be understood as nomically determined by a person’s physical structure.” (note 12) However,

this requirement helps *generate* the conflict between appearance states as determined by relations to environment, on the one hand, and as determined nomically by a person's physical structure, on the other. It does not *resolve* the conflict.

⁸ See "On a Causal Theory of Content," forthcoming in *Philosophical Perspectives: Philosophy of Mind and Action*, James E. Tomberlin, ed. The argument there is applied to Fodor's *Psychosemantics*.

⁹ As I have argued in "On a Causal Theory of Content," the presence of red objects is irrelevant to the comparative appearance state in question; 'the state that tends to be elicited by the presence of red objects' is a mere reference fixer (like 'the stuff that is in the lakes and streams').

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