

The Synthetic Significance of Analytic Statements

In his essay “Brains and behavior” (Putnam, 1965), Putnam has contended that Logical Behaviorism is not merely dead, its corpse has become olfactorily unattractive. For, says Putnam, while the *translatability* of mentalistic terms into the vocabulary of overt behavior is no longer a live issue, innocent philosophers are still being corrupted by sinful urges of a Logical-Behavioristic sort, namely, (a) suspicion that statements relating behavior to mental events may be more than just synthetic, and (b) the possibility that the translatability thesis breaks down purely and simply through a mismatching of vagueness in the way, e.g., that a statement about baldness fails at translation into a statement about the number of hairs on a person’s head merely because of the inherent vagueness of the term ‘bald’. But while the latter version of neo-Logical-Behaviorism can be dismissed with a curt reminder of what has been learned about the observational irreducibility even of dispositional terms, I remain unconvinced that propositions linking mental and behavioral events are wholly devoid of analytic support.

Taking “pain” as his paradigm, Putnam’s rebuttal for the claim, that all which prevents the translation of pain-talk into grunt, grimace and groan talk is the vagueness of the term ‘pain’, is the perfectly sensible observation that *causes*, in this case pains, are not logical constructions out of their effects, i.e., behavioral symptoms. And while so stated the argument is far from complete, its details are sufficiently straightforward that I shall assume the point to be conclusively established. Putnam’s attempted refutation of the other species of neo-Logical-Behaviorism I find more difficult to summarize. If I understand him correctly, its main thrust is that “there is nothing self-contradictory . . . in talking of hypothetical

¹With only minor changes, the following is the text of my rejoinder in a 1961 AAAS symposium to Hilary Putnam’s argument that mental concepts are entirely independent in meaning of behavioral ones. The original plans to publish the symposium in its entirety went awry; and Putnam’s paper subsequently appeared in Butler (1965) as a solitary—to my rue, since it seemed to me that despite its obligatory brevity my discussion made a significant and not wholly unoriginal contribution to the other-minds problem. Even so, that my commentary was largely self-contained, handily transcending the time and context of its original production, did not really occur to me until my recent editorial encounter with John Koethe’s article, “The Role of Criteria in Wittgenstein’s Later Philosophy,” forthcoming in the *Canadian Journal of Philosophy*. Despite its overall excellence, Koethe’s argument seems incomplete to me in one critical respect that happens to be exactly the point of my rejoinder to Putnam. If the logic of mental states’ behavioral criteria is still a live issue—as would appear to be the case—Koethe’s argument supplemented by mine should do much to allay it. And since the *Canadian Journal of Philosophy’s* editorial policy against publishing its editors’ own material prohibits my piece from appearing in tandem with Koethe’s, its most appropriate outlet is *Dialogue*.

worlds in which there are pains but *no* pain behavior”; *ergo*, pain-statements do not analytically entail behavior-statements. As will be seen, the premise of this argument, though true, does not support its conclusion. However, Putnam also gets in some ancillary footwork on meaning changes, “cluster” concepts, and non-behavioral criteria for pain-ascriptions; and while I have been unable to tease out any clear Putnamian theses on the latter points—in fact, I don’t think he intended to advance any—this is where the issue he has raised comes into sharpest focus. Why this is so I will try to indicate shortly, though if I am to do so with brevity, you will have to bear with some dangerously attenuated arguments.

To begin, I submit that a statement, ‘*p* is the case’, may be analytically true in a perfectly good sense of “analytic”, and still not conflict with the counterfactual claim that *p might not* have been the case. That is, to put the matter somewhat paradoxically, the semantic alternatives for the truth status of some non-apodictic statements are ⟨contingently false, analytically true⟩ rather than the traditional ⟨contingently false, contingently true⟩. Several years ago—let me say in 1955, though my memory here is a little shaky—there was a flurry of newspaper stories about a woman in the southeastern U.S. who had been struck by a falling meteorite—the first time, apparently, that such an event had ever been reported. Let me call this woman ‘Marysue Smithjones’. That is—and now I deliberately adopt Putnam’s own phrasing—by ‘Marysue Smithjones’ I *mean* the woman who was struck by a meteorite in 1955. Now: Was it necessary for Marysue Smithjones to have been struck by a meteorite in 1955? Of course not. What could be more fortuitous than an accident of this sort? And what could be easier than to compose a story—a historical romance in this case rather than Putnam’s science fiction about super-spartans who suppress all overt symptoms of their inner agonies—in which some chance distraction, some momentary hesitation, perhaps no more than one synapse with a slightly altered threshold, suffices to absent Smithjones from that tiny volume of space-time in which the historic encounter transpired. Thus it very well *might* not have been the case that Marysue Smithjones was struck by a meteorite in 1955. And yet, in what fashion am I able to suspect that Smithjones *was* not, in fact, struck by a meteorite in 1955? Certainly not in the same way that I can question whether my wife or Professor Putnam has had such an experience. For in the latter cases I can identify the subject irrespective of any knowledge I may have concerning his affairs with meteorites, whereas by the only criterion I have for Smithjones’ identity, no one who was *not* hit by a meteorite in 1955 will qualify. That is, while I may question whether there ever was such a person as Smithjones, once I *have* accepted this, it would be senseless for me to be in further doubt about Smithjones’ alleged encounter with the meteorite. Thus the statement, ‘Marysue Smithjones was struck by a meteorite in 1955’, is analytically true *if* it is true at all, albeit the state of affairs it describes is a thoroughly empirical fact. Neither does the analyticity of this statement contravene the counterfactual claim, ‘Mary-

sue Smithjones might not have been struck by a meteorite in 1955’—the latter statement meaning that the person who was *in fact* struck by the meteorite *need* not have been, though to be sure, if she had not been, we would have had to find some other phrase by which to refer to her. The analyticity involved here is admittedly more sophisticated than as traditionally conceived, but it is of a particularly important sort that I have discussed in detail elsewhere² and Putnam has insisted that the fact that a world might exist in which people feel pain without indulging in pain behavior *not only* disproves that pain analytically implies pain behavior in the old-fashioned way that bachelorhood analytically implies unmarriedness, but *also* rules out that pain-behavior ascriptions follow analytically *in any sense* from pain-words.

If the point of my “Smithjones” example is not sufficiently clear, Putnam’s own case of “multiple sclerosis” will do as well. If the words ‘multiple sclerosis’ *mean* “that disease which normally produces some or all of the following symptoms . . .” (normally, that is, as defined by the frequency-distribution of circumstances in which humans do, in fact, find themselves), the statement ‘Multiple sclerosis normally produces some or all of the following symptoms . . .’, is indeed analytically true. It is, in fact, *true by definition* if true at all, albeit this “definition” is not an *explicit* (i.e., eliminative) definition, and is *false* if its assumptions are not realized. Moreover, the analyticity of this (presumed) truth is perfectly compatible with subsequent discovery that the condition which we call ‘multiple sclerosis’ and at present probabilistically identify only through its overt symptoms is infestation beyond a certain tolerable concentration with a certain virus. It is likewise compatible with the possibility that the symptoms of multiple sclerosis might be quite different on a world with lower mean temperatures, and even with the claim that multiple sclerosis—i.e., whatever it is that *does*, in fact, produce the symptoms in question under human-normal circumstances—*need* not produce these symptoms under these circumstances. By the same token, whatever the literary merits of Putnam’s super-spartan mythology, it has little bearing on his contention of mental/behavioral semantic independence; for there is no inconsistency between the possibility of other species or even whole worlds in which pain occurs without human-type pain behavior, and the possibility that the word ‘pain’, as understood by most speakers of English, *means* “whatever it is in the mind (or brain) that is the most frequent cause of human writhings and screamings.” And if this, or something like it, is in fact all or even part of the contemporary meaning of the word ‘pain’, then assertion that some human is in pain analytically implies something about that person’s behavior and conversely, though of course the entailments are only probabilistic. I cannot agree, therefore, that Putnam has reduced this last

²Rozeboom (1962a). The analyticity involved here is by no means restricted to advanced theories in technical science; it also pervades our most primitively intuitive inferences to the underlying causes of observed events—see e.g., Rozeboom (1973, p. 66ff).

bastion of Logical Behaviorism to rubble. I question whether he has even made its defenders breathe heavily.

To undermine Putnam's argument, however, is not necessarily to discredit its conclusion, and it still remains to consider whether mentalistic concepts in ordinary use do in fact contain behavioral implications as part of their meanings. (By the way, you will have to forgive me for talking about these elusive things, *meanings*, so glibly. I have, however, said more about them elsewhere.³ The problem has two main parts: (a) whether mind-words are infused with behavioral meaning at any stage of their normal acquisition, and (b) if so, to what extent do they preserve this condition during subsequent elaborations and revisions of usage. The latter question is the more difficult one, and I shall speak to it first.

Suppose that having defined the name 'Marysue Smithjones' to *mean* "the woman who was struck by a meteorite in 1955," I now dig back into the newspaper files and discover that Ms. Smithjones was reported to be a 37-year-old legal secretary known to her friends as "Talltales Tessie." And suppose too that I *accept* this report fully as much as I believe the business about the meteorite. Now, when I first started talking about Ms. Smithjones a few paragraphs ago, it would have been absurd for me to entertain the possibility that she never was, in fact, bumped by a meteorite, even though I might legitimately have had reservations about whether the name 'Smithjones', as originally defined, refers to anyone at all. But does this analyticity still obtain now that I have enriched my (possible) knowledge about Smithjones? Would or would not it be self-contradictory for me now to venture that perhaps Ms. Smithjones was a 37-year-old legal secretary called 'Talltales Tessie' who saw a meteorite fall nearby and cooked up an interesting story? Or is it now analytic for me *both* that Smithjones was meteorite-stricken *and* that she was a 37-year-old legal secretary at the time? Or am I perhaps entitled to wonder, without being illogical, whether Ms. Smithjones really *is* the person known as 'Talltales Tessie', since after all, the press identification might have been in error—e.g., perhaps the one who was struck, namely, Smithjones, was not actually Tessie but a bashful friend who was with her at the time. I shall not try to answer these questions here. Their purpose is merely to raise doubt that the statement 'Smithjones was struck by a meteorite in 1955', becomes wholly synthetic as soon as we have additional criteria for Smithjones' identity.

Similarly, if medical research were to decide that infestation with a certain virus V is almost always responsible for the symptoms ascribed to multiple sclerosis, at what stage in concluding that multiple sclerosis *is* infestation with virus V would the statement, 'Multiple sclerosis is that disease which normally produces some or all of the following symptoms . . .', become *merely* synthetic? Indeed, might not there instead come a time when symptoms . . . are an *analytic*, albeit probabilistic,

³See footnote 2. Also, Rozeboom (1962b, 1971, 1972b, 1975).

criterion for infestation with virus V—e.g., if another strain of virus were found to be identical with virus V in all known respects except the ability to produce the symptoms of multiple sclerosis? Without belaboring these example further, let me suggest that a sentence’s analyticity is not an all-or-none affair but a matter of *degree*, turning upon the extent and manner in which what it predicates of its subject is a criterion for the referent of its subject-term. If so, it is plausible that if having effect *A* is the chief (or only) criterion for the identity of an assumed cause *X* at one stage of knowledge, then the statement, ‘*X* tends to produce *A*’—including in particular the case where ‘*X*’ is a mind-word and ‘*A*’ is a behavior-description—may remain at least weakly analytic even after more satisfactory criteria have supplanted *A* as the favored test for *X*. Nor would such analyticity, weak or strong, interfere with regarding *A* as an *empirical* effect of *X* (though it does require abandoning the classic dogma that an analytic statement cannot signify a logically contingent state-of-affairs.) For we can draw upon certain truths about *X* in order to build a concept of *X*, even while maintaining that whatever it is that *does* have the attributes ascribed to *X* does not *have* to have them. Thus if ‘*X*’ is a “cluster” concept meaning “that condition responsible for the disproportionately frequent co-occurrence of attributes “ A_1, \dots, A_n ” then for each criterion attribute A_i , the statement ‘*X*s tend to be A_i s’ is analytic, even though we may conclude from the co-presence of $A_1, \dots, A_{i-1}, A_{i+1}, \dots, A_n$ in an entity *E* that *E* is (undoubtedly) an *X* and still need to determine empirically whether *E* is also an A_i .

We have yet to consider whether mind-words do, in some fashion, embody behavioral meanings at any stage of their development. It is not practical to explain here how observed behavioral regularities provide us, through brutally compelling abductions,⁴ with conceptions of their underlying sources regardless of any help we may receive from introspection in learning about these. So let it suffice for me to observe, as Putnam has done before me, that we certainly don’t learn mind-words such as ‘pain’ by having standard mental states held up to us by our teachers, even though eventually we come to label certain introspected feelings as instances of pain without recognizing any need to reserve judgment until we see how they cause us to act. A reasonable account of how such words are learned is that the *first* meaning they acquire for me is in terms of probabilistic causal connections with the external world ascribed to them by others in my language-community. (E.g., “*Hurt* is something that Mommy says happens to me when I touch the top of the stove when it’s red; and Daddy said that the reason baby Jim cried when I sort of accidentally stepped on his nose was because it *hurt* him, and Daddy gave me a spanking to make me *hurt* too; but sometimes when baby Jim cries Daddy says he’s not *hurt* at all, just spoiled.”) Concomitant with this learning, perhaps,

⁴For discussion of the generic nature of explanatory induction (abduction), see Rozeboom (1961, 1972a)

but certainly not prior to it, is a gradual realization (not a *conceptualized* realization, of course, but something more primitive) that there is a certain vividly unpleasant kind of experience which afflicts me in remarkably close association with the circumstances in which others say I am in pain. Add to this the fact that as my language-community uses the word ‘pain’, it refers to something which I am expected to be able to identify without hesitation when it obtains in my own case, and it is inevitable that I will conclude—not a deliberate, reasoned conclusion, but an acquisition of language habits which come to the same thing—that this unpleasant experiential quality is what pain is. ‘Pain’ has now come to be a word for which I have a near-infallible internal criterion in its application to *me*, but to which the original behavioral meanings still cling as I preserve my criteria for judging the pain of others.

The most interesting aspect of this interpretation of the acquisition of mind-words is not just the plausibility it gives to the view that the entailment of behavior-statements by mind-statements is in some sense analytic, but a further implication for the “other minds” problem. When a person begins to use the word ‘pain’ and other mentalistic terms, he has certainly not matured to a level of linguistic discretion where he can pick and choose among the various things other people say about pain in order to compile what *he* elects to mean by ‘pain’. He simply buys into his language-community’s consensus over the use of this term. Consequently, as his use of the word ‘pain’ *also* becomes cued to certain introspectively accessible internal conditions—that is, as he in effect decides that *this* is the sort of feeling that pain is—he has of logical necessity also concluded that *this* sort of feeling is what is usually responsible for other persons’ screamings and writhings. (“If *this* is what hurt is, and hurt is what baby Jim felt when I stepped on his nose, then *this* is what baby Jim felt.”) Whatever force the Analogical Argument may have for justifying belief in other minds, it is profoundly irrelevant to why we *do* believe in them. Mind words are proffered to us with a built-in meaning that pains, joys, fears, desires, etc., are certain inner workings, common to many people including ourselves, that are responsible for overt actions in certain specific ways. It is inevitable that we should construe these words to denote those aspects of our private feelings which appear to affect our own behavior in just these ways, but until we learn to argue like philosophers, we can do so only at the price of conceding these very same experiential qualities to other minds.

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