Philosophers, three year olds & autistics

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Abstract

In the 'false belief' task (Wimmer and Perner 1983) autistics and three year olds attribute beliefs based on the objective truth of a situation in the world rather than what the person believes on the basis of available information. Several recalcitrant problems in philosophy are based on the same mistake in which philosophers take their own knowledge of the truth rather than the subject's justified belief as relevant to belief ascription. Specifically, externalism regarding mental content rests on intuitions such as those evoked by Putnam's Twin Earth example. However, despite its subjective force, externalism may be undermined by attending to its aetiology and showing how the intuitions arise from deceptive mechanisms. Instead of defending internalism directly, I ask: Why does externalism seem so convincing? This is a cognitive science of biases and illusions among philosophers.

Keywords: Mental content; semantics; externalism; internalism; individualism; Twin Earth; intuitions.

Intuitions and Externalism

In confronting certain persistent puzzles, philosophers resemble the three-year olds and autistics in the false-belief task of Wimmer and Perner (1983) where belief is ascribed on the basis of the truth rather than the subject's justified beliefs. In these cases, the believer's internal state of mind can remain fixed and yet the beliefs can be made to change from true to false by manipulating the external world. This is essentially Farkas' (2003b) reason for pressing the internalist case regarding mental content on the grounds that "external features are important only if they are incorporated into the internal cognitive or experiential perspective of cognizers." Farkas (2003b) succinctly summarizes the moral of the Putnam's famous Twin Earth story: "Internally identical subjects … can have different mental contents." Similarly in the notorious Gettier problem, internally identical subjects can have different "mental contents" if the latter are individuated on the basis of the truth as known to the theorist but unavailable to the believer. I will suggest that Quine's (1960) famous puzzles concerning propositional attitudes rest on the same intuitions about beliefs that may be true or false for reasons entirely independent of the believer's grounds. The relevance of these matters to cognitive science lies in settling interminable debates about the individuation of mental states by showing that the most widely held externalist view is based on seductive but misleading intuitions.

Baffling and Vexatious?

It is widely acknowledged that externalism has become established as the dominant view about mental content. (Egan 1999, Farkas 2003a, Rey 2004, Wikforss 2008). Moreover, Segal (2000, 24) remarked that underpinning externalism, "Putnam's Twin Earth example has become a sort of paradigm in the philosophies of language and mind." However, Fodor (1987a) has noted that the Twin-Earth Problem "*isn't* a problem; it's just a handful of intuitions together with a commentary on some immediate implications of accepting them" (1987a, 208). Significantly, Fodor writes:

> … it is very plausible that all these intuitions hang together. The question is: What on earth do they hang on? (Fodor 1987, 202).

Farkas (2003b) characterizes this "deeply rooted" intuition as "baffling" and a "vexatious problem" that "poses a serious challenge for any attempts to give an internalist analysis" of the familiar thought experiments such as Putnam's (1975) Twin Earth scenario. Kripke acknowledges that he was led by his "natural intuition" to the view that proper names are rigid designators. Kripke (1972, 42) wrote:

> Of course, some philosophers think that something's having intuitive content is very inconclusive evidence in favor of it. I think it is very heavy evidence in favour of anything, myself. I really don't know, in a way, what more conclusive evidence one can have about anything, ultimately speaking.

Nevertheless, Pietroski (2003) suggests "despite a considerable literature on this topic, no one has shown that names *do* bear any interesting and theoretically tractable relation to their bearers." If he is correct, we are owed an explanation of how so many philosophers could have been so misguided. Chomsky has characterized the orthodox philosophical conception of semantics as a kind of illusion. He says "there is no word-thing relations of the Fregean variety" since such relations are "mythical" by contrast with the question of "how the person's mental representations enter into articulation and perception" (1996, 23). However, Fodor (2000) expresses puzzlement about Chomsky's view of semantics, saying: "I think it is hard to make sense" of Chomsky's remarks and "It's not so clear that what Chomsky takes to be semantic truths actually are."

Chomsky rejects the orthodox semantic conception of a presumed relation between words and things that he describes as "obscure" and "perverse" (2000b, 39). He warns about the "distorting residues of common-sense understanding" (2000b, 23). In what we might term the 'NRA thesis' by analogy with the notorious slogan, Chomsky (2002, 43) says "Words don't refer; English people refer; it's an act". Chomsky points to the seductive intuitions with which I am concerned saying "one would want to ask why such ideas appear so compelling" (1995, 57). However, where Chomsky (2000b, 148) explicitly addresses the matter of intuitions underlying Putnam's story about the reference of the word "water" on Twin Earth, he seems sceptical about the prospect of any deeper analysis. He writes "we can have no intuitions about the question, because the terms *extension, reference, true of, denote*, and others related to them are technical innovations, which mean exactly what their inventors tell us they mean" Chomsky (2000b, 148). However, even if we grant Chomsky's point in general, it seems clear that certain intuitions may be induced by the notorious thought experiments that preoccupy philosophers. These intuitions are not random in the way that intuitions about technical concepts might be among the uninitiated. A vast philosophical literature attests to the existence of systematic, robust and widely shared intuitions that are at the heart of externalism.

Little Choice?

Chomsky points out that certain externalist questions are never raised for phonology where there is no sensible notion of a non-individualist or extra-linguistic object, but with regard to semantics the analogous, spurious, answers are assumed to be obvious. It is in regard to this sense of obviousness that I want to ask why philosophers feel that these "intuitive responses to a certain kind of thought-experiment appear to leave them little choice," as Boghossian (1998, 273) puts it. If Farkas and Boghossian are right about the spurious intuitions driving externalism, then these may be susceptible to a satisfactory analysis. Like an explanation of the Müller-Lyer illusion, it may defuse the intuition even if not curing us of it.

Glue

We see the intuitions at work in certain objections to Egan's computational account of content. Some have complained that the states characterized by a computational theory of vision are not essentially *visual* states (Egan 1999, 190). However, the objection rests on an implicit, illegitimate criterion. Egan's examples of computationally individuated states allegedly fail to be visual not because of any deficiency in their functional role but only in the sense of not being *viewable by us*. It is significant that this irrelevant criterion underlies the same complaint against Pylyshyn's (2003) account of visual imagery. His "tacit knowledge" account does not posit pictorial representations and are, therefore, said to be not *essentially visual* (see Farah 1988, Slezak 1995). Implicitly, this means the representations are

not intelligible to us as viewers. However, in these cases we see a tacit reliance on the very intelligence that is to be explained. It is only from this vantage point that the contents of mental states appear to be an essential property. However, Egan notes that, given the right functional role, visual representations might be auditory and, therefore, "the content assigned to states of the device by an interpretation that is appropriate to its normal environment is not an essential property of the device as computationally characterized" (1999, 190).

Fodor has referred to this assumed essentiality as the "glue" that holds representations together with their vehicles. This is, of course, the concern of Fodor's earlier question: What makes a computer program play chess rather than simulate the Six Day War? (Fodor 1978, 207). Egan emphasizes that the possibility of alternative semantic interpretations does not pose a problem for computational theories. Thus, the computational states of the visual system might be interpretable as covarying with the fluctuating stock market index (Egan 1999, 183). However, Fodor and Lepore present the fundamental puzzle as follows:

> What we need to know is what precludes radical mismatches between intension and extension. Why can't you have a sentence that has an inferential role appropriate to the thought that water is wet, but is true iff 4 is prime? (1992, 171)

Fodor and Lepore say that no adequate semantics could allow an expression whose intension and extension were so radically disconnected. They ask "What on earth would it mean?" (1992, 170) – that is, if the computational, inferential role and external truth conditions come apart. This question is very revealing about the intuitions of interest here. Presumably, this question asks how we might conceivably *understand* an expression whose intension and extension diverged. However, unless it is merely a *façon de parler*, the very question suggests that the problem may arise precisely from conceiving the explanatory problem in terms of how we might *understand* mental representations as distinct from how we might *explain* them. Here we may see what lies behind the troublesome intuitions that support an externalist conception of content, namely, the tacit reliance on precisely the kind of understanding that is to be explained.

Mayan Intuitions

Gabriel Segal (2004) objects to Putnam's and Kripke's externalist intuitions, on what seem to be secondary grounds. He says "there are specific reasons why we should not trust those intuitions" (2004, 339), namely, that "both Putnam and Kripke … mistakenly think that their intuitions are 'ours', that they are representative of those of all sensible, reflective humans" (2004, 340) – a failure of empirical, anthropological, psychological caution. Segal's concern about the *apriorism* of Putnam and Kripke appears to arise merely from over-generalizing from their own unrepresentative intuitions. Accordingly, Segal proceeds to

give anthropological evidence of the variation in intuitions among the Maya regarding Twin-Earth type questions. However, even if the Maya all shared the Kripke-Putnam intuitions, this would hardly establish the metaphysical claims that are taken to be warranted on their basis. Segal's criticism doesn't address the question of the underlying source of the intuitions even if they were found to be universally shared.

Invisible Narrator Illusion

In Crane's (1996) useful phrase, the question of who is "in the know" is central to untangling the intuitions at the heart of the puzzles concerning externalism. We don't notice our own role as philosophers or theorists in the very formulation of the conundrum and our own essential contribution as observers. Philosophers' talk of truth and reference adopts the stance of the invisible narrator of a novel or movie according to which he, and we, know how things *really* are. In the familiar example, we know that Clark Kent is really Superman. We might ask: Does Lois Lane love Clark Kent? However, although this problem is essentially Kripke's case of Pierre, the puzzles that are generated in this manner are not too deep for ten year olds to appreciate.

The invisibility of our own role and our own knowledge creates the illusion that it is the relational fact about how the world really is that determines the thought or belief in question. However, the truth about the way the world really is gets conveyed only via our own tacit knowledge of the relevant facts. Putnam's concession that the truth about the non-psychological world "may take an indeterminate amount of scientific investigation" is the give-away clue to the intuition that is leading us astray. The clear conclusion we must draw from Putnam's reasoning is that we might *never* have discovered that Oscar$_1$ and Oscar$_2$ understood the term "water" differently. We are to suppose that people might differ in the meanings of their words and thoughts regardless of anything we might ever come to learn about the scientific truths about the world.

As Crane (1996, 293) notes, "the Twin Earth cases are meant to demonstrate that the world itself can, as it were, fix the meanings of some of our words." However, as Fodor and Crane have argued, such relational properties cannot be relevant to the intrinsic contents of mental states. The appearance of relevance arises from our own "being in the know." Of course, "omniscience" is to be understood here only in the sense of knowing what the subject of thought ascription does not know – the illusion of the invisible narrator who knows the truth.

Thoughts and their Ascription

Michael Devitt (1984) has made a salutary distinction between 'Thoughts and their Ascription': "Thoughts are one thing, their ascription another" (Devitt 1984, 385). Devitt warns "it is a common practice … to use 'belief', for example, where what one means to refer to is belief *ascription*" (1984, 389). The failure to respect Devitt's distinction is to blame for Kripke's (1979) "Puzzle About Belief" in which we seem forced to describe the hapless Frenchman Pierre as holding contradictory beliefs about London. He doesn't know *Londres* is London, and thinks *Londres est jolie* and also 'London is ugly'. Kripke acknowledges "I am fully aware that complete and straightforward descriptions of the situation are possible and that in this sense there is no paradox" (1979, 895). However, he insists "none of this answers the original question" namely "Does Pierre, or does he not, believe that London is pretty?" He says "I know of no answer to *this* question that seems satisfactory … No answer has yet been given (Kripke 1979, 895,6). Kripke is emphatic that talk of 'what is really going on' cannot resolve the problem and, indeed, the puzzle has remained a source of philosophical debate.

Evidently unconvinced, in a footnote *en passant*, Fodor (2008, 76) recently asks "But why on earth should we suppose that the question [concerning Pierre] *has* a definite right answer when it's phrased that way? And, once one sees *why* it doesn't, *why does it matter* that it doesn't?" I want to give some brief considerations in support of Fodor's dismissive attitude.

Chomsky, too, has considered Kripke's widespread externalist conception of denotation or reference as misguided on the grounds that it makes no sense to talk about the independent existence of such an external object as London:

> A city is both concrete and abstract, both animate and inanimate: Los Angeles may be pondering its fate grimly, fearing destruction by another earthquake or administrative decision. London is not a place. Rather it is *at* a place, though it is not the things at that place, which could be radically changed or moved, leaving London intact. London could be destroyed and rebuilt, perhaps after millennia, still being London. (Chomsky 2000, 126).

Thus, Chomsky explains "What is a thing, and if so what thing it is, depends on specific configurations of human interests, intentions, goals, and actions" (2000, 137) and regards the notion of independent reference as "dubious". Granting Chomsky's point, nevertheless it is helpful to notice that Kripke's puzzle arises from a different source. Even if there were such an external real-world object as London to serve as the referent or denotation, Kripke's puzzle can be seen to arise in a different manner – namely, from the vagaries of belief *ascription* and not from the nature of belief about a purported object – a salutary distinction that has been emphasized in this context by Devitt (1984).

That is, Kripke's puzzlement about belief may be misguided for reasons other than the fact that there is no such object as London, even if Chomsky is correct in this claim. If we assume, for the sake of argument that there is some independent external object, we can see that the puzzle arises from potential ambiguity of belief ascription. For example, we can generate Kripke's puzzle by noting that Pierre might appear to have contradictory beliefs about a certain number. That is, by analogy with Kripke's original

version of the story, Pierre may come to believe both the following sentences:

(1) The smallest prime is a lucky number.
(2) The even prime is an unlucky number.

Following Kripke's puzzlement, we might ask "Does Pierre, or does he not, believe that the number 2 is lucky?" Of course, as in the original example of London/Londres, Pierre does not know that the smallest prime and the even prime are the same number.

Does Lois Lane love Superman? Well, yes and no. As ten-year olds appreciate, we share the perspective of the invisible, omniscient narrator when telling these stories and the apparent "Puzzle about belief" only arises if we systematically conflate the subject's beliefs with our own. That is, just because Lois Lane doesn't know that Clark Kent is Superman, we need not ascribe a contradiction to her beliefs. For the same reason, we need not take seriously Kripke's puzzle about Pierre's beliefs. In particular, in these cases, we recognize that the source of the problem is not the supposed existence of the object but rather, "who is in the know." In considering Kripke's (1979) puzzle about belief, Brandom (1994, 574) alludes to the source of the underlying intuitions and explains the source of the puzzle in a revealing manner. He writes:

> Individual speakers are not omniscient about the commitments they undertake by their use of various expressions …

But, of course, *we* are. That is, in formulating the problem, we tacitly adopt the vantage point of the invisible narrator's omniscience in the sense that we know the relevant facts about the world that are unknown to the subject whose semantic contents we wish to characterize. According to Brandom, the problem in Kripke's use of this principle arises from the fact that "the very same words used to avow the belief are used to report it" (1994, 577), but as he points out later (1994, 590) "Conceptual contents are *essentially expressively perspectival*"

> … they can be specified explicitly only from some point of view, against the background of some repertoire of discursive commitments, and how it is correct to specify them varies from one discursive point of view to another. (Brandom 1994, 590)

Ralph, Pierre and Oscar

It seems that the potential ambiguity between styles of ascription, the equivocation between perspectives, is the diagnosis for the notorious puzzles of Kripke and Putnam. We can see how the same ambiguity and the same intuitions are generated in Quine's famous sentences:

(1) Ralph believes that the man in the brown hat is a spy.
(2) Ralph does not believe that the man seen at the beach is a spy.

As Quine (1966, 185) had noted, Ralph does not know it but the men are one and the same, both of the 'that'-clauses

being about the man Ortcutt. Quine's puzzle is evidently the same as Kripke's puzzle of Pierre's belief with his question, "Can we say of this man (Bernard J. Ortcutt, to give him a name) that Ralph believes him to be a spy?" Quine notes that we appear to find ourselves accepting a contradiction of the form that is just like Kripke's unsolved puzzle about Pierre.

Putnam's device of imagining a replica of Oscar, the person to whom we want to ascribe beliefs, disguises the same apparent contradiction of Kripke's Pierre. The apparent contradiction is avoided only because the one mind/brain of Pierre is split into the two identical Oscars. Nevertheless, the Twin Earth puzzle is generated in the familiar way by substituting into opaque belief contexts. Thus, Putnam's Twin Earth puzzle can be seen to fit the familiar pattern of Quine's Ralph:

(4) Twin Oscar believes water (XYZ) is wet
(5) Twin Oscar does not believe water (H_2O) is wet

In Quine's case we have Ralph's different beliefs about the same object (Ortcutt), and in Putnam's case we have the same belief about different objects (H_2O and XYZ). In both cases the puzzle is an artifact of the ascriber's perspective, his omniscience in knowing the truth about the objects in each case. In both cases, the beliefs appear contradictory only because we the ascribers know the truth.

If we don't split the subject into identical duplicates as in the Twin Earth case, we can generate the same puzzle in a different way by changing the external world. Thus, Gettier's subject, too, has a belief ('There is a sheep in the paddock') that happens to be true, though not in virtue of information available to him but only to us as ascribers, like the molecular composition of water. Analogous to Putnam's stratagem of changing worlds, we can turn the very same belief from true to false by taking the unseen truth-maker sheep out of the paddock. Again, we have the same internalistically individuated belief both true and false without any internal, intrinsic difference.

What a dubber dubbed?

The intuitions that give rise to the puzzles in this domain may be understood when seen in another context. The perspectival shift of attention from the believer to the ascriber (ourselves as philosophers) appears to be exactly the basis for Chomsky's (1959) telling criticisms of Skinner regarding the very concept of a stimulus and its alleged independent, external objectivity. Skinner's identification of a stimulus involved externally individuating the alleged causes of behaviour without noticing that these were, in fact, disguised internally individuated mental contents. We can see the striking parallel in Farkas' (2003b) paper in which she addresses an apparently independent question of Loewer and Rey (1991, xxv), namely, "the question of what a dubber dubbed." Farkas wants to emphasize the aspect of the subject's ability to discriminate rather than any external

causal chain that is widely invoked. Loewer and Rey write in response to historical causal theories:

> … a natural answer to the question of what a dubber dubbed might be: whatever kind of thing she would *discriminate* as that thing; that is, whatever she would apply the thing to, as opposed to everything she wouldn't. (Loewer and Rey 1991, xxv)

Unwittingly it seems, these discussions echo Chomsky's response to Skinner's attempt to ground psychology in purely, objective external factors. The parallel between Skinner's concerns and that of content externalists seems evident. Farkas replies to Burge's (1986) view that perceptual experience is about mind-independent objects and that our representations specify objects as such:

> The only way Burge can get his externalist conclusion is if … he claims that whatever happens to be there to cause Sebastian's experiences … will determine content. … there are *too many* properties which all the actual instances could, as a matter of accident share, and which are external … to the subject's cognitive or experiential perspective.

This is an almost verbatim rehearsal of Chomsky's (1959) response to Skinner's project of seeking objective, external causes of behaviour. The parallel in unrelated debates is suggestive concerning the intuitions that are at work – in this case, the illusion that we as theorists and ascribers of content are not making an essential, unnoticed contribution which is doing the work.

Chomsky exposed the sham of technical notions such as "stimulus" illustrating the possible reactions to a painting: *Dutch*, or perhaps *Clashes with the wallpaper, I thought you liked abstract work, Never saw it before, Tilted, Beautiful, Hanging too low, Remember our camping trip last summer?* Chomsky explained the same point Farkas makes against Burge:

> This device is a simple as it is empty. Since properties are free for the asking … we can account for a wide class of responses … by identifying the 'controlling stimuli'. But the word 'stimulus' has lost all objectivity in this usage. Stimuli are no longer part of the outside physical world; they are driven back into the organism. It is clear from such examples, which abound, that the talk of 'stimulus control' simply disguises a complete retreat to mentalistic psychology. (1959, 32)

Chomsky shows that the external, objective stimulus is unknowingly characterized as such on the basis of assumptions about internal mental processes.

Justified True Belief

Boghossian's analysis is very suggestive and we may usefully extrapolate from his characterization of the Twin Earth thought-experiment. He writes:

> Putnam's original experiment is carried out on a term – 'water' – in full knowledge that it does refer to a kind: namely H_2O.

> That knowledge plays a central role in the experiment. … Twin Earth teaches us that water is required for the word 'water' to name the concept <u>water</u> … but we only learn this because we know – empirically – that water is the kind actually named by 'water'. (1998, 278)

Boghossian's reference to what "we" learn and what "we" know is a key to the source of the puzzlement in the Twin Earth story since, of course, what we know as philosophers telling the story is distinct from what Oscar and Twin Oscar know. As Boghossian notes, it is a stipulation of the scenario that Oscar and his twin are not chemists and have no specific views about the microstructure of water. Accordingly, since *we* know the facts of the relevant chemistry, we may paraphrase Boghossian's remarks by saying that Oscar has a justified, true belief about water unlike Twin Oscar despite being in the same mental state.

Of course, this formulation should elicit a strong sense of *déjà vu*. We are reminded of the Gettier Problem (1963), and I suggest that we may illuminate externalism by recalling the features of this notorious conundrum. The intuition that the subject may be ascribed justified belief while lacking knowledge arises from the fact that he doesn't know the truth, as it is known to us. The truth may, indeed be so recondite as to be unknowable to anyone except the theorist posing the Gettier puzzle, just like the knowledge of chemistry in Putnam's thought-experiment. The puzzle of Twin Earth arises in the same way because of the semantic evaluability of mental content. This is the feature that makes Twin Oscar's belief about water allegedly different from Oscar's despite the identity of their internal states. Oscar's belief that he is drinking water is true, but Twin Oscar's identical internal mental state is false.

As Burge (1988) puts it, "We take up a perspective on ourselves from the outside." Adopting this perspective is another way of making the point of Boghossian and Farkas: The truth about the chemical structure of water as H_2O and twin-water as XYZ may never be discovered by people on either planet. As Farkas observes, "it is difficult to conceive how the referring intention could, in advance – that is, before the actual identification of the underlying composition – legislate about relevant and irrelevant differences in structure." We may gloss Farkas' point by saying that externalism depends on the theorist's omniscience about the chemistry of water in Putnam's case, or the existence of a sheep beyond the subject's ken in Gettier's case.

Whether or not Chomsky is right to doubt that there is a subject of semantics conceived in the usual technical sense as a relation of words and things, it helps to see the source of the widespread conviction concerning this relation. Strawson's myth of the logically proper name is the illusion of the invisible narrator.

It seems clear that Gettier's Problem and Putnam's puzzle have the same structure. Like Putnam's twins, an identical mental state of Gettier's subject may be both true and false. Gettier's subject is in a mental state which is true by accident, and therefore the same mental state might

become false if external facts are otherwise. In Chisholm's example, if the sheep wanders out of the field, the subject's justified true belief that there is a sheep in the field becomes false although there is no change in the internal mental state of the subject. Like the Twin Earth scenario, Gettier cases demonstrate the independence of internal mental states from the truths of the external world.

For this reason, the Gettier sheep example is suggestively similar to Fodor's (1987, 107) illustration of misrepresentation in which a token mental representation 'horse' is caused by a cow. The parallel may be seen in Fodor's characterisation of the hapless frog who is faced with a moving lead pellet rather than a fly. As Fodor puts it, this is a case in which the "world has gone wrong," as we might also say in the Gettier and Putnam cases.

Relevance for Cognitive Science

Does the speedometer misrepresent the speed of a bicycle when it is on rollers and not moving? It doesn't matter how we might choose to answer this question since the theory of speedometers just like psychology has no obligation to explain why the world may go wrong. Once we see the source of the puzzlement, like the question of Lois Lane's beliefs about Clark Kent, it remains unclear what interest the invisible narrator's 'God's eye' perspective holds for any scientific psychological issue concerning mental representations and their semantic content.

The wider interest of these matters lies in their bearing on disputes in cognitive science concerning the study of mental representations. Farkas (2003), Wikforss (2008) and Boghossian (1998) have noted that externalism has become the orthodoxy about mental content, arising from the intuitions underlying Putnam's and Kripke's puzzles. However, the internalist alternative is succinctly stated by Schantz (2004: 23): "As far as psychological explanation is concerned, what counts is how the world is internally represented as being, not how the world really is." Farkas' (2003), too, argues that "external features are important only if they are incorporated into the internal cognitive or experiential perspective of cognizers." Seeing why Putnam-Kripke externalist intuitions are illusory helps to strengthen the growing internalist opposition.

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