

## Philosophers, Autistics & Three Year-Olds: Intuitions & Semantics

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One might have thought the everyday phenomenon of referring to an individual by name to be something less than a mystery, but the debate on proper names keeps spreading and the epidemic of theories goes unabated.

Kent Bach 1987, 1

It is easy nowadays to get caught up in direct-reference mania  
Salmon 1986, 82

### Referentialist Turn

Soames says “The job of semantics is to specify the principles by which sentences represent the world” (2008/9, 183). Indeed, this is the seemingly innocent conception of the problem of reference that Devitt (1981, xii) characterizes as the “age-old question about how language ‘hooks onto’ the world.” However, Pietroski (2003) suggests that “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.

Indeed, it is widely acknowledged<sup>1</sup> that externalism has become the orthodoxy about mental content. Kripke (1972) is regarded as having “ushered in a new era in philosophy” (Soames 2005, 1) – the “referentialist turn” (Bianchi 2012, 79) or “American referential realism” (Perry 2012, 4). This was the 1970s *direct reference* (DR) “revolution against Frege” (Wettstein 2004, 66) held to overturn a widely held *descriptive* conception of proper names. Despite a few voices of dissent against the Kripkean orthodoxy, recently Jackson (2010, 10) observes “It is still conventional wisdom that the description theory of proper names is false.” I wish to explore the

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<sup>1</sup> Farkas (2003a, b), Rey (2004), Segal (2004), Wikforss (2008), Boghossian (1998), Mendola (2008), Egan (1999).

heretical thought expressed by Fodor (2004) who ventured to wonder whether something has gone “awfully wrong” in this mainstream philosophical consensus, perhaps confirming Chomsky’s (1992) view that the whole field of philosophical semantics is “utterly wrongheaded” and “crazy” by virtue of its non-naturalist assumptions. I will argue that the mainstream anti-Fregean, anti-descriptivist orthodoxy is a version of a cognitive illusion we can see throughout philosophy of mind and cognitive science. Chomsky points to the diagnostic concern I wish to pursue:

Here, I think, philosophers and linguists and others who are in the modern intellectual tradition are caught in a kind of trap, namely, the trap that assumes that there is a reference relation. (2012, 28)

Word-thing relations are “mythical” by contrast with the question of “how the person’s mental representations enter into articulation and perception” (1996, 23), but this is *syntax*. Fodor (2000) expresses the inevitable puzzlement: “It’s not so clear that what Chomsky takes to be semantic truths actually are.” However, addressing the counter-intuitiveness of his view, Chomsky poses the aetiological question I take up here, suggesting that we may go beyond the usual analysis of those doctrines that have been assumed too uncritically “to ask why they seem so compelling” (2000b, 105).

### Baffling, Vexatious, Little Choice?

Before turning directly to the semantic theories, then, we may consider the matter of intuitions which has become a hot topic of self-conscious interest among philosophers. In different guises, under such headings as ‘conceptual analysis’ (Jackson 1998) or ‘conceivability’ (Chalmers 2002), the deliverances of intuition have played a central role in philosophy (DePaul & Ramsey eds. 1998, Miscevic 2000, 2006). In particular, the received externalist view of semantics rests on intuitions elicited by thought-experiments such as Putnam’s (1975) famous Twin Earth story, “a sort of paradigm in the philosophies of language and mind” (Segal 2000, 24). Also influential have been Kripke’s (1979) puzzle about Pierre’s seemingly contradictory beliefs, and his fiction about Gödel stealing the Incompleteness proof from Schmidt. Significantly, Kripke acknowledges that he was led by his “natural intuition” to the view that proper names are rigid designators. Kripke (1972/1980, 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, philosophers' reliance on intuition has recently become the subject of intense controversy arising from empirical, experimental inquiries (X-Phi) that appear to challenge their reliability and universality (Weinberg et al. 2001, Machery et al. 2004, Weinberg et al. 2010). I will suggest that this debate fails to address the most serious challenge to philosophers' reliance on intuition. Both defenders and critics share an unexamined assumption, so that even conceding the strongest case to defenders of philosophers' special expertise (e.g. Williamson 2011, Devitt 2011a) leaves them vulnerable to a fatal objection.

Fodor (1987a) has noted that among the intuition-generating thought experiments, 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 1987a, 202).

Farkas (2003b) characterizes the “deeply rooted” externalist intuitions as “baffling” and a “vexatious problem” that “poses a serious challenge for any attempts to give an internalist analysis.” Thus, we may ask why philosophers feel that the “intuitive responses to a certain kind of thought-experiment appear to leave them little choice,” as Boghossian (1998, 273) puts it.

## Giving Intuitions a Bad Name

Hintikka (1999, 127) has suggested intuitions “came into fashion in philosophy” as a consequence of the popularity of Chomsky's linguistic methodology. Philosophers' attempted to “get on the bandwagon of transformational grammar” that they took to provide a model for research into cognition. Hintikka (1999, 127,8) specifically cites Kripke's (1972/1980) *Naming and Necessity* as an influential case in point, suggesting “Unfortunately, his reliance on intuitions in defending his idea of rigid reference is apt to give intuitions a bad name.”

Contrary to Hintikka (1999, 132), Chomsky's reasons for appealing to intuitions in generative linguistics have nothing to do with being a “self-acknowledged Cartesian” or with his theories about innate ideas. Nevertheless, Hintikka makes the important observation that the use of intuitions in linguistics is generally quite different from the role of intuitions in philosophy. Hintikka correctly notes, in contrast to linguists' use of intuition, “philosophers' intuitions do not pertain to the supposed faculty of intuition itself but to the truths about which this faculty is supposed to provide knowledge.” (Hintikka 1999, 133). For example, Bealer (1998, 202) argues that intuitions have a “strong modal tie to the truth” which he suggests “is a philosophical

(conceptual) thesis not open to empirical confirmation or refutation” and, moreover, “The defense of it is philosophical, ultimately resting on intuitions.” In the same vein, Chalmers (2002) asks “Does Conceivability Entail Possibility?” challenging the systematic scientific picture obtained from the usual sources. However, if philosophers’ intuitions are taken *properly* on the model of generative linguistics, they may be valuable as *psychological evidence* rather than intimations of truth. This conception corresponds with what Stich (1996, 128) describes as “folk psychology construed internally.” On this view, “It is plausible to hypothesize that there is ... a tacit theory, call it *folk semantics*, which guides people’s intuitive judgments about what terms refer to” (Stich 2009, 192). My suggestion is that, adopting this approach, Putnam-Kripke intuitions might be explained like the Müller-Lyer illusion as deceptive in spite of its subjective force. Of course, the model for this kind of inquiry into intuitive judgment is the ‘heuristics and biases’ research program initiated by Tversky and Kahneman (1974, 1983). This work has demonstrated the systematic unreliability of compelling intuitions resulting in a wide range of cognitive illusions to which we are prone.

### “Reader’s Intelligence”

Chomsky (1962) has drawn attention to a pervasive error of theorizing, noting that a grammar may produce the illusion of explanatory completeness, but in fact have “serious limitations so far as linguistic science is concerned” because the success of the grammar depends on being “paired with an intelligent and comprehending reader.” This unnoticed reliance on the user’s ability is illegitimate because it is just what the theory is supposed to explain. That is, it is the reader and not the grammar that is doing a significant part of the work. Chomsky explains: “Reliance on the reader’s intelligence is so commonplace that its significance may be easily overlooked” (Chomsky 1962, 528,9). In one guise, the theorist ascribes mental representations as “semantically evaluable” based on his own knowledge of the truth rather than the subject’s beliefs. In this case, philosophical intuitions arise from tacitly adopting the perspective of an omniscient story-teller that Mario Vargas Llosa (1975) aptly refers to as the literary device of a “philosopher-narrator.”

### Experimental semantics

The question of intuitions has been illuminated from a new angle by empirical inquiries in experimental philosophy or the “X-Phi” movement (Weinberg et al. 2001, Machery et al. 2004). Cultural variation in intuitive judgements has brought into question the universality of the evidence on which philosophical puzzles have relied. For example, Segal (2004) objects to the externalist intuitions of Putnam and Kripke because “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 anthropological, psychological caution. For example, Segal reports studies of Twin-Earth intuitions among tribespeople such as the Mayans of the Yucatan in Mexico. The data are mixed, but Segal (2004, 343) says “surely” these data should be given considerably more weight than the intuitions of Putnam or Kripke. In the same

vein, Machery et al. (2004, B7) found that “Chinese subjects tended to have descriptivist intuitions, while Westerners tended to have Kripkean ones” and these data suggest “significant philosophical conclusions” about the theory of reference (2004, B1). The authors conclude that it is “*wildly* implausible that the semantic intuitions of the narrow cross-section of humanity who are Western academic philosophers are a more reliable indicator of the correct theory of reference ... than the differing semantic intuitions of other cultural or linguistic groups” (2004, B9).

### Untrained Undergraduates & Unwashed Masses: The ‘Expertise Defense’.

Responding to the empirical evidence of variation, Devitt thinks that experimental philosophers have tested the wrong subjects since the intuitions of ordinary folk are unreliable. He says “The intuitions we need are ones from people with some expertise in these matters, presumably metaphysicians and other philosophers” (2011a, 427). Hales (2012, 199) makes the same point, suggesting “it is the expert intuitions of professionally trained philosophers that have epistemic merit, not the uninformed reactions of the unwashed masses.” Devitt prefers “the intuitions of semanticists, usually philosophers” for the same reason we would prefer the intuitions of scientists such as physicists in their domain of expertise. The same “expertise defence” has also been articulated by Williamson (2011), but Weinberg et al. (2010, 335) conclude that there are key disanalogies between philosophy and other fields so that “playing the expertise card” does not trump sceptical concerns raised by the empirical evidence. Thus, “philosophers have no reason to expect, now, and from the armchair, that we are intuitive experts of the required sort” (Weinberg et al. 2010, 350) and “philosophers at this time *cannot take it for granted* that they are experts, in the relevant sense here.” Replying to this tentative and qualified scepticism, Williamson (2011) suggests that “elaborate invocation of the expertise literature” is too general to apply to philosophers’ special case and, therefore, the available evidence is not decisive. He says philosophers need not “suspend their current projects” to investigate their own competence in making intuitive judgments just because “undergraduates untrained in philosophy are bad at conducting thought experiments” (2011, 217). This is a somewhat qualified response to inconclusive criticism. At worst, we have a stand-off in which the two sides disagree about the force of the empirical evidence. Indeed, among critics of intuition-based philosophy, Stich (2009, 232) suggests, at worst, that a practitioner has cause for “getting pretty nervous,” but he concedes no one can claim that anything has been demonstrated beyond reasonable doubt.

However, the burgeoning literature on experimental philosophy appears to be irrelevant to the most serious challenge faced by philosophical reliance on intuitions. Stich’s conclusion that a great deal of previous philosophy “belongs in the rubbish bin” (2009, 232) seems to be misconceived even if the empirical evidence were entirely beyond reasonable doubt as Stich (2012) has recently insisted. Indeed, he cites evidence suggesting that even the Müller-Lyer illusion is not universally shared among all human cultures, but it is no help to be told that someone else doesn’t share your puzzlement. If I am the only one who is guilty of confirmation bias or base-rate

neglect, I need diagnosis and a cure, not anthropology. Who cares what the Maya think? *Their* failure to be puzzled doesn't help resolve *our* problems, even if they are parochial to Western departments of analytic philosophy. On the other hand, even if Nagel (2012) is right and there is no cultural variation among people in their intuitive judgments about philosophically important cases, there may still be good reason for philosophers to be nervous. Even if the intuitions of interest were *universally shared*, their credentials and reliability are not thereby established. Hales (2012) makes an extended argument for construing rational intuition as a mental faculty closely analogous to perception (see also Sosa 2007, 101). But, of course, this just invites the obvious question about the problem of systematic biases and inherent illusions.

Thus, the 'expertise defence' is to no avail against the criticism that expert judgment is *especially* prone to error precisely because of professional education and training. The point is hardly new since it is just Wittgenstein's *Tractatus* complaint about the conceptual confusions that have constituted the entire history of philosophy. We see the same idea in Kant's concern with "paralogisms of pure reason." As Kant puts it, these are not mere errors "in which a bungler might be entangled" but rather, a "natural and unavoidable illusion" (Kant 1781, A298, 386). The irony of emphasis on philosophers' professional training is that this is exactly the mechanism for inculcating widely shared biases and systematic errors. It was in this spirit that G.E. Moore (1925) famously remarked "I do not think the world or the sciences would ever have suggested to me any philosophical problems. What has suggested philosophical problems to me is things which other philosophers have said about the world." Famously, Chomsky's (1959) review of Skinner's *Verbal Behavior* exposed errors that were shared among professional experts throughout the discipline of psychology. Galileo, too, was principally opposed by the academic experts of his time, the professional philosophers, whose Aristotelian intuitions were the source of their resistance to Copernicanism.

Devitt (2011b) acknowledges that expert bias is a hazard, but he points out that it is an "inescapable risk" that we *always* run in scientific theorizing. Indeed, there is no higher court of appeal than our best scientific conjectures. However, it is a characteristic feature of the intuition-based *philosophical* doctrines that they are in stark conflict with our best science. Consider the immense literature on contra-causal freedom of choice, or the vast literature on qualia, the conceivability of zombies and immaterial consciousness. If philosophers' intuitions were like forefront scientific theories, we could have no grounds for objecting to the 'expertise defence.' However, philosophers' expert Kripkean intuitions are contrary to the best scientific considerations. We discount our intuitions of the Müller-Lyer lines because we can measure them. Similarly, in the famous example (Tversky & Kahneman 1983), we discount our intuitions concerning Linda the feminist bank-teller because we have a normative theory of probability. Accordingly, by analogy with the methods of perceptual psychology and also generative linguistics, we may approach philosophers' semantic intuitions as data for a theory of 'tacit knowledge' or 'competence' (or, in this case, incompetence).

## Residue of Commonsense

Specifically, I suggest we may discern the mechanism of “the trap that assumes there is a reference relation” (Chomsky 2012, 28). The assumption is natural and compelling, shared among theorists who may differ on other fundamental issues. Chomsky blames the mythical conception of mind-world relations on a “residue of commonsense” and Egan (1999, 187), too, notes that a sign of theoretical progress is often the departure of our theories from folk-science. But lessons from the history of science and homilies on the Galilean approach fail to address the particular persuasiveness of the commonsense picture in this case. Chomsky (2000b, 148) holds that we can have no intuitions about thought experiments such as the Twin Earth scenario because the key terms “extension”, “reference”, “true of” and “denote” are technical inventions. In the same way, it would be pointless to explore our intuitions about “tensors” or “undecidability.” However, there can be no doubt that certain intuitions may be consistently induced by the notorious thought experiments. These are not random in the way that intuitions about tensors or other technical concepts might be among the uninitiated. Devitt (2011b, 25) notes “We can probably assume that nearly all philosophers of language agree with Kripkean intuitions about Gödel cases” (see also Hughes 2004, vii).

## Perspective on Ourselves from Outside: The Spectre of Gettier.

We see these intuitions in the doctrinal shift of the 1970s direct reference “revolution against Frege” (Wettstein 2004, 66) and against the idea that the reference of a word “is grounded in the mind’s grasp of the item in question.” The “radical suggestion” of *direct reference* theorists involves rejection of the idea that “something about the speaker’s cognitive state” is relevant. That is, reference can be “cognitively unmediated” (Wettstein 2004, 13). Soames (2009, 183) explains, “Semantic theories do not state that which a speaker knows in virtue of which he or she is semantically competent.”

Towards the goal of elucidating these “baffling” and “vexatious” externalist intuitions, it is helpful to notice a close parallel between philosophical problems that are generally treated in isolation from one another. Thus, Burge (2012) recently explains the nature of *de re* belief in terms that are suggestive of other familiar problems. He notes, “One can have a *de re* belief that is successfully referential and meets all other conditions on being *de re*, which nevertheless fails to count as knowledge.” Burge suggests a case in which one is looking directly at an object and that one forms a true belief about it, but one has reason to doubt that there is really an object there, having been fooled in the past. Burge’s scenario is easily illustrated. Consider the case in which someone is looking at a chair which he can see in a certain position apparently in the next room. However, he doesn’t notice that he is looking at a large mirror and, therefore, sees the reflection of a chair that is actually nearer to him in the same room. As it happens, there is an identical chair in the next room behind the mirror, exactly where the reflection appears to be. In such circumstances,

Burge (2012, 119, fn. 12) suggests, one has a *de re* belief of the object, but one lacks knowledge. Of course, it is evident that this is exactly the Gettier Problem (1963). Burge doesn't mention Gettier, but these parallels suggest the Problem has a wider interest beyond the epistemological issues it has been directly concerned with.

In Chisholm's (1966) version of the classical story, the subject sees a sheep-like bush and acquires a perceptual belief "There is a sheep in the field." Although this belief is justified by the evidence, it is true only by accident because, unbeknownst to him, there is a sheep elsewhere in the field. The classical criteria are met, but the belief does not count as knowledge. Lycan (2006) does not think that the Gettier problem deserves the widespread opprobrium and suggests "*So far as has been shown*, there is nothing particularly wrong with the Gettier Problem." On the contrary, however, I offer a diagnosis of the intuition on which it rests, concurring with Baz (2012, 329) in a suggestive footnote. Philosophers have in general failed to appreciate the difference between typical thought experiments and actual cases of everyday thinking. Baz (2012) notes, by contrast with real life examples of belief, in Gettier puzzles "we, the readers of the example ... already know, on the basis of an assurance that in earthly matters only God could provide," the truth of the subject's belief. It's the same intuition underlying semantic theories in philosophy.

Hetherington (2012) has recently given an analysis of the Gettier problem as an "epistemological chimera" and "illusion." Hetherington distinguishes "beliefs as such" from "Gettiered beliefs," the latter being cases in which "truth remains essential." His diagnosis is "People reacting in the standard way to Gettier cases are being *infallibilists*, without realizing this about themselves." This is another way of making the point about puzzles that arise from the "narrator's" omniscience. Indeed, the spectre of Gettier hangs over much philosophy and cognitive science. The puzzles of Twin Earth and meaning arise in the same way because of the alleged semantic evaluability of mental content. This is the feature that makes Twin Oscar's belief about water different from Oscar's despite the identity of their internal states. Burge (1988) puts it explicitly in terms that support the analysis I have been suggesting, saying "We take up a perspective on ourselves from the outside."

### Who is in the know?

Boghossian's (1998) characterization of the Twin Earth thought-experiment is suggestive of the parallels I have noted between the puzzles of semantics and the Gettier Problem. He writes of our "full knowledge" that a term 'water' refers to a kind, namely H<sub>2</sub>O and "That knowledge plays a central role in the experiment" (Boghossian 1998, 278). Indeed, this is just Baz's (2012) insight concerning Gettier Problems in which reference to what *we* learn and what *we* know is a key to the intuitions evoked. On Putnam's (1975, 11) account, if the chemical difference between our water and XYZ is scientifically inaccessible to us, we might never discover that they differ. Nevertheless, we are to assume that "Oscar<sub>1</sub> and Oscar<sub>2</sub>



understood the term “water” differently in 1750 *although they were in the same psychological state.*” Crane (1996, 292) has forcefully noted this problem in Putnam’s account suggesting “This cannot be right.” In Crane’s (1996, 292) useful phrase, the question of who is “in the know” is central to untangling the intuitions at the heart of puzzles concerning externalism.

The invisibility of our own role and our own knowledge creates the illusion noted by Crane (1996, 293): “the Twin Earth cases are meant to demonstrate that the world itself can, as it were, fix the meanings of some of our words.” Crane’s apt characterization captures the paranormal or clairvoyant conception of meanings which somehow link the mind directly with its objects in the world. The intuition arises from *our* “being in the know” as philosopher-narrator.

Indeed, the diagnosis of the malaise is confirmed by its sufferers. Far from regarding it as problematic, the conception of an “omniscient observer” has been explicitly embraced by Donnellan (1974) and endorsed by Almog (2004) in their externalist accounts of naming, as we will see. Kaplan (2012, 156), too, describes the vantage point of the theorist as “description from above” which is an understanding “in which one surveys another’s thought” from a point of view “independent of whether the subject’s thought corresponds to reality.”<sup>2</sup> This is the source of the intuition generated by the Gettier Problem and the Twin Earth scenario. That is, externalism depends on intuitions arising from the *theorist’s* knowing about the chemistry of water in Putnam’s case, just as *we* know of the sheep beyond the subject’s ken in Gettier’s case. Indeed, we see the parallel in Donnellan’s (1966) example of the sentence “The man drinking the martini” which can be used to refer to something it fails to denote – namely, the person the speaker has in mind who is actually drinking water and not the person in the next room who is drinking a martini. Although this case has not received the opprobrium of the Gettier Problem, it is clearly identical.

## Experimenter Bias in the Armchair?

In light of this analysis, it is not surprising that Kripke’s (1972/1980) story about Schmidt and Gödel is also a variant of Gettier’s scenario. In this fiction proposed as a counter-example to the descriptivist account of names, Schmidt is the real discoverer of the famous Incompleteness Proof for which Gödel has claimed credit. Kripke suggests that the name ‘Gödel’ must still refer to Gödel and not Schmidt, even if the only thing we knew about the name was the description “Discoverer of the Incompleteness Theorem.” This description is just like “the sheep in the field” and

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<sup>2</sup> Putnam gives analogous diagnosis of the externalist perspective on metaphysical realism which adopts a “God’s Eye point of view” (1981, 49). Davidson (1977/2001, 201), too, explicitly raises the problematic assumption in relation to his truth-conditional view of semantics: “there is nothing absurd in the idea of an omniscient interpreter.” (See Mendola 2008, 258). Lepore and Ludwig (2005, 322) remark, “Davidson has said in conversation that he wished he had never mentioned the omniscient interpreter” (2005, 322), but they give no indication of his reasons.

“the man drinking martini” in applying by accident to something other than the intended object. The puzzles about whether the cases are real knowledge or real reference are structurally identical. In a different example, Kripke (1980, 85) mentions Peano, who is often credited with formulating the number-theoretic axioms that are really due to Dedekind. A speaker holding the common, mistaken view using the name “Peano” will “hold a false belief about Peano, not a true belief about Dedekind” (Kripke 1980, 89). This is just as we may say about Gettier’s subject who holds a false belief about the bush and not a true belief about the sheep.

In seeking to diagnose the intuitions, it helps to notice that the truth-making fact is known to the theorist who ascribes belief – the ubiquitous omniscient narrator – but not the subject to whom belief is ascribed. Our intuition elicited by Kripke’s Gödel/Schmidt story depends entirely on the fact that we acquire new information and a *new description* associated with the name ‘Gödel’ – that is, “the man who didn’t discover the incompleteness of arithmetic, but killed Schmidt and took the credit.” Under these circumstances, *our* intuitions about what *someone else* might be referring to when using the name “Gödel” are of little interest as far as a scientific theory of semantics is concerned. Kripke encourages conflating our roles as theorist and subject, and we rely on intuitions generated by “being in the know” about facts that are not available to the subjects whose naming competence we are trying to understand. Whether their naming ability is best explained descriptively or in some other way is a matter of cognitive science or psycholinguistics that is not illuminated by how anyone “in the know” might describe such a subject. How could the truth about Gödel’s crime and plagiarism be relevant to explaining naming ability on the part of a subject who doesn’t know? That is, it seems clear that the correctness of a Fregean descriptive account of names can’t be challenged by discovering a new description known only to the theorist/ascriber and not the subject whose naming ability we want to explain. Whether philosophers or others intuitively regard a speaker to be holding a false belief about Gödel or a true belief about Schmidt has no bearing on the *explanatory* problems semantics. The puzzle arises partly from neglecting Devitt’s (1984) important distinction between belief and belief ascription (see also Heck 2012, Michael 2010).

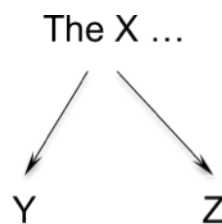
### Philosophers, Autistics & Three Year Olds.

In response to the orthodoxy in semantics, though notably bearing also on the Gettier Problem, Farkas’ (2003b) argues that “external features are important only if they are incorporated into the internal cognitive or experiential perspective of cognizers.” Schantz, too, says “As far as psychological explanation is concerned, what counts is how the world is internally represented as being, *not how the world really is* (2004, 23; emphasis added).” This is essentially Fodor’s (1998, 20) diagnosis of externalism, – the view that “what you are thinking depends on what world you’re in.” Schantz’ prescription is apt also for capturing the mistaken “theory of mind” in a different domain. Central problems in philosophy of language and mind have a striking, unnoticed analogue known to clinical psychologists in the Wimmer and Perner (1983) “false belief” task: Autistics and three year-olds ascribe beliefs to others based on

their own knowledge of the truth rather than on the other's justified beliefs. The child observes a scene in which a person or fictional character such as Kermit the Frog is shown a piece of candy placed in one of two closed boxes. When Kermit leaves the room briefly, the experimenter observed by the child places the candy in the other box. The child is then asked which box Kermit will look in to find the candy when he re-enters the room. Autistics and three year-old children will nominate the box to which the candy has been moved rather than the original box. That is, their ascription of beliefs to others is based on their own knowledge of the truth rather than on the other's justified beliefs.

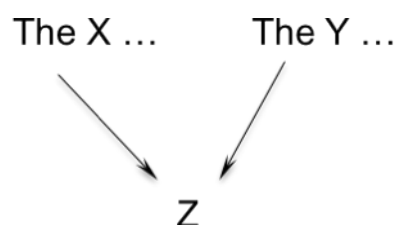
It appears that philosophers make the same mistake that children grow out of by the age of four. This insight permits us to make a catalogue and taxonomy of puzzles that arise in the same way. In the first set (A), we have belief ascription that goes awry when the truth-maker is someone or something else, unknown to the subject. In the second set (B) to be considered presently, we have Frege Puzzle cases in which different belief ascriptions apply to the same person or thing.

Category A. Gettier Cases:



- (1) The sheep in the field (Gettier)
- (2) The man drinking a martini (Donnellan)
- (3) The water in the lake (Putnam)
- (4) The discoverer of the Incompleteness Proof (Kripke)
- (5) The chair in the next room (Burge)

Category B. Frege Cases:



- (6) The morning star (Frege)
- (7) The evening star

- (8) The man in the brown hat (Quine)
- (9) The man seen at the beach
  
- (10) *La ville qui s'appelle Londres* (Kripke)
- (11) The city called London

In Gettier/Putnam cases we can have the same belief about different objects (H<sub>2</sub>O and XYZ) whereas in the Quine/Kripke case we can have different beliefs about the same object (Orcutt/London). Putnam's stratagem of changing worlds is analogous to making the "Gettiered" belief false by taking the unseen truth-maker sheep out of the paddock, or switching the candy when Kermit isn't looking.

### Ralph and Pierre: Thoughts and Their Ascription.

The foregoing analysis permits us to see the source of Kripke's (1979/2011) "Puzzle About Belief." This puzzle has generated a considerable literature suggesting that it remains the case, as he says, "No answer has yet been given." Indeed, Kripke regards the puzzle as comparable to the Liar Paradox (1979, 904/156) and Salmon (2011, 236) endorses Kripke's "sound methodology" quoting Tarski's classic discussion of the Liar antinomy and its intellectual challenge. Not knowing that *Londres* and London are the same city, Pierre believes that '*Londres est jolie*' but denies 'London is pretty.' It appears that we must ascribe a contradiction to Pierre, though he is a perfectly rational person. Kripke says "I know of no answer" to the question "Does Pierre, or does he not, believe that London is pretty" (Kripke 1979, 895/147). He says "I have no firm belief as to how to solve it." (2011, 147), though he 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, 895/147). Kripke is emphatic that talk of 'what is really going on' cannot resolve the problem. 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" (1979, 895,6). Accordingly, Kripke's "primary moral" is that "the puzzle *is* a puzzle" (1979/2011, 156) and that it can not be resolved by re-describing it. However, a re-description need not avoid the problem but rather show how it arises. After all, the indeterminacy of Pierre's belief about London is not like the contradictory state of Schrödinger's cat or the quantum wave/particle duality. To be sure, in some cases such as Zeno's story of Achilles and the Tortoise, restating the problem (e.g. with a distance/time graph) is to sidestep the puzzle rather than solving it since the re-description doesn't expose the flaw in Zeno's reasoning. Kripke is right to say that talk of 'what is really going on' doesn't answer the original question, but it does show clearly *what's wrong with the original question* and why the puzzle *isn't* a puzzle, after all. With Kripke, we can point out that "No answer has yet been given" to the question of whether Lois Lane loves Clark Kent or whether she believes Clark Kent can fly, but we understand why.

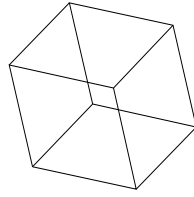


Figure 1. Necker Cube.

Or, seeing the Necker Cube on two different occasions, Pierre might not recognize it as the same geometrical figure. Adapting Kripke's (1979/2011, 148) words we may ask "Does Pierre, or does he not, believe that the Figure (not the shape satisfying such-and-such descriptions, but the *Figure*) is facing upwards to the left? No answer has yet been given." Fodor (2008, 76) pointedly 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?" However, while sharing Fodor's dismissive attitude, we may go further to ask why the puzzle should have such a firm grip on philosophical imagination.

Thus, Devitt (1984, 385; 1990) has made a salutary distinction: "Thoughts are one thing, their ascription another." 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 puzzle in which we seem forced to describe the hapless Frenchman as holding contradictory beliefs about London. The intuition that we can be induced to share is simply the idea that we can ascribe *de re* beliefs from our own perspective independently of the beliefs of the subject in question. Brandom (1994, 503, 590) explains, "expressions that occur within the scope of the 'that' [in *de dicto* contexts] serve to specify how things are represented by the one to whom the belief is ascribed." Brandom (1994) says it is Kripke's *disquotational principle* that "causes all the trouble" though it is regarded by Kripke as "a self-evident truth":

"If a normal English speaker, on reflection, sincerely assents to 'p', then he believes that p."

Devitt suggests that Kripke's disquotational principle is false as an empirical matter. If a normal English speaker, on reflection, sincerely assents to 'p', then that is merely good, rather than conclusive, evidence that the speaker believes that p. But it's not the empirical incidence of contrary cases that is the problem with Kripke's principle. Rather the problem is that the formula relies on using 'p' disquoted *in our own language*. Kripke's disquotational principle has an affinity with Davidson's T-schema of truth-conditional semantics and echoes the interpretative conception he shares with Quine. The second, disquoted, use of 'p' is in the metalanguage understood by the *theorist* who ascribes 'p.' The parallels are ubiquitous. Brandom (1994, 502) notes that we are rehearsing Quine's emphasis on the grammatical difference between

referentially transparent and opaque contexts in *de re* propositional-attitude-ascribing locutions. Thus, we can see how perspectival ambiguity and the corresponding intuitions are generated in Quine's famous sentences corresponding with (8) and (9) above:

(12) Ralph believes that the man in the brown hat is a spy.

(13) 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. Quine's puzzle is evidently the same as Kripke's puzzle about Pierre. Quine asks, "Can we say of this man (Bernard J. Ortcutt, to give him a name) that Ralph believes him to be a spy?" Kripke asks, Can we say of this city *London*, that Pierre thinks it is beautiful? Quine, like Kripke, notes that we appear to find ourselves ascribing a contradiction.

### Direct Reference: Contentious, Murky Waters.

Donnellan's conception of what a speaker "has in mind" appears to be a "psychological model" (Bianchi (2012), but as Wettstein (2012, 104) reveals, "we have entered more contentious, even murkier waters." Wettstein is concerned about a hint of descriptivism or "the scent of Russell" in Donnellan's attempt to ensure that a speaker is "appropriately connected" with the person he has in mind. Accordingly, this "cognitive connection" must be constrained so that one can't just "use the definite description "the murderer of Smith" to refer to the number 3" (2012 105 fn. 7). In exactly the same terms, Fodor and Lepore (1992) asked, "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) What is the glue that keeps meaning and reference stuck together and precludes such radical mismatches? This is, of course, Fodor's earlier question: What makes a computer program play chess rather than simulate the Six Day War (Fodor 1978, 207). 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). Presumably, this question asks how we might conceivably *understand* an expression whose intension and extension diverged in this way. However, unless it is merely a *façon de parler*, the very question is inappropriate and suggests that the problem may arise precisely from conceiving the explanatory problem in terms of how we might intuitively *understand* mental representations as distinct from how we might *explain* them.

## Empty Names

For Donnellan, the appropriate link and constraint is provided by his “history-oriented view about what it is to have something in mind.” However, he is confronted by the puzzle of “empty names” arising from Millian theories of reference.<sup>3</sup> Donnellan (1974) describes it as “one of the major puzzles” for a theory of reference: “How can one say something about what does not exist?” (1974, 3). However, from an explanatory, scientific point of view, it is difficult to see why empty or non-referring names should be grounds for perplexity. Devitt (1989, 211) has noted that the meaningfulness of a name does not depend on whether it has a reference, but we will see that his solution rests on essentially the same intuitive illusion. The non-existence of Robin Hood or Moses is an empirical matter that has no bearing on the cognitive states of a competent user of the names. It is significant that Donnellan offers his account in terms of “an omniscient observer of history [who] would see an individual” with the appropriate connections to the name. In accord with the standard conception of the semantic enterprise, such historical explanation provides “the relationship between the use of a referring expression and the referent.” However, Donnellan’s device of the omniscient observer offers a remarkable insight into the intuitions captured by the causal-historical theory. It confirms the aptness of the metaphor that I have used here – Vargas Llosa’s invisible *narrador-filósofo omnisciente* – who is “in the know.”

If someone were not already in the thrall of an intuitively seductive, but bizarre picture, the puzzle of empty names could hardly arise or be taken seriously. In particular, there is a widespread neglect of the most obvious fact to which Reimer (2001, 504) draws attention, “It is, after all, *language* – and not *reality* – that we are interested in analyzing when we try to understand the workings of empty names.” Donnellan (1974, 25) himself addresses this point directly but it is a remarkable fact that he entirely sidesteps the question with no further comment. However, the issue generates a clear *reductio ad absurdum* of the direct reference assumptions from which it arises. Reimer (2001, 501) says it is “an undeniable empirical fact” that speakers of a language are unreflectively inclined to suppose that we can refer to things that do not exist.” Could they be mistaken? It is also an undeniable fact that in acquiring a competent use of names, people may not know, and may never learn, that some of their names are empty. Entire civilizations have arisen and flourished on belief in things that do not exist and to which they referred. It is obvious that, whatever their other difficulties, they were not suffering from linguistic problems.

The claims are subject to easy empirical test. If we consider typical psycholinguistic experiments with children (e.g. Crain and Thornton 2000), a child could acquire two new names without knowing that only one of them has a real denotation. In a “double-blind” condition, it’s a safe prediction that the experimenter could not determine from the children’s naming ability which is the empty name. In particular, Braun’s (1993) idea that there is some defect in sentences with empty names in being

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<sup>3</sup> See Donnellan 1974, Braun 1993 and Reimer 2001.

“gappy” is an implausible, indeed desperate, gambit. The gappiness is in the *world*, not in language. The pseudo-problem of empty names recalls Fodor’s remark on the hapless frog that snaps at the experimenter’s BB rather than a fly. The frog is not to blame. As Fodor says, “it is not the frog but the world that has gone wrong” (quoted in Millikan 1991, 161).

## Co-Thinkers

Given the direct reference point of view, a related problem arises for explaining how two different minds can be “*co*-thinkers, minds *focused* on the same thing” (Almog 2004, 394). Almog explains how the rival “classical” descriptive theory fails to account for “trans-mind cross-identification” of content:

What makes the two co-thinkers is not a common internal content but an external fact, probably unknown to both, but available to what Donnellan called ‘the omniscient observer of the history’ – an ‘omniscient’ investigator, having all the pertinent facts accessible by stipulation ... (Almog 2004, 394)

Almog makes a remarkably explicit endorsement of a semantic enterprise that resorts to facts that have no explanatory relevance. On this conception, “the semantics of the market-place language may only be given from the ‘outside’, by the omniscient observer of history” (Almog 2004, 409). That is, “the semantical rules describe our language ‘from above’ and are not cognitively accessible meanings” (2004, 411).

## Linguistic Contact Without Cognitive Contact.

Despite Donnellan’s allusion to the idea of “having in mind,” in fact, the theories in question make no explanatory appeal to anything in mind at all. Donnellan takes a cognitive connection to be the historical, perhaps causal, connection between a mental event or speech act and the referent. As we will see, this is evidently Devitt’s story too, but it is a cognitive account in name only. On a different conception that Bianchi terms the “*social model*,” even the empty gestures towards “having in mind” are dropped. It is denied that the mind is relevant in determining reference. Wettstein (2004) expounds this view, based on rejecting what he calls “linguistic Cartesianism” in favour of notions of a public language and social practices. Wettstein’s conception is perhaps the most radical and, therefore, the most revealing, not least because of its commonalities with Devitt’s rival account to be discussed presently. Wettstein repudiates “the contents of thought” taken to “reside in the mind, in the head” (2004, 61). Among the reasons for “supplanting” purely “thought-oriented” linguistic Cartesianism is the risk we have seen that an individuating description might fail to be “correct.” Devitt (1989) has recognized the occult character of direct reference theories which he has criticized (1989, 2012) as contrary to a naturalistic, scientific



view, as if names refer by “magic” (Devitt 1989, 211).<sup>4</sup> Wettstein (2004) defends his slogan “linguistic contact without cognitive contact” on grounds that he takes to be *empirical* rather than merely “philosophical” (2004, 70, 77). However, Wettstein’s arguments are acutely ironic in view of the occult nature of the claimed “direct reference” relation. Indeed, Wettstein acknowledges “we need not reject the sense that there is something magical at work here” (2004, 112). Moreover, Wettstein ignores the overwhelming empirical evidence of mental intermediaries and advocates exactly the doctrine that Fodor has ridiculed as the “miracle” theory – namely, a version of Reid’s “direct perception” (2004, 142).<sup>5</sup>

Wettstein rhetorically turns the tables characterizing the *cognitive* approach as looking “beyond the natural world, to Fregean senses in a third realm” and thereby to “posit nonnatural relations” which are an “unanalysable” kind of “spookiness” (2004, 111) “like positing a god” (2004, 105), lacking genuine explanatory force. In his view, naturalistic inquiry would eschew a notion like Frege’s sense as “a purely spiritual substance” like “the soul of a word” (2004, 100). It is true that Frege did not regard senses or modes of presentation as psychological, but there is no doubt that Frege’s insights depended on a cognitive, conceptual understanding of the key distinction between sense and reference. Regardless of Frege’s own view, the much-maligned “Cartesian” conception is entirely defensible on empirical, scientific grounds. If there is admittedly little known about internal cognitive mechanisms responsible for language abilities including naming and reference, it is at the very least an empirically plausible, perhaps the only, candidate for an explanation of phenomena such as the Frege puzzles concerning the informativeness and “cognitive values” of “ $a = b$ .” Indeed, Wettstein admits “I realize that I’m not supplying what the Fregean is seeking” (2004, 110), and significantly adds “But there is nothing more to tell.” Thus, Wettstein suggests instead of concern with the mind and “how someone is thinking of ‘Aristotle’ when he uses the name,” semantics should be focused on social practice (2004, 134). “We should abandon the Fregean explanatory project” to consider “full blown practices” (2004, 112). Of course, there can be no argument against the choice to pursue a certain kind of inquiry rather than another. However, the renunciation of the most plausible account of names leads him to the bizarre conclusion that “I can talk and think about [someone] ... because I am a member of a linguistic community that has a name for him” (2004, 168). This is a kind of behaviourism that rejects Fregean “modes of presentation” as “a misleading characterization of our mental lives” (2004, 139).

Above all, rejecting internal, mental representations and a “thought-oriented” approach altogether is hardly justified, following Wittgenstein, on the grounds that depictive, *pictorial* images are a bad idea. Wettstein makes a remarkable, unwitting admission of the fatal flaw to which I have been drawing attention. Regarding the difference in cognitive informativeness between sentences such as “ $a = b$ ” and “ $a = a$ ,” Wettstein says “my idea is that we don’t really need to render the datum

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<sup>4</sup> Jeshion (2006, 33) refers to a “whiff of a kind of mysticism” in Wettstein’s account.

<sup>5</sup> I have argued (Slezak 2004) that Fodor’s targets Reid and Putnam are not guilty of Fodor’s charge. Wettstein is (2004, 100).

intelligible; *it's intelligible, unproblematic, on the face of it*" (2004, 142; emphasis added). Of course, the datum is indeed intelligible "*on the face of it*" – that is, to *us as theorists*.

## Mode of Presentation

Although critical of direct reference theories, Devitt also rejects Frege's "intellectualized," Cartesian account. Accordingly, before turning directly to his analysis, we may usefully revisit Frege's (1892/1970, 57) classic discussion of senses as modes of presentation in his 'On Sense and Reference.' Although widely repudiated, my suggestion is that Frege's conception of "*differing cognitive value*" deserves to be taken seriously and literally in terms of a descriptive or conceptual representation. In particular, Frege's account is consistent with an avowedly psychological interpretation as we would understand this today. Although Frege rejected a psychological understanding of sense, he distinguished it from an "idea" which is a "wholly subjective," idiosyncratic mental representation. By contrast, for Frege, "sense" is an abstraction and idealization from individual thoughts identified with "the mode of presentation of that which is designated." Sense and mode of representation determine "the thought expressed" and, thereby, "actual knowledge." In these explicitly cognitive terms, Frege speaks of "grasping a sense" when we understand a word, and it is clear that we may take this in an appropriately qualified psychological sense now familiar in cognitive science. How else? In this vein, Dummett (1973, 94) glosses "cognitive value" as "information content." Frege takes sense to be an ingredient of meaning "where meaning is that which a man knows when he understands a word" (1973, 95). Despite being widely scorned in the wake of the Kripkean revolution, Frege's conception of sense and mode of presentation seem perfectly plausible, understood as internal, intellectual, conceptual processes. Above all, nothing in Frege's account suggests the kind of mysterious posits that Wettstein characterizes pejoratively as "Cartesian." Frege's illustration of a mode of presentation is clear enough to refute these misplaced criticisms. Frege writes,

Let  $a$ ,  $b$ ,  $c$  be the lines connecting the vertices of a triangle with the midpoints of the opposite sides. The point of intersection of  $a$  and  $b$  is then the same as the point of intersection of  $b$  and  $c$ . So we have different designations for the same point, and these names ('point of intersection of  $a$  and  $b$ ,' 'point of intersection of  $b$  and  $c$ ') likewise indicate the mode of presentation; and hence the statement [of identity] contains actual knowledge. (Frege, 1892/1970, 57)

Above all, Frege's geometrical illustration makes it clear that "point of intersection of  $a$  and  $b$ " is a description that we *understand* in the perfectly ordinary way – a matter of internal psychological, conceptual processing, though of a more abstract idealized kind than an individual "idea." Taking up Wettstein's parallel between reference and perception (see also Salmon 1991, 122 and Burge 2012, 111), we may pose Wettstein's Fregean question as we did before using the Necker Cube: He asks "How

one can be in touch with the same thing twice over without knowing this fact?” (Wettstein 2004, 141). The answer is obvious and the analogy with Frege’s Hesperus/Phosphorus case is clear. It is *cognitively* informative to be told or shown that one object is identical with another for exactly the reasons Frege appreciated – namely, the different senses or modes of presentation understood as psychological information processing.

### What ties the ability to the object?

Devitt acknowledges that the difference in meaning between “a = a” and “a = b” “is about as powerful a semantic intuition as we have” (2012). In this regard, Devitt (forthcoming) accepts that “Frege was right in thinking that a name had a sense” (1989, 211) and that a name’s “sense” is its mode of “presenting” its bearer, but he holds Frege was wrong in thinking that a mode is descriptive. Thus, Devitt claims to partially vindicate Frege’s idea of sense as “mode of presentation,” although his own version of Frege’s insight diverges significantly from Frege’s conception. Devitt argues for a “less intellectualized” solution that avoids the flaws of Cartesian and direct reference views, but still explains “what ties the ability to the object.”

Devitt develops Kripke’s (1972, 298, 346, fn. 22; 1980, 91) adumbration of the idea that it is a causal chain rather than any description which determines reference. Bianchi (2011, 264) has suggested that Kripke’s picture of such communication links “may seem naïve.” She complains, “even today, forty years later, we do not possess a fully blown theory built on this picture.” In response, Devitt (2012) claims to have elaborated the idea into a more complete theory which is as “full blown” as one can expect under current limitations of our knowledge. However, I suggest that, if we take the idea of causal chains and networks seriously, Devitt’s account of reference “grounding” and “borrowing” fails in a familiar way to provide an explanation. Indeed, his account has the virtue of making more explicit the Kripkean intuition and its serious flaws. Despite its naturalistic, scientific ambitions, Devitt admits that his views “have the same sources as the views of direct reference philosophers” (1989, 206) and, therefore, in the end, he doesn’t manage to extricate himself from the fundamental problem of construing the semantic project as “explaining how names related to the world” (1989, 211).

### Raising Eyebrows

Devitt explains “competence with the name is simply an ability with it that is gained in a grounding or reference borrowing” through the chain of causal links (Devitt and Sterelny hereafter D&S, 1999, 67). Devitt’s causal chain explanation is undoubtedly an answer to a certain kind of question, but not a theory of naming *ability or competence*, as he claims, except in a Pickwickian sense. A dog or doorknob present at the dubbing doesn’t “gain an ability” to use a name, despite sharing the same causal

circumstances. Of course, it is not the *ability* as such that is gained on such occasions. Rather the *pre-existing* ability is used to add a new name to one's repertoire. On Devitt's model, when I buy a tennis racquet endorsed by Roger Federer, I also acquire his "competence" to play.

I have acknowledged, of course, that the naïve causal theory captures a certain compelling intuition. Scriven (1959) famously drew attention to the variety of questions and the diverse family of explanations that may be made. He notes "The most cursory examination of both scientific and historical writing makes it clear that there are many occasions when questions beginning What, How, Who, Which, Where and When produce explanations; and explanations are also given in response to the raising of eyebrows" (1959, 451). Although Devitt claims his account to be "theoretically motivated," the elaboration of Kripke's causal chain of reference "borrowing" is simply an explanation of the origins of a name and why we conventionally use it in referring to someone. The intuitive appeal of the causal "theory" is derived from the fact that there is undoubtedly a chain of transmission, but this history is irrelevant to the way that each individual must acquire the competence to use the inscription-type or sound-pattern.

Devitt's account bears an affinity to Bromberger's (1992, 83,4) illustration of spurious explanations. Undoubtedly, we explain *how we know* the height of a flag-pole by citing the length of its shadow and the angle of the sun's rays, but this is not the answer to a *scientific explanatory* question about the height of the flag-pole. Among the different possible projects that might be associated with causal explanations (Woodward 2001, 161), at best, Devitt's communicative chain of reference "borrowing" is a paradigm singular-causal, historical explanation typically offered in the fashion of Scriven's (1959) inkwell example (see Hempel 1965). A sequence of events explains why the carpet was stained with ink by adverting to someone's knee hitting the table which turned over the ink bottle which poured out the ink which ran over the edge and dripped on to the carpet. (see Woodward 2003, 156). Woodward points out the litany of problems confronting singular-causal claims as explanations of relations between events. He notes, that there is no reason to think that single events can be identified with cause-and-effect events in a causal claim and,

Often, the events related in a singular-causal claim will correspond to what, from the perspective of the underlying scientific framework, are complex, spatially and temporally distributed, gerrymandered and unnatural-looking congeries of events falling under many different laws. (Woodward 2003, 169)

Devitt claims that his "naturalistic" causal account achieves as good an explanation as we can reasonably expect given currently available knowledge. However, since we are unlike ink bottles when we display a competence in using names, such a singular-causal historical explanation leaves out the most important factors just as Skinner's stimuli neglected or disguised the internal mental processes involved in "verbal

behaviour.” Devitt’s epithet “Cartesian” is empty disparagement of what is the only remotely plausible (and emphatically naturalistic) explanation – namely, one that adverts to internal psychological processes and representations, that is, our descriptive concepts associated with a name.

Devitt denies that “we have Cartesian access to meanings” (1996, 172,73). Of course, we may concede that naming competence “does not require any knowledge *about* the sense” or intentional “knowledge *that*” regarding senses. However, most explanations in good standing throughout psychology posit internal processes that are not “knowledge” in this special, philosophical sense. Propositional knowledge “that” something is the case can hardly exhaust the resources of internalist psychological theories. Most of cognitive science, and the most plausible account of Fregean senses as “modes of presentation,” is a story about the internal representations that subserve our mental capacity or naming competence.

The emptiness of the causal account is evident in Devitt’s attempt of to make it do the work of a psychological theory by terminological fiat. It is telling that, although Devitt claims that Cartesianism has been undermined by the Direct Reference revolution and is “almost entirely unsupported,” it is the one that his own theory clearly, though *implicitly*, relies upon and insinuates, as suggested in his emphasis on “abilities to designate,” “mental representation,” and “cognitive values” (1989, 211), “grasping” (D&S 1999, 67), “competence with a name” (D&S 1999, 69), “ability gained” (D&S 1999, 68). In Devitt’s use of the term, even the “cognitive fix” that establishes reference is an external causal influence. Thus, there is nothing cognitive in Devitt’s version of “cognitive values” since his version of Frege’s “mode of presentation” transposes it into an external, causal chain, though this cannot explain a naming ability and “actual knowledge.” Of course, Devitt is free to define the special Fregean terms such as “mode of presentation” as he chooses, but he uses “cognitive value” in the way we might speak of a “criminal lawyer” when we don’t really mean it pejoratively. In a revealing example, Devitt explains *empty names* with his external, causal account of sense by suggesting that in such cases “the sense is the property of *purporting to designate* an object by such a link” (D&S 1999, 67; emphasis added). How external links in a causal chain might “*purport*” to refer is not explained. Of course, in Chomsky’s (1959, 31) words, this device is as simple as it is empty. It is Cartesianism in disguise.<sup>6</sup>

### Lightening the epistemic burden.

For Devitt a name’s meaning is not cognitive but, rather, “a non Fregean sense explained in terms of a causal network” (Devitt 1989, 211). Thus, he seeks to explain “competence with a name” and “grasping its sense” in what he terms “a psychologically austere way” (D&S 1999, 67). However, there is no reason for

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<sup>6</sup> Barker (2006, 16) refers to Wettstein’s account as “descriptive theory in disguise” in the same sense.

thinking that psychological “austerity” is a virtue when we seek to explain language or any other mental ability. Thus, a name is alleged to be “largely external to the mind and beyond the ken of the ordinary speaker” (D&S 1999, 67). Indeed, Devitt says that on his account “The connection between names and identifying beliefs is cut” and, therefore, “The epistemic burden is lightened” (D&S 1999, 69). We might similarly “lighten the epistemic burden” with a theory of vision or any other mental competence at the cost of having no explanation.

This appeal to facts “external to the mind” is just the one Chomsky (1959) had criticized in Skinner’s *Verbal Behavior*. In particular, Skinner’s use of terms such as “stimulus control” disguised the mentalist assumptions on which they implicitly relied.<sup>7</sup> Departing from Frege’s cognitive conception, Devitt (D&S 1999, 68) proposes that the causal theory can “emulate the description theory” (D&S 1999, 67) in accounting for both sense and reference of a name. External causal chains substitute for Frege’s own notion of sense understood as a “mode of presentation.” On Devitt’s view, the Causal theory explains the “cognitive fix” which is actually a network of links “from thoughts to peripheral stimuli and by links from stimuli to the external world” (Devitt 1989, 222).

The charge of Behaviourism may appear unfair on the grounds that Devitt explicitly acknowledges “explanation must frequently involve the mind” (1989, 222). Indeed, Devitt (forthcoming) says that the ability to use a name is only “partly explained by a causal connection to an object” where the linguistic competence itself will be explained by psycholinguistics. However, despite acknowledging that “Very little is known” about the psycholinguistic matters underlying naming ability, Devitt suggests that this ignorance “should not be of much concern to a theory of names.” In other words, the explanatory burden is placed mainly on external causes which give the illusion of explanation, as we have seen, by disguising their dependence upon an internal, mental account.<sup>8</sup>

Devitt (forthcoming) says “But the causal theory does have something to say about what makes something an ability to designate one object in particular with one name in particular, about what ties the ability to that object and that name.” However, when we turn presently to consider causal networks, we will see that this tie between object and name is also an illusion because, among all the causal chains in a vast ramified net, we can trace a path backwards to a specific dubbing event only in hindsight. To paraphrase and adapt Chomsky’s remarks on external stimuli, since causes are free for the asking, we can account for the wide class of naming occasions by identifying the controlling causes. But the word cause has lost all objectivity in this usage. Causes are no longer part of the outside physical world; they are driven back into the organism. We identify the cause when we hear the name. It is clear from such examples, which

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<sup>7</sup> See John Collins’ (2007) reconsideration of Chomsky’s review of Skinner.

<sup>8</sup> Devitt’s position is reflected also in his explicit nominalism (Devitt 2006b) that takes “linguistic reality” to reside in external tokens rather than types. See criticism by Smith (2006) and Slezak (2009).

abound, that the talk of causal chains simply disguises a complete retreat to mentalistic psychology. In particular, Chomsky gives examples of the use of proper names by someone who has never been stimulated by the corresponding objects. These are instances of stimulus control of the kind Devitt claims for causal chains, but Chomsky remarks that they “merely add to the general mystification” (Chomsky 1959, 32).

### Intentional Magic and Movement of the Soul: “Extramission”

Indeed, Stalnaker (2003, 178) suggests that the only alternative to descriptive accounts seems to be “some kind of obscurantist intentional magic.” And Searle (1969, 87), too, remarks that without description, our ability to *mean* or *intend* a particular object to the exclusion of all others seems like a “movement of the soul.” Indeed, these referential intuitions are suggestive of widely held, compelling misconceptions concerning visual perception that are thought to involve emanations from the eyes – the so-called “extramission theory of perception” maintained by early Greek philosophers.<sup>9</sup> Remarkably, following Piaget, Winer et al. (2002) report evidence that belief in extramission remains widespread, deeply ingrained and resistant to educational efforts. I don’t mean to suggest that such theories are literally believed by philosophers, but the compelling conceptions are very suggestive of intuitions underlying the most widely held idea of how words “hook onto” their objects.

Searle (1969, 93) suggests, “It is misleading, if not downright false, to construe the facts which one must possess in order to refer as always facts *about* the object referred to, for that suggests that they are facts about some *independently* identified object (See also Stalnaker 2003, 185). Searle argues that if an expression has no descriptive content, “then there could be no way of establishing a connection between the expression and the object.” He asks “What makes *this* expression refer to *that* object?” Devitt (forthcoming) gives an explicit answer to this question with his causal account of “what makes something an ability to designate one object in particular with one name in particular.” As we have seen, for Devitt, the answer is nothing epistemic or intellectual but rather “a designating-chain grounded in that object.”

### Causal Networks: Baptism or Big Bang?

Wettstein (1986, 193) has noted that “advocates of this approach have never provided an account of what exactly the *semantic* function of the historical chain is.” More emphatically, Dummett (1973, 148) remarks on the irrelevance of a chain of communication to our understanding of language or our competence in the actual

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<sup>9</sup> I am grateful to Justin Colley for drawing my attention to this case.

practice of naming.<sup>10</sup> An indication of the reasons was given by Mackie (1980, 34,5) referring to the fact that “causal statements are commonly made in some context, against a background which includes the assumption of some *causal field*.” Thus, “what is said to be caused, then, is not just an event, but an event-in-a-certain-field.” Anything that is part of the assumed field of events will not be considered as a relevant cause but this attitude must be seen as “reflecting some conversational or other purpose of the speaker” (1980, 36). This pragmatic aspect of identifying cause and effect is also articulated by van Fraassen (1980, 123) who refers to the scientific picture of the world as “a net of interconnected events, related to each other in a complex but orderly way.”<sup>11</sup> This is just the framework to which Devitt appeals in order to explain “a nonFregean sense” but it is just hand-waving in the absence of any attention to how causal networks could conceivably serve the explanatory purpose that Devitt claims for them. When we look at such models, we see that Devitt’s ideas of reference “grounding” and “borrowing” arise from the same misleading externalist intuitions behind direct reference theories.

As it happens, there has been an explosive literature in philosophy and psychology on causal networks or Bayes Nets (Woodward 2003, 2012, Sloman 2005, Glymour 2001, Pearl, 1995, 2000, Lambrozo 2010). This picture has been elaborated in the apparatus of Causal Bayes nets represented in diagrams – “directed acyclic graphs.” The nodes in such a graph represent events and the arrows represent causal links between them.

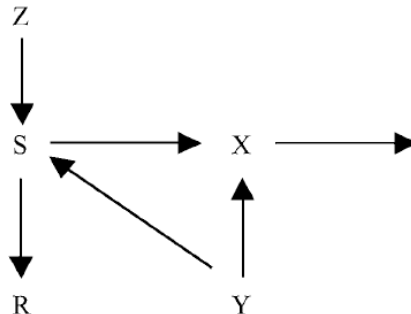


Figure 2. Bayes causal net (Gopnik and Schulz 2009, 4)

Such causal diagrams permit us to visualize van Fraassen’s (1980, 124) account and its direct bearing on Devitt’s theory of naming ability. Van Fraassen (1977, 149) points to the systematic ambiguity or context-dependence of why-questions and notes the relevance of “*concerns brought from outside*.” He notes that such outside

<sup>10</sup> The point is precisely analogous to Putnam’s (1967, 18) attempt to rebut Chomsky’s “innateness” claims by citing the common historical origin of human languages to explain language universals. However, such an account leaves untouched the question of acquisition – that is, how each individual must accomplish the task of becoming a competent speaker.

<sup>11</sup> I am indebted to Michael Slezak for guidance on the literature and helpful discussion of causation.



concerns are relevant “even if we ask specifically for an ‘efficient cause,’ [and] for how far back in the chain we should look?” Woodward, too, asks “why suppose ... that the underlying scientific framework posits single events to be identified with the cause-and-effect events in the original causal claim?” Van Fraassen notes, “Explanation of why an event happens consists (typically) in an exhibition of salient factors in the part of the causal net formed by lines “leading up to” that event.”

In other words, the salient feature picked out as ‘the cause’ in that complex process, is salient to a given person because of his orientation, his interests, and various other peculiarities in the way he approaches or comes to know the problem – contextual factors. (van Fraassen 1980, 125)

Even in the simplest networks with a few causal links such as cases of “double prevention” (Woodward 2012, Lambrozo 2012), it is difficult to draw firm conclusions about causal connections. A modest, realistic causal network helps to dramatise the retrospective selectivity. The following model encodes medical knowledge of a cardiac system. What is the cause of blood pressure at node (5)?

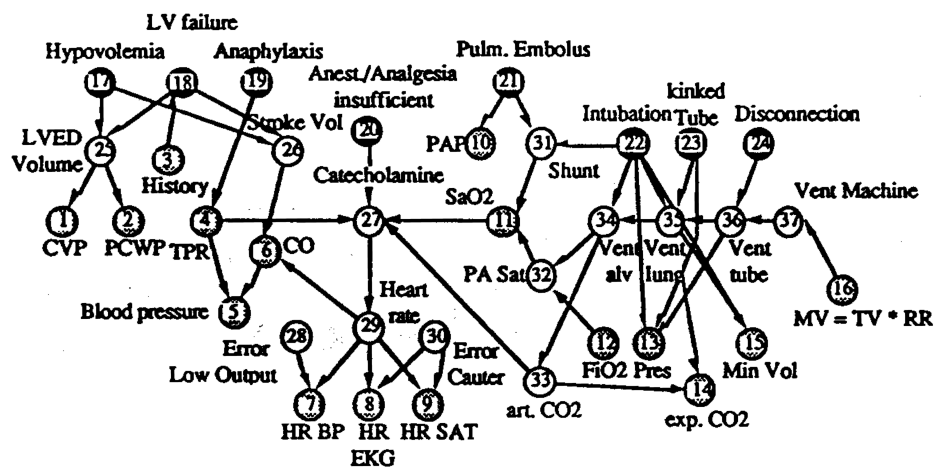


Figure3. from Beinlich et. al. 1989.

It is clear that on Devitt’s account of naming, we choose the dubbing of Aristotle rather than the Big Bang not because one is a cause of our “ability” and the other is not. Rather, we have a specific pragmatic interest which governs our backward tracing of the path through the causal network. Devitt’s appeal to causal networks simply disguises the tacit operation of Donnellan’s omniscient observer of history – the “extramission” illusion.

## Blindness or Shiftiness?

Despite frequent pronouncements that Kripke's account has refuted and displaced descriptivism to become the received view, a descriptivist insurgency continues to defend the Russell-Frege account of proper names essentially along the lines of Dummett's (1973) 'wide scope' analysis (Devitt 1981, Sosa 2001). Soames (2002) argues that all such attempts to circumvent Kripke's case and to reinstate descriptivism fail against "decisive" objections, but the ongoing debate is revealing about the issues of interest here. Soames' argument against descriptivism is itself vulnerable to the charge that it trades on the ambiguity of key expressions (Hunter 2005, Baumann 2010). In the usual example, the definite description in (2) might not refer to Aristotle and, therefore, cannot be the meaning of the proper name in (1).

- (1) Aristotle was fond of dogs
- (2) The last great philosopher of antiquity was fond of dogs

Dummett remarks "a mere reliance on intuition is not, in such a case, a guarantee that there really is a clear notion here" (1973, 125). Indeed, Hughes' (2004) disconcerted reaction to Dummett is interesting in the light the persistence of descriptivist arguments against Kripke's intuitions (Sosa 2001, Nelson 2002, Stanley 1997). Hughes (2004) professes "blindness" to the ambiguity of crucial sentences, but there can be no doubt about the existence and cogency of the alternative readings. As Sosa (2001, 26) notes, the phenomenon of ambiguity is widespread in the English language and the "shiftiness" of linguistic constructions containing modal expressions is akin to lexical ambiguity of words such as "bank." Closer are the structural ambiguities familiar to linguists and the basis for jokes such as Groucho Marx's remark: "One morning I shot an elephant in my pajamas." Failure to appreciate the humour through blindness to the ambiguity is a psychological defect rather than theoretical criticism.<sup>12</sup>

Dummett argues that Kripke wants to give different explanations for descriptions and proper names and with the latter he does not acknowledge a role for scope ambiguity. Instead, Kripke invokes different kinds of possibility and necessity – epistemic and metaphysical. Thus, Kripke's doctrine of rigid designators rests partly on such modal intuitions, but Dummett shows that a theory of proper names as disguised definite descriptions has no difficulty with the crucial phenomena. Scope ambiguity in modal statements can apply to both names and descriptions "which accordingly cannot be used to differentiate the two types of expression" (Dummett 1973, 113). Overall, Dummett suggests "these considerations, so far from providing grounds against the assimilation of proper names to definite descriptions, supply substantial evidence in its favour." (Dummett 1973, 116).

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<sup>12</sup> For those afflicted, Groucho adds "How he got into my pajamas I'll never know."

## A disgrace to the human race?

More recently, Sosa (2001, 4,7) develops and defends the descriptivist account of proper names along Dummett's lines. In particular, Sosa notes that ambiguity predicted by Russell's theory of descriptions for a sentence such as (2) is reflected in the intuitive understanding of the sentence. Sosa (2001, 19) draws attention to Russell's (1919) emphasis on the two crucially different senses of "is" – namely, the "is" of identity and the copula. Sosa says "I echo Russell's lamentation of our ambiguity in this regard." When this distinction is respected, we can see "Aristotle was the teacher of Alexander" is ambiguous between a statement of identity and the statement "Aristotle taught Alexander." As always, we can see the alternative readings of ambiguous statements when placed in an appropriate context. Thus, we might make a sequence of statements "Aristotle met Alexander; Aristotle walked with Alexander; Aristotle spoke to Alexander" and, we might add "Aristotle was the teacher of Alexander," *not to assert an identity* but to make a further attribution. On the other hand, of course, the same sentence may be used to assert an identity as when we say "You can't imagine who had been the teacher of Alexander the Great of Macedon! Aristotle was the teacher of Alexander." Soames (2002, 29) insists that "there is no sense in which ... Aristotle might not have been Aristotle" but Sosa (2001, 23) points out, "It is not to be ignored, in this connection, that there are, in fact, ways of *using* proper names to indicate that they should take narrow scope" (see also Baumann 2010, 187). As Baumann (2010, 187) notes, sentences abstractly considered such as "Aristotle might not have been Aristotle" do not express a determinate proposition. To do so, the truth-conditional value of the name must have been decided and the "is" must be disambiguated. Russell expressed this concern as follows:

It is a disgrace to the human race that it has chosen to employ the same word "is" for these two entirely different ideas – a disgrace which a symbolic logical language of course remedies. (1919, 172).

Dummett (1973, 117) characterizes sentences as ontically necessary (or contingent) if they are true independently of the means available to us for recognizing them as true. Kripke reserves the word "necessary" for metaphysical necessities of this kind, using the term "a priori" for what Dummett refers to as epistemic necessities. Dummett (1973, 120) argues that necessity had little to do with the behaviour of proper names and definite descriptions in modal contexts and suggests that Kripke wishes to dissociate the necessary/contingent distinction from epistemic considerations altogether "But this he fails to do" (1973, 124). From the point of view of my theme, Dummett's conclusion is noteworthy in speaking of the need "to invoke the conception of a being whose powers of observation or mental capacities transcended ours in a given respect":

The analogy which we implicitly rely on is with a hypothetical observer not subject to the restrictions to which we ourselves are subject. ... we tacitly

appeal to the notion of an observer who is able to survey the whole infinite domain within a finite time. ... (Dummett 1973, 119)

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