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REFERENCE AND RESPONSE

Louis deRosset

A standard view of reference holds that a speaker's use of a name refers to a certain thing in virtue of the speaker's associating a condition with that use that singles the referent out. This view has been criticized by Saul Kripke as empirically inadequate. Recently, however, it has been argued that a version of the standard view, a response-based theory of reference, survives the charge of empirical inadequacy by allowing that associated conditions may be largely or even entirely implicit. This paper argues that response-based theories of reference are prey to a variant of the empirical inadequacy objection, because they are ill-suited to accommodate the successful use of proper names by preschool children. Further, I argue that there is reason to believe that normal adults are, by and large, no different from children with respect to how the referents of their names are determined. I conclude that speakers typically refer positionally: the referent of a use of a proper name is typically determined by aspects of the speaker's position, rather than by associated conditions present, however implicitly, in her psychology.

1. Introduction

In virtue of what does a use of a proper name refer to a certain thing? Until Saul Kripke's *Naming and Necessity*, there was a standard answer, the *cognitive determination hypothesis*:

CDH: A use of a proper name α refers to an individual x in virtue of the speaker's associating with α some condition which singles x out¹

where a condition *singles out* an individual just in case that individual uniquely satisfies the condition.

Kripke gave several objections to *CDH*. In my view, his most powerful objection was that it is empirically inadequate: speakers simply do not associate with many of the proper names they use information that singles out their referents. More recently, however, it has been argued that *CDH* survives this objection [Chalmers 2002a, 2002b; Gertler 2002; Jackson 1998a, 1998b]. Competent speakers are not always able to express the condition that guides reference on cue; but *CDH* does not really require otherwise. Speakers need only respond in accordance with the associated

¹This view is more commonly called *descriptivism*. I eschew this label because the associated condition need not be statable by a description; see Chalmers [2002b]. Kripke's seminal discussion of *CDH* is [Kripke 1980].

condition when prompted, by manifesting dispositions to identify a referent for the name in various factual and counterfactual scenarios.

This rehabilitation of *CDH* has been used to push a variety of interesting views in many different areas. It plays a central role in an argument that, interpreted correctly, the doctrine that conceivability entails possibility is true [Chalmers and Jackson 2001]. It is supposed to defuse the problem posed by Kripke's discovery of *a posteriori* necessities for the view that there is a strong constitutive connection between *a priority* and necessity [Chalmers 1996: 56–71]. It is held to show that a certain kind of meta-ethical realism is true. It is the key premise in a defence of philosophical analysis against the objections of Quine and others [Jackson 1998a].

Any tool that gets such heavy use should be closely inspected to ensure its soundness. The task of this paper is to assess whether the response-based rehabilitation of *CDH* can ultimately avoid the sorts of problems Kripke noticed. I will argue that it cannot, and that Kripke's answer to the question of the referential bond is, in this respect, better.

2. Response-Based Theories

Kripke objected to *CDH* on the grounds that, in many actual cases, a competent speaker has a use of a proper name that refers, even though the speaker does not associate with her use a strong enough condition to single out any individual. Consider Joe, who, if asked, 'To whom or what do you refer by your use of 'Cicero'?', would answer, 'Some Roman orator or other.' He knows full well that the Romans went in for oratory in a big way, and that there were lots of Roman orators. His use of 'Cicero' nevertheless refers to a certain Roman orator rather than any of the others. Thus, no condition that Joe associates with 'Cicero' singles out the individual to whom his use of the name refers. Kripke argues that we know empirically that many ordinary speakers are in Joe's situation. So, *CDH* is wrong. Call this the *argument from underinformation*.

Kripke's critics have noticed that the argument from underinformation relies on an overly strong account of association. Kripke was correct to point out that, as an empirical matter, a speaker sometimes cannot call to mind and articulate in words any condition that singles out the referent of a name he uses. But any account of association that requires so much of a speaker is implausible. We can and should give a less demanding and more plausible account of association. Intuitively, Susan might associate 'The Vulcans', the name of a local Star Trek fan club, with its membership list, even though she is not able to rattle off the complete list of names on cue. Evidence that Susan associates names of members with the name of the club is provided by the fact that she is disposed to give the correct response to questions like 'Is So-And-So a member of the Vulcans?' For many Americans, this is the only sense in which we associate such names as 'Chester A. Arthur' and 'James Buchanan' with the U.S. presidency.

Susan's case points the way to an account of association that allows that an associated condition may guide our identification of a referent, despite being largely or entirely implicit. On this view, an associated condition must provide the psychological basis of a disposition to respond to prompting in accord with the condition; it needn't also be something the speaker can call to mind or articulate. Here's how Jackson expresses the idea: '[T]ypically the association is implicit or tacit rather than explicit. It is something we can extract in principle from speakers' patterns of word usage, not something actually explicitly before their mind when they use the words' [Jackson 1998b: 211].

For a given proper name α , call a description of a situation α -neutral if it does not explicitly contain information about which thing is the referent of α , and does not contain uses of α . Latter-day defenders of *CDH* endorse:

RESPONSE: A condition ϕ is associated by a speaker S with a proper name α iff ϕ guides S's responses to the question, 'Who or what is the referent of α ?' when S is presented with an α -neutral, but otherwise complete, description of a situation.

Let's call a theory that combines this account of association with CDH a response-based theory of reference. Response-based theories seem to evade the argument from underinformation. Kripke's empirical data were limited to the fact that speakers can't express any appropriate condition on cue. But RESPONSE does not require that the associated condition be producible on cue, or even statable in words. So Kripke's empirical insight fails to show that an underinformed speaker like Joe associates no suitable condition with 'Cicero'.

Grant that Joe's inability to express a suitable associated condition does not by itself imply that he does not associate any such condition with 'Cicero'. Do we have any positive reason to think that ordinary speakers like Joe actually do associate the right sorts of conditions with their names? Notice that the descriptions we use as prompts will contain some metalinguistic information, including information about the historical provenance of the name in question. Part of a prompt for Joe might include, e.g., 'You acquired your use of the name "Cicero" from your fifth-grade social studies teacher.'3 In so far as Joe responds to cases in the way Kripke thinks he should, he is disposed to apply some such condition as the individual whose initial baptism with the name 'Cicero' is the historical source of my use of that name to specify the referent when given a 'Cicero'-neutral, but otherwise complete, description of a situation. I'll follow the standard terminology by saying that Joe defers to others when his associated condition relies on facts about other people's uses to single out an individual. It may not occur to him to supply such metalinguistic information on cue. His dispositions to

²I don't pretend to have given any very precise characterization of α-neutrality. Fortunately, nothing in our discussion will turn on any controversial way of explaining α -neutrality.

³Does such a description exceed the bounds of 'Cicero'-neutrality? Let's assume not for the sake of argument.

respond to cases indicate that he nevertheless associates it with his use of the name.⁴

One last feature of response-based theories of reference bears mention. A condition may in fact guide a speaker's response to an α -neutral description of a situation even though, because of time constraints, inattention, impishness, error, and a variety of other circumstances, he does not identify the right individual when prompted. Thus, only the speaker's responses under cognitively auspicious circumstances should count according to response-based theories.⁵

3. A Consequence of Response-Based Theories

The key notion in understanding *RESPONSE* is the notion of a condition's *guiding* a speaker's responses. Response-based theorists rely on an idea I have already broached: if a certain condition guides a speaker's identification of a referent for her proper name, then it provides the basis of a disposition to respond in accord with that condition [Jackson 1998b: 211–12]. Most descriptions of situations that we use in philosophy are not true of the actual situation—the situation in which we all find ourselves. Philosophy papers are full of fanciful thought experiments involving teletransportation, mindreading, runaway trolleys, and the like. Consideration of speakers' dispositions to respond to descriptions false of the actual situation raises complications concerning a distinction response-based theorists make between primary (or *A*-) intensions and secondary (or *C*-) intensions. To avoid these complications, I will focus on descriptions that are true of the actual situation. Applying response-based views to descriptions true of the actual situation yields:

DISPOSITION: A condition ϕ is associated with α by S only if S is disposed to specify as the referent of α the individual (if there is one) in fact singled out by ϕ when presented in cognitively auspicious circumstances with a true, α -neutral, but otherwise complete description of the actual situation.

Suppose that a speaker S's use of a name α refers to some individual x. According to CDH, S associates some condition ϕ with α that singles out x. According to DISPOSITION, S must be disposed to identify the individual in fact singled out by ϕ when presented with an α -neutral, but otherwise complete, description of the actual situation. On our assumptions, the individual in fact singled out by ϕ is none other than x. So the conjunction of CDH and DISPOSITION implies

CORRECTNESS: A speaker S's use of a proper name α refers to an individual x only if S is disposed to identify x as the referent of α when presented in

⁴Sometimes a view on which associating such deferential conditions is the norm for ordinary speakers is called 'causal descriptivism'. I avoid the terminology because it is disputed; see n. 1. But the argument of §4 applies to such views.

⁵For some discussion of the idealization, see Jackson [1998a: 35–7], Chalmers and Jackson [2001: 320–8], and Chalmers [2002a: 148–9; 2004: 191ff., 208, 223 n. 15].

⁶This procedure is also followed in Chalmers [2006: 89ff.].

cognitively auspicious circumstances with an α-neutral, but otherwise complete, description of the actual situation.

CORRECTNESS says that a speaker is disposed to specify the right individual—the referent of her use of α—when presented with the right sort of description of the actual situation. This claim is the result of plugging into the place where CDH mentions association any account of association that implies DISPOSITION.

4. An Objection to Response-Based Theories

There is reason to think that CORRECTNESS is false. Consider Ethan, a normal human male. Suppose that, as part of his religious education, we teach Ethan to use 'Peter' as a name for the apostle Peter by reading him the following story:

Peter and his friends were telling people about Jesus. The people listening wanted to hear more! Peter told how Jesus came so that everyone could be a part of God's family. The people wanted to be part of God's family. They shared what they had and ate together.⁷

After hearing this story a few times, Ethan acquires enough facility with 'Peter' that he goes around using it to educate his friends with his newfound knowledge that Peter was an important man who told a lot of people about Jesus.

Here are what seem to be some evident facts. Ethan has a use of the name 'Peter'. He uses that name to say things about a certain apostle, whom we call 'Peter'. He can do so because his use of that name refers to that very man. The story itself does not provide enough information to single anyone out. Virtually every Christian evangelist has done the deeds attributed to Peter in our story. So knowing the story does not provide Ethan with enough information to single out the referent of 'Peter'. Ethan is underinformed, and so will need to associate some deferential condition with 'Peter' if CDH is to be maintained. Here's the catch: Ethan is a threeyear-old boy. He is not disposed to respond to a 'Peter'-neutral, but otherwise complete, description of the actual situation by identifying the man we all refer to by our uses of 'Peter' as the referent of his use of 'Peter'. He's disposed to pick his nose and stare when prompted like this. It's not that he's bored, distracted, or busy thinking how dumb grown-ups are; he is not really equipped to give an answer. He has no facility with the usemention distinction; he lacks the cognitive resources to handle questions that turn on the notions of reference or of a transmission of the use of a name. Ethan simply isn't in a position to pick out a referent for 'Peter' in accord with the relevant sort of deferential condition.8

⁷This is the entirety of the text about Peter in Currie [2005].

⁸I used a hypothetical case, the case of Joe, as an expository device to focus the discussion of Kripke's original argument from underinformation, despite the fact that the argument is empirically based. This

Deferring to others would require Ethan to associate with 'Peter' some metalinguistic or metacognitive condition, such as the man the people who taught me 'Peter' intended to talk about using the name. Empirical research suggests that a typical three-year-old like Ethan lacks the requisite metalinguistic and metacognitive abilities. He can acquire proper names for animate objects, and distinguish names from common nouns and adjectives. He may refuse to knowingly apply such proper names to more than one thing [Katz et al. 1974; Gelman and Taylor 1984; Hall 1994]. He cannot yet, however, pass the False Belief Test. Thus, he lacks a robust capacity to answer questions that depend on how another's view of things differs from his own. Importantly, he can't reliably differentiate a word from its referent [Markman 1976].

In summary, his cognitive resources for representing, or even responding in accord with, metacognitive and metalinguistic conditions in the way required by *CORRECTNESS* are poor or nonexistent. Ethan nevertheless has no difficulty acquiring the use of proper names he hears, even when they are not introduced to him by ostension. He can acquire the use of the proper name 'Peter' just by hearing our use of 'Peter' in our story [Jaswal and Markman 2001]. Nevertheless, absent education and further cognitive

rhetorical gambit is sound so long as our empirical evidence suggests that there is or could easily be a case like Joe's. I am deploying the same sort of expository device to focus the discussion of the referential abilities of pre-schoolers. My description of Ethan is based on a real boy, but the argumentative burden of this section is carried by the empirical evidence I adduce. This evidence suggests that there is or could easily be a case like Ethan's: a three-year-old who (i) uses a name to refer to someone, (ii) is underinformed, and (iii) does not possess the cognitive wherewithal to defer to the source of his use of the name.

possess the cognitive wherewithal to defer to the source of his use of the name.

In the False Belief test [Wimmer and Perner 1983], a subject is shown a play in which a protagonist sees an item placed into a basket. The protagonist goes offstage, and the item is moved to another place. The subject is asked where the protagonist will look first for the item. The subject passes if she correctly predicts that the protagonist will look in the basket. The prediction appears to require the attribution to the protagonist of the false belief that the item is in the basket. Carpenter et al. [2002] report that some three-year-olds pass less demanding tests that don't implicate verbal dispositions.

¹⁰Piaget [1929] discovered evidence that young children cannot differentiate words and their referents. Smith and Tager-Flusberg report:

In the Piagetian task, for example, one asks the child if the moon could be called the "sun." Although it has been found that young children can accept this name substitution, they now attribute sun-like properties to the moon.

[Smith and Tager-Flusberg 1982: 455]

Chaney [1992], following Smith and Tager-Flusberg [1982], reports that many three-year-olds succeed in differentiating a word from its referent, but the experiment seems only to demonstrate that three-year-olds succeed in picking up a new term for a familiar kind of thing. Here is a description of the task at which three-year-olds succeeded:

We told children we were making up a new language and would therefore need new names for things. [...] [T]he child was shown a picture of a carrot, and asked if its new name could be "gok." [...] Then the picture was removed and four true/false questions were asked about "goks." Two of the questions were true about carrots (Can you eat a gok? Are goks orange?) and two were false (Do goks have wheels? Can you read a gok?).

[Smith and Tager-Flusberg 1982: 455]

Success at this task does not seem to require differentiating the word 'gok' from carrots. There is reason to believe that pre-school children have other metalinguistic skills, manifesting knowledge of phonology and syntax; see Chaney [1992], Smith and Tager-Flusberg [1982], Karmiloff-Smith [1986], Karmiloff-Smith et al. [1996], and the anecdotal and experimental evidence cited by Chaney [1992: 487–9]. But the evidence indicates that they have not mastered the distinction between name and referent required to grasp a deferential condition. Bialystok [1986] tested the grammaticality judgments of children between ages 5 and 9. The tasks were designed to distinguish failures owing to lack of selective control from failures owing to lack of metalinguistic knowledge. Her results indicate that age is correlated with the ability to complete tasks which impose demands on knowledge rather than control, suggesting that the inability of three-year-olds to successfully differentiate word and referent is not attributable to performance error alone.

development, the boy does not seem to have the sort of dispositions required by CORRECTNESS.11

Importantly, Ethan does have the ability to recognize the referents of some of his names. He knows the names of certain of his playmates, for instance. If he were asked, 'Who's Julia?' and Julia were present, he could point to her. If I pointed to Julia and said 'Emily looks happy today', Ethan could correct me by saying, 'That's Julia.' It is plausible, then, to suggest that he associates conditions with certain names that single out their referents. Ethan would, of course, be confused if we asked, 'To whom does your use of 'Julia' refer?' But to suggest on these grounds that Ethan does not associate a condition with 'Julia' that singles out its referent is to impose an implausibly strong interpretation of 'identify the referent', one on which one fails to identify the referent of 'Julia' if one fails correctly to answer the explicitly metalinguistic question, 'To whom does your use of "Julia" refer?' This suggests a response on behalf of CDH: the fact that Ethan would not respond appropriately to the metalinguistic prompt, 'To whom does your use of "Peter" refer?' does not indicate a failure of CORRECTNESS. 12

Let's suppose, then, that Ethan's prompt were the object-linguistic question 'Who's Peter?' rather than the metalinguistic question 'Who is the referent of your use of "Peter"? The object-linguistic question wouldn't confuse him. But he still wouldn't be able to answer that question in a way that would single out the relevant apostle. All of the object-linguistic answers that Ethan can give to the object-linguistic question can be inferred by him from the information in the story we read, and no such answer will single any individual out. Because Ethan is underinformed, CDH demands deference: Ethan must associate with 'Peter' a metalinguistic condition that singles out a referent. To return to the example given above, Ethan must associate some such condition as the man the people who taught me 'Peter' intended to talk about using the name. This is precisely the sort of condition which empirical research suggests Ethan is ill-equipped to handle. Ethan's inability to represent, or even respond in accord with, metalinguistic conditions of the right sort will pose a problem for CORRECTNESS no matter how Ethan is prompted. So, Ethan's case still seems to present a counter-example to CORRECTNESS. 13

Perhaps it might be urged that, though Ethan is not in a position to respond to prompting in accord with a deferential condition, it might still be implicitly encoded in some procedure he is disposed to use to identify a referent for 'Peter'. Ethan associates a deferential condition in virtue of what he is disposed to do in order to identify a referent for 'Peter', rather than in virtue of what he is disposed to say when asked to make an identification. Suppose, for instance, that Ethan's mother has transmitted to him the use of

¹¹Much of the empirical work on children's acquisition of proper names is summarized in Bloom [2000:

¹²Thanks to Christopher Hill for suggesting this response.

¹³Any competent user of 'Peter' will associate the condition being Peter with the name. But this condition won't determine the reference of Ethan's use of 'Peter' unless he is in a position to refer to Peter independently of having the name in his vocabulary. Thus, appealing to this associated condition would not provide a non-circular explanation of reference for Ethan's use of 'Peter'; see Kripke [1980: 68-70] for a seminal discussion of proposals that fall prey to circularity.

a name 'Mark' for one of her co-workers. Ethan might be disposed, when asked who Mark is, to turn the question over to his mother. Then, though Ethan can't now deploy a deferential condition to identify the correct referent when given a 'Mark'-neutral description of his situation, his dispositions do indicate the presence of a deferential condition in his psychology. In the case of 'Peter', the suggestion is that a response-based theory might be defended by claiming that Ethan is disposed to turn the question of who Peter is over to us, the people who transmitted the name to him.

Do we have any reason to believe that ordinary children in Ethan's situation have any such deferential dispositions? It seems not. But even if we suppose for the sake of argument that they do, there are two things to note about this reply. First, the reply abandons the account of association expressed in RESPONSE. Though it is still maintained that the presence in Ethan's psychology of a deferential condition is attested by his dispositions, the dispositions in question are no longer confined to those concerning the identification of a referent when prompted with the right kind of description. So adopting this response sends us back to the drawing board for a general account of association. Second, we could, without altering the salient features of Ethan's case, imagine that: (i) Ethan is the sort of parent-centred child who is disposed to turn the question 'Who is Peter?' over to his mother; and (ii) his mother has never heard of the man we call 'Peter'. For instance, we might suppose that Ethan's parents are immigrants from a non-Christian background, who have enrolled Ethan in a religiously affiliated pre-school. Thus, the deferential dispositions embedded in Ethan's procedures for handling a demand to identify a referent for his use of 'Peter' still would not lead him to the correct answer.¹⁴

5. Three Avenues of Resistance

There are three strategies available to response-based theorists for avoiding the problem apparently posed by Ethan's case: (i) deny that Ethan has a use of 'Peter' at all; (ii) deny that Ethan's use of 'Peter' refers to the relevant apostle; or (iii) insist that Ethan really is disposed to defer to us. We'll take each avenue of resistance in turn.

It would not be plausible to deny that Ethan has a use of 'Peter' in his vocabulary. He is not just a parrot or recording device. He displays all the normal symptoms of ordinary linguistic competence with a proper name. He can produce and respond to novel sentences, and correctly answer questions we might pose using the name 'Peter' on the basis of the information we have given him. He can, for instance, correctly answer the question, 'Was

¹⁴An objection to response-based theories on the basis of the referential and cognitive abilities of young children has previously been made in Schiffer [2003: 147–9]. Such an objection is also implicit in the claim in Byrne and Pryor [2006: 52] that response-based theories place implausibly high demands on understanding what someone else says.

Peter a woman?' And he does this in the same way (whatever that is) as other linguistically competent human beings. 15

Turn now to the second avenue of resistance, claiming that Ethan's use of 'Peter' does not refer to the relevant apostle. On this response, we have succeeded in teaching Ethan some stories, but the stories he learned are not about anyone. 16 This is not plausible either. Our own use of 'Peter' uncontroversially refers to the relevant apostle. In virtue of deploying this use, we gave Ethan information about the relevant apostle. Now Ethan is repeating this information, using such sentences as, 'Peter was a man who told a lot of people about Jesus.' When he speaks, what he says is true. And it is true in part in virtue of the fact that the use of 'Peter' Ethan deploys refers to an individual who was in fact a man who told a lot of people about Jesus. These are the sorts of abilities that indicate that Ethan's use of the name 'Peter' refers to the relevant apostle. At least, this is how matters seem, and we have no reason independent of antecedent commitment to CDH not to take appearances at face value.

A defender of CDH might nevertheless insist that, because we have assumed that Ethan's dispositions to defer would not lead to the relevant apostle, we should not attribute reference to the relevant apostle in Ethan's case. Ethan, unlike us, lacks dispositions to identify a certain referent for 'Peter'. The defender of CDH denies that adults with such aberrant dispositions refer to the same individuals as the rest of us. Consider Avinash, a normal adult, who announces that he associates being the person who first formulated the axioms of first-order arithmetic with his use of 'Peano'. Imagine that his dispositions to respond to cases accord with his announcement. The defender of CDH holds that Avinash does not associate misinformation with 'Peano', because Avinash's use of 'Peano', unlike ours, refers to Dedekind [Jackson 1998a: 32]. What additional cost in plausibility is incurred by insisting that Ethan's use likewise fails to refer to the relevant apostle?

There is an important difference between the two cases. Avinash announces the conditions under which his use of 'Peano' refers to a certain individual. His claim is seconded by his dispositions to respond. This lends some plausibility to the application of CDH to Avinash's case. Ethan is unable to make or even understand such a proclamation. Nevertheless, we endeavour to teach him something about the relevant apostle by giving the name to him, albeit without providing him with enough information to single the referent out. And, without knowing or caring what Ethan's deferential dispositions are, we pre-theoretically take this endeavour to be successful when Ethan starts deploying a use of 'Peter' to repeat what we told him and infer new claims. In the light of these facts, denying that Ethan's use of 'Peter' refers to the relevant apostle is implausible.

Importantly, our transmission of 'Peter' to Ethan is an entirely normal way to provide a child of his age with the use of a name. The story about the

¹⁵Empirical study of children's ability to acquire proper names takes these abilities (together with the ability to act in ways indicated by the subject's inferences using the name) to indicate successful acquisition of a use of the proper name. See, e.g., the studies cited in §4.

¹⁶At least, they are not determinately about anyone. This qualification does not improve the plausibility of the response.

relevant apostle that we used to transmit 'Peter' to Ethan is a direct quotation from an actual children's book. The idea is to teach children a story about a particular person. It is plausible to think that the author also wants to teach children to use and understand the name 'Peter', so that further educational efforts can use that name to add to the children's store of information about the relevant apostle. The story itself nevertheless provides nowhere near enough non-metalinguistic information to single anyone out. It won't even differentiate Peter from the friends mentioned in the story. There is no reason to think that the children who thereby acquire a use of the name are disposed to defer to people who use 'Peter' to refer to the relevant apostle. Perhaps the author's efforts here are quixotic. But we wouldn't ordinarily have supposed so.

Of course, the defence of *CDH* at hand—that Ethan's use of 'Peter' does not refer to the relevant apostle—is not inconsistent. But one lesson of Kripke's original argument from underinformation is that we appear to have empirical knowledge of the reference of speaker's uses of names that is independent of the application of any particular theory of reference. We don't need to presume any theory of reference, for instance, to recognize with Kripke that there are speakers who have no relevant classical education but nevertheless have uses of 'Cicero' that refer to Tully. Against this empirical background, responding to the argument from underinformation by denying such a claim would come at significant cost in plausibility. A defender of *CDH* could without inconsistency apply his theory and claim that there are no such people. But this result, though not inconsistent, is implausible. Perhaps for this reason, defenders of *CDH* don't rest their case on such a denial, instead weakening their account of association to accommodate the empirical data.

It seems to me that Ethan's case is no different in this respect. As the example from the storybook illustrates, we don't need to presume any theory of reference to recognize that there are children in Ethan's situation who have uses of 'Peter' that refer to the relevant apostle. Against this empirical background, denying that this is so is implausible. Thus denying that Ethan's use of 'Peter' refers, while not inconsistent or incoherent, is implausible.

We have supposed that Ethan apparently lacks any deferential dispositions, other perhaps than a disposition to defer to his mother, who has never heard of the relevant apostle. The third avenue of resistance is to claim that, despite appearances, Ethan really is disposed to defer to us, the source of his use of 'Peter'. To avoid the charge of special pleading, it might be argued that Ethan's apparent lack of a disposition to defer to us is really just evidence that he is in cognitively inauspicious circumstances; under ideal circumstances, he would either turn the question 'Who is Peter?' over to us or identify as the referent of 'Peter' the individual to whom we refer by our use of the name.

I'll make two comments about this response. First, Ethan's apparent lack of a disposition to defer to the causal source of his use of 'Peter' seems no more indicative of cognitive defect than the lack of deferential dispositions on the part of Avinash. Avinash's use of 'Peano' has someone else's use of

'Peano' in its causal past. He is nevertheless not disposed to defer to that person. The defender of CDH did not diagnose Avinash with a performance error caused by some cognitively inauspicious circumstance. There seems to be no principled reason to think that Ethan's lack of a disposition to defer to us is any more an indication of cognitively inauspicious circumstances than is Avinash's. Second, it is independently incorrect, I think, to say that Ethan's apparent disposition to rely on his mother rather than us indicates some epistemic defect. This seems precisely the right epistemic policy for Ethan to follow. He knows that his mother is an expert on matters that concern him and has his best interests at heart. If, as we may assume, Ethan knows not to rely on strangers unless he has no choice, relying on his mother is clearly the better alternative. He should trust his mother, rather than us, to help him on questions he has trouble answering. For these reasons, we have no grounds to discount Ethan's lack of a disposition to defer to us as symptomatic of cognitive defect. Thus, the claim that Ethan has a deeply buried disposition to defer to the source of his use of 'Peter' is pretty implausible, both on its own merits, and on the antecedent commitments of response-based theories. But is it too bitter a bullet to bite? Maybe not, if there is no prospect other than a response-based theory of reference for explaining Ethan's referential abilities.

6. Reference Without Response

6.1 The Causal-Historical Theory

Fortunately, there is a genuine alternative to response-based theories: the causal-historical theory of reference. The causal-historical theory explains the reference of a use of a proper name in terms of the speaker's historical position, and independently of what conditions are present in her psychology. 17 A speaker's use of 'Aristotle', for instance, refers to a certain man in virtue of the fact that the name has a history of uses, one derived from another, that both terminates in her use and traces back to an original use of the name (or one of its predecessors) to refer to that individual.

Ethan's case, not to mention the actual successful use of proper names by millions of children worldwide every day, strongly suggests the picture of reference sketched by the causal-historical theory. Ethan—like other children—is an unreflective opportunist. He is lucky enough to have acquired a use of the proper name 'Peter' from us. He can occupy this position and take advantage of it without being able to describe it, without being guided by a description of it, without, indeed, being aware, even implicitly, of most of its relevant features. Ethan isn't born referring to Peter; and he doesn't achieve reference to Peter by associating some condition with 'Peter'; he has reference thrust upon him when we transmit to him the use of the name. I will say a speaker refers positionally when she uses

¹⁷See Kripke [1980], Donnellan [1974], and Evans [1973] for seminal discussion of causal-historical theories.

a proper name that refers in virtue of her actual position, rather than of her appreciation, however implicit and dispositional, of its relevant aspects. To round out the terminology, I will say a speaker *refers associatively* when the reference of her use of a proper name is explained by way of associated conditions.¹⁸ According to *CDH*, whenever a use of a proper name refers, the speaker refers associatively.

Accepting that we refer positionally helps us avoid the battery of problems for *CDH* posed by situations like Ethan's. Positional reference does not depend on the existence of implicit dispositions or other hidden features in the mental lives of children and the cognitively disabled. This is an advantage for the causal–historical theory.

6.2 Association Without Response

The causal-historical theory evades the empirical problems encountered by response-based theories of reference by abandoning *CDH*. There is, however, a more conservative alternative: keep *CDH*, but deny *RE-SPONSE*, discarding the idea that there is a strong tie between association and the speaker's responses to prompting under cognitively auspicious circumstances.

What might association come to if we reject *RESPONSE*? Some defenders of *CDH* hold that the notion of an associated condition is to be explained in normative, rather than psychological, terms. This merits calling the view *normativism*. According to normativism, response-based theories go wrong by explaining association in terms of the dispositions that speakers *do* have; the idea should be explained instead in terms of the dispositions that speakers *ought* to have. In Chalmers's version of the view, the norms in question are epistemic norms governing the speaker's concepts. These norms underwrite *a priori* entailments from α -neutral descriptions of situations to identifications of a referent for α . Thus a condition ϕ is associated by a speaker with a name α only if there is an *a priori* entailment from an α -neutral, but otherwise complete, description of that speaker's situation to an identification of a certain individual—the one singled out by ϕ —as the referent of α .¹⁹

Normativism makes available the claim that pre-schoolers like Ethan can and do associate deferential conditions with their uses of proper names, despite lacking the correlative deferential dispositions. Their cognitive limitations prevent them from possessing the dispositions that they ought to have. A speaker's actual dispositions on this view are merely *diagnostic*. They are useful for diagnosing the presence of an associated condition, but it's no part of the theory of reference that they be present in all cases. ²⁰

¹⁸Notice that it is not enough for associative reference that a speaker happen to associate with her use of a proper name a condition which singles out its referent. Her use must also refer in virtue of this fact.
¹⁹See Chalmers [2002b]. Some of what Chalmers says there suggests a response-based theory instead; see, for

¹⁹See Chalmers [2002b]. Some of what Chalmers says there suggests a response-based theory instead; see, for instance, the passage quoted below, which concerns what speakers would do, rather than what *a priorities* there are. The texts cited and quoted in §2 above indicate that Jackson rejects normativism.

²⁰Thanks to two anonymous referees for pointing out the need to discuss this way of amending the response-based view.

The argument of §4 against response-based theories does not readily apply to normativism. But that's because any version of normativism that avoids that argument grants much of what is at stake in the present dispute between response-based and causal-historical theorists. Call the kind of association characterized by RESPONSE and DISPOSITION dispositional association; call the kind of association on which normativism relies normative association. All parties to the discussion should agree that we often dispositionally associate names with conditions. The normativist, like the causal-historical theorist and unlike the response-based theorist, holds that dispositionally associated conditions do not fix the reference of a name. The normativist avoids the problems posed by Ethan's case by unmooring the account of association from any psychological ability (other than the ability to use 'Peter' to refer to the relevant apostle) or propositional attitude plausibly attributable to Ethan. The normativist defence sketched above and the causal-historical theory part ways on the question of which features of Ethan's position are relevant to fixing the reference of 'Peter'. But they agree that no condition singling out the referent of 'Peter' (other than being Peter) need ever be present at any time, even implicitly or incipiently, in Ethan's psychology, guiding his responses. Both views deny Jackson's [1998b: 211] claim, quoted above, that 'we can extract in principle from [Ethan's] patterns of word usage' a condition which singles a referent out. In short, the normativist avoids the §4 argument by holding that Ethan refers positionally.

A symptom of the subtle but important differences between normativist and response-based theories of reference is that normativism is not wellsuited for some of the uses to which response-based theories have been put. For instance, response-based theorists can use associated conditions to ground a claim of a priority. Response-based theories contend that dispositionally associating a condition ϕ with a proper name α does the work of a reference-fixing stipulation for α . The response-based theorist can then claim with Kripke [1980: 79 n.] that such a reference-fixing stipulation (or association) grounds the a priori knowledge that α is uniquely ϕ if anything is. So, dispositional association is a source of a priori knowledge according to response-based theories. Normativist theories, by contrast, deny that dispositional association plays any direct role in fixing reference, so they cannot appeal to dispositional association to ground a priority claims in the simple way that response-based theories do. What's more, on Chalmers's development, the kind of association that does fix the reference of a name, normative association, relies on the a priority of the relevant claims. Normatively associating a condition with a name is not a source of the relevant a priori knowledge; it is the result of it.

The bottom line: the point of the argument involving Ethan is to show that children in Ethan's situation refer positionally. If that argument succeeds, it takes response-based theories, as well as some of the uses to which such theories have been put, off the table. But it leaves both causalhistorical and normativist theories on the table. Nevertheless, I favour the causal-historical theory over normativism. Though here is not the place for the sort of extended treatment the issue deserves, let me briefly indicate why.

We have evidence, even on the normativist account of association, that Ethan associates no condition with his use of 'Peter' that singles out the relevant apostle. While it's true on this view that a speaker's dispositions to identify a referent are merely diagnostic, it's important to remember that they are, well, diagnostic. The normativist agrees that Avinash associates no deferential condition with his use of 'Peano', and Joe associates no non-deferential condition with his use of 'Cicero'. Why think so? Because they lack suitable dispositions to identify a referent in accord with any such condition. But now consider Ethan's case. Ethan's lack of a disposition to identify a referent for his use of 'Peter' given the right sort of prompt is good evidence that he associates no appropriate condition with that use. A normativist discounts this evidence as misleading: Ethan does, despite appearances to the contrary, associate some suitable condition with his use of the name.

Do we have any reason to think that the evidence provided by Ethan's dispositions is misleading? What normativists say about the argument from underinformation does not help with the case at hand. Chalmers's reply to the argument from underinformation presumes that underinformed speakers are disposed to defer:

[W]hen speakers use a name such as 'Gödel' or 'Feynman' in cases [of underinformation], how do they determine the referent of the name, given sufficient information about the world? ... The answer seems clear: [they] will look to *others*' use of the name.

[Chalmers 2002b: 170]

I have argued in effect that (i) whether underinformed speakers will look to others' use of a name is an empirical question, and (ii) the empirical data on three-year-olds suggest that they won't. Chalmers offers a different reply in unpublished remarks (quoted with the author's permission):

[W]hat matters [according to normativism] is not whether the boy (in his far-from-ideal cognitive state) can actually make the inferences in question, but whether idealized *a priori* reasoning with the boy's concepts would support them. This requires that the boy's inferences are subject to certain rational norms (so the relevant inferences might be justified if made), but not that the boy's reasoning actually meets those norms. [...] [I]n the case of an ordinary language-using child [like Ethan], it is plausible that the relevant epistemic structure is present.

[Chalmers 2002c]

However plausible it may be that Ethan's concepts license inferences in accord with a deferential condition, it is more plausible, given the evidence of his dispositions, that his concepts only license inferences in accord with some non-metalinguistic condition like *being an important man who told a lot of people about Jesus*. This diagnosis won't serve the purposes of *CDH*, but it is the one that Ethan's dispositions recommend.²¹

²¹Indeed, if we claim that Ethan's dispositions to respond to cases are misleading, one might wonder why we should think that Ethan normatively associates a deferential condition with 'Peter' at all. We have at hand no reason to think that Ethan is in a situation relevantly like Joe's, in which he is governed by epistemic norms

Thus, Ethan's case presents a challenge for normativism which has not yet been met: provide a reason for discounting the evidence provided by Ethan's deviant dispositions, but not discounting the evidence provided by the deviant dispositions of speakers who, like Avinash, refuse to defer. By contrast, the causal-historical theory handles cases like Ethan's easily and naturally. This is, ab initio, a reason to favour the causal-historical theory.

In summary, we have some reason to believe that normativism faces the same problems as response-based theories in cases like Ethan's. But even if it is better off in these cases, it concurs with the main conclusion of §4, that three-year-olds like Ethan refer positionally. In what follows, I set normativism aside.

7. Does Ethan's Case Make Bad Law?

Perhaps a sympathizer with CDH might agree that Ethan's case fits the causal-historical theory better than it does the response-based theory. He might insist, however, that Ethan's case is quirky; it gives us no good reason to doubt applications of the response-based theory to normal adults. On this view, unreflective opportunism is a stage that normally developing language-users grow out of. Adding some plausibility to this mixed view of reference is the fact that it seems as if, sometimes, the correct explanation of how something comes to be the referent of a speaker's use of a proper name proceeds in terms of associated conditions. Thus, Gareth Evans, perhaps, might be credited with a referring use of the name 'Julius' in virtue of associating with that name a condition, being the inventor of the zipper, which singles someone out [Evans 1979, 1982: 31].

Let's assume for the sake of argument that CDH is true in Evans's case. I have claimed that it is false in Ethan's case. The proponent of the mixed view of reference, whom I'll call a preponderantist, suggests that Evans's case is the norm, and Ethan's is the exception. Preponderantists hold that cases like Ethan's deserve acknowledgment in a footnote of the account of reference. According to the causal-historical account, by way of contrast, cases like Ethan's are the norm, and it is 'Julius' that belongs in a footnote.²²

I suspect that preponderantism is incorrect. The question of whether preponderantism is true is in large measure empirical. I want to close, however, by highlighting a difficulty that the preponderantist position faces. I will argue in effect that Ethan's case is not so easily dismissed as a quirky outlier, because all of us used to be relevantly like Ethan. Preponderantists hold that normal human beings start life as unreflective opportunists, and then later come, by and large, to refer in virtue of associating conditions with their names. There is reason to believe that this is not a plausible developmental hypothesis.

warranting inferences in accord with a deferential condition, rather than a situation relevantly like Avinash's, in which he normatively associates some non-deferential condition with 'Peter' instead. Antecedent commitment to CDH might give us reason to think so, but CDH is precisely what is at issue.

²²I broach preponderantism as a natural way to preserve the spirit of *CDH* without biting any bullets regarding the referential abilities of children. To the best of my knowledge there are no actual preponderantists, perhaps because language use by children does not figure centrally in the literature.

To secure the plausibility of this developmental hypothesis, the preponderantist needs to explain why we stop referring positionally as we mature. Two candidate explanations spring to mind. The first candidate is that the ability to refer positionally atrophies or disappears entirely over the course of normal development. We do have abilities early in life that atrophy over the course of normal maturation. Most of us used to have the ability to put our toes in our mouths. Almost all of us who used to have that ability have lost it. But the outlines of the explanation of why we lost the ability are pretty clear. Human beings normally lose flexibility as our bodies grow and strengthen. Our bodies change shape as they grow: their limbs elongate, and the size of the head decreases in proportion to the size of the rest of the body. Thus, there is less flexibility available to us, even as the changing shape of our bodies demands more flexibility to get the toes and mouth into position. In short, the ability of infants to put their toes into their mouths is explicable in terms of the shape and other properties of their bodies. These features change as we mature, explaining why we lose the ability.

But no such explanation is going to be forthcoming with respect to the ability of normal three-year-olds to refer positionally. That ability is explained in terms of their ability to acquire the use of a proper name from someone else, and the causal and historical pedigree of their use of the name. Neither of those features changes over the course of development in ways that substantially weaken the ability to refer positionally. It's not plausible, then, to claim that the ability to refer positionally atrophies or disappears over the course of normal development.

The second candidate explanation for why we stop referring positionally claims that referring positionally is less convenient, once we acquire the ability to refer associatively. Once we can refer associatively, we typically do. Again, we have other abilities that fit this profile. Most of us once got around by crawling on all fours. In the course of normal development, most of us acquired the ability to walk instead. Now, though we retain the ability to crawl, we don't use it very much, because it is less efficient and convenient than walking. No similar explanation fits the case of positional reference. Deferring to that use of 'Peter' from which one's own use is derived is a significant cognitive achievement, requiring facility with the use-mention distinction, the notion of the derivation of one use of a name from another, and the rest. This cognitive work is no more convenient or efficient than simply using a name when in a position like Ethan's. The same goes, even for those who do not defer, but associate some more mundane condition with their use of a proper name. Evans's manner of using 'Julius' is not more convenient or efficient than Ethan's manner of using 'Peter'. In fact, I suspect that the opposite is true. Thus, though it is in large measure an empirical question whether we normally grow out of referring positionally, I think there are reasons to suspect that we don't.²³

²³Joshua Schechter has suggested (without endorsing) that a preponderantist might decline the developmental hypothesis we've been discussing in favour of the claim that attributions of reference are *standard-sensitive*. Normally we cease to meet the standards for attribution of reference, on this suggestion, because the standards have changed; not because we ourselves have undergone some sort of psychological development. Similarly, because the relevant standards are different, one might perfectly truly claim that

The preponderantist, then, faces a challenge: find a plausible explanation of the progression from the universally positional reference of the child to the alleged preponderantly non-positional, associative reference of the adult. Over the course of maturation, we undergo many cognitive changes. Why do these changes cause us to stop referring positionally, at least in the majority of cases? Notice that the causal-historical theory avoids this challenge. The developmental story proposed by the causal-historical theory is very simple: the referential abilities of adults are, by and large, of precisely the same sort and get exactly the same kind of explanation as the referential abilities of children 24

8. Conclusion

This paper presents, in rough outline, an extended modus ponens argument. Against CDH, I claimed that Ethan refers positionally; against preponderantism I argued in effect that if Ethan refers positionally, then, by and large, so does just about everyone; thus, just about everyone, by and large, refers positionally.

Someone, long ago, was well-placed to refer to Cicero. Now, because of our de facto historical position, we are well-placed to refer to Cicero, even though we (or those of us without classical education) wouldn't know Cicero from Seneca. We don't need to be able to point to him, or apprehend some condition that singles him out (other, perhaps, than being Cicero). Possessing an appropriately-derived use of 'Cicero' suffices. According to the theory of evolution by natural selection, so long as we are appropriately situated (i.e., so long as our local environment is relevantly similar to our ancestors'), we benefit from our biological ancestors' reproductive successes. Similarly, when we refer positionally, so long as we are appropriately situated, we benefit from our linguistic ancestors' referential successes. In neither case do the conditions by which we benefit have to be present, even implicitly, in our psychology.²⁵

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Ethan is a fast runner, while denying that an adolescent with the same foot-speed is a fast runner. (See MacFarlane [2005] for a run-down of semantic proposals for accommodating standard-sensitive attributions.) The problem with this response is that the claim of standard-sensitivity is implausible: it would imply that if Ethan grew up, but maintained his present dispositions, then he would no longer have a use of 'Peter' which refers to the relevant apostle. Imagine that Ethan is properly considered a fast runner. Suppose that he were administered a sleeping potion, and awoke fifteen years later with the same foot-speed and the same dispositions. He's certainly no longer a fast runner but, intuitively, he still has a use of 'Peter' that refers to the relevant apostle.

²⁴There are exceptions. Evans's use of 'Julius' may be one. Also, reference for original uses of names is not explained by the causal-historical theory in the same way as derived uses.

²⁵Versions of this paper were read at Brown University, Northwestern University, and the University of Virginia. Special thanks to David Chalmers, Sin yee Chan, David Christensen, Terence Cuneo, Tyler Doggett, Brie Gertler, Richard Heck, Randall Harp, Christopher Hill, Don Loeb, Mark Moyer, Derk Pereboom, Guy Rohrbaugh, and Joshua Schechter for helpful comments and criticism. Thanks also to Benj Hellie, Frank Jackson, and Jessica Wilson for helpful discussion of some of the underlying issues.

References

- Bialystok, Ellen 1986. Factors in the Growth of Linguistic Awareness, Child Development 57/2: 498-510.
- Bloom, Paul 2000. How Children Learn the Meanings of Words, Cambridge, MA, and London: MIT Press. Byrne, Alex and James Pryor 2006. Bad Intensions, in Two-Dimensional Semantics, ed. Manuel García-Carpintero and Josep Macia, Oxford: Oxford University Press: 38–54.
- Carpenter, Malinda, Josep Call, and Michael Tomasello 2002. A New False Belief Test For 36-Month-Olds, British Journal of Developmental Psychology 20/3: 393–420.
- Chalmers, David J. 1996. The Conscious Mind: In Search of a Fundamental Theory, Oxford: Oxford University Press.
- Chalmers, David J. 2002a. Does Conceivability Entail Possibility?, in Conceivability and Possibility, ed. Tamar Szabó Gendler and John Hawthorne, Oxford: Oxford University Press: 145–200.
- Chalmers, David J. 2002b. On Sense and Intension, in *Philosophical Perspectives 16: Language and Mind*, ed. James E. Tomberlin, Oxford: Blackwell: 135–82.
- Chalmers, David J. 2002c. Reply to Schiffer's 'Mental Content and Epistemic Two-Dimensional Semantics', URL=<http://consc.net/papers/schiffer-reply.html>. This is a slightly expanded version of unpublished comments in reply to Stephen Schiffer's 'Mental Content and Epistemic Two-Dimensional Semantics' at the 2002 Pacific APA meeting, which was itself a response to Chalmers [2006].
- Chalmers, David J. 2004. Epistemic Two-Dimensional Semantics. Philosophical Studies 118/1: 153-226.
- Chalmers, David J. 2006. The Foundations of Two-Dimensional Semantics, in Two-Dimensional Semantics, ed. Manuel García-Carpintero and Josep Macia, Oxford: Oxford University Press: 55–140.
- Chalmers, David J. and Frank Jackson 2001. Conceptual Analysis and Reductive Explanation, The Philosophical Review 110/3: 315–60.
- Chaney, Carolyn 1992. Language Development, Metalinguistic Skills, and Print Awareness in 3-Year-Old Children, Applied Psycholinguistics 13/4: 485–514.
- Currie, Robin 2005. The Baby Bible Storybook, Colorado Springs, CO and Paris, Ontario: Cook Communications Ministries.
- Donnellan, Keith 1974. Speaking of Nothing, The Philosophical Review 83/1: 3-32.
- Evans, Gareth 1973. The Causal Theory of Names, Aristotelian Society Supplementary Volume 47: 187-208.
- Evans, Gareth 1979. Reference and Contingency, *The Monist* 62/2: 161–89.
- Evans, Gareth 1982. The Varieties of Reference, Oxford: Clarendon Press.
- Gelman, Susan A. and Marjorie Taylor 1984. How Two-Year-Old Children Interpret Proper and Common Names for Unfamiliar Objects, Child Development 55/4: 1535–40.
- Gertler, Brie 2002. Explanatory Reduction, Conceptual Analysis, and Conceivability Arguments About the Mind, Nôus 36/1: 22-49.
- Hall, D. Geoffrey 1994. Semantic Constraints on Word Learning: Proper Names and Adjectives, Child Development 65/5: 1299–317.
- Jackson, Frank 1998a. From Metaphysics to Ethics: A Defence of Conceptual Analysis, Oxford: Clarendon Press.
- Jackson, Frank 1998b. Reference and Descriptions Revisited, in *Philosophical Perspectives 12: Language*, Mind, and Ontology, ed. James E. Tomberlin, Oxford: Blackwell: 201–18.
- Jaswal, Vikram K. and Ellen M. Markman 2001. Learning Proper and Common Names in Inferential Versus Ostensive Contexts, Child Development 72/3: 768–86.
- Karmiloff-Smith, Annette 1986. From Meta-Processes to Conscious Access: Evidence from Children's Metalinguistic and Repair Data, Cognition 23/2: 95–147.
- Karmiloff-Smith, Annette, Julia Grant, Kerry Sims, Larie-Claude Jones, and Pat Cuckle 1996. Rethinking Metalinguistic Awareness: Representing and Accessing Knowledge About What Counts as a Word, Cognition 58/2: 197–219.
- Katz, Nancy, Erica Baker, and John McNamara 1974. What's in a Name? A Study of How Children Learn Common and Proper Names, Child Development 45/2: 469–73.
- Kripke, Saul 1980. Naming and Necessity, Cambridge, MA: Harvard University Press.
- MacFarlane, John 2005. The Assessment Sensitivity of Knowledge Attributions, in Oxford Studies in Epistemology, Volime 1, ed. Tamar Szàbo Gendler and John Hawthorne, Oxford: Oxford University Press: 197–233.
- Markman, Ellen M. 1976. Children's Difficulty With Word-Referent Differentiation, *Child Development* 47/3: 742–9.
- Piaget, J. 1929. The Child's Conception of the World, London: Routledge & Kegan Paul.
- Schiffer, Stephen 2003. The Things We Mean, Oxford: Oxford University Press.
- Smith, Carol L. and Helen Tager-Flusberg 1982. Metalinguistic Awareness and Language Development, Journal of Experimental Child Psychology 34/3: 449–68.
- Wimmer, Heinz and Josef Perner 1983. Beliefs about Beliefs: Representation and Constraining Function of Wrong Beliefs in Young Children's Understanding of Deception, *Cognition* 13/1: 103–28.