

NAMING AND UNCERTAINTY: THE HISTORICAL-CHAIN THEORY REVISED

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Suppose I tell you: “Hilary Putnam was consulted for the second *Matrix* movie”. There are two sorts of questions one might ask about the semantic function of the proper name occurrence ‘Hilary Putnam’ (HP for short):

- (1) What does the name token HP *mean*?
- (2) What *determines the reference* of the token HP?

This short paper explores various answers to question (2). I will focus on the historical-chain theory of reference determination, more commonly called the causal theory of reference, developed, among others, by Donnellan and Kripke. First, I will explain how this theory’s answer to (2) departs from Frege’s proposal about senses. Second, I will explore an early formulation of the historical-chain theory, the photograph theory, highlighting its misleading aspects; in particular, I will dispute its emphasis on mind-independent causal connections, and will focus instead on the role that speakers’ intentions play in an answer to (2). Third, I will examine Devitt’s attempt to revise the photograph theory by incorporating speaker intentions. His account fails to be sufficiently general, however: for example, it does not account for successful name-using practices for names that lack bearers (names from fiction, for example). I will conclude by outlining a revised version of the historical-chain theory that is based on referential *intentions* (rather than on reference), and provides the sort of general account we are seeking.

Where should we search for the answer to (2), about reference determination? Frege’s (1892/1952) *sense theory* points us in one direction: look in the minds of name users. For according to him, a name (and hence each

of its tokens) is associated with a sense (*Sinn*) that competent users of the name grasp. The sense of HP is, for example, a mode of presentation of Putnam: say, ‘the American philosopher who wrote about brains in vats.’ Crucially, a mode of presentation uniquely fits the referent, hence the answer to (2): a token of HP refers to whomever the associated sense fits.

By contrast, the *historical-chain theory*¹ suggests that the answer to (2) lies elsewhere: it is in vain to look for it inside the minds of name users. Instead, we need to consult the established linguistic practice of using the name HP. This *name-using practice* consists of an *introductory use*: when (back in 1926) the Putnams named their child HP. The name is passed on by them as well as others—these are *transmitting uses*. These various uses within a single name-using practice are causally related, forming communication chains. My name token HP refers to the philosopher for whom the name HP had been introduced in the relevant name-using practice; its reference is determined by the history of prior uses of HP to which my transmitting use is linked.

A name-using practice has various participants: *producers*, who can recognize the referent, and discriminate him from others, as well as *consumers*, who lack such abilities²—they have never met HP and know very little about him (they might mistakenly think that HP is a woman, like one famous Hillary). Still, being part of the practice, these consumers will (along with the more knowledgeable producers) count as competent users of HP: they will be able to utter the name and thereby refer to Putnam.

Now, consumers’ knowledge about the referent is limited: subject to the *problem of error* (recall the consumer who thinks HP is a woman), and the *problem of ignorance* (a consumer might know no more about Putnam than that he is a contemporary American philosopher; but that description is insufficient to single out a unique individual). These two problems affect language users quite generally: imagine competent users of natural kind terms like ‘aluminum’ and ‘wombat.’³ By contrast, with expressions like ‘or’

¹ Due primarily to Donnellan (1970) and Kripke (1972/1980, see especially 91-97); for early formulations, see also Kaplan (1968/1971) Putnam (1973, 1975).

² Evans proposed such a distinction between consumers and producers (Evans 1982, 382-385).

³ The wombat is little known but rather interesting (and interestingly named) marsupial species. Putnam (1975) argues for a parallel externalist conclusion (ref-

and 'red', even with the least knowledgeable of consumers, it is not altogether hopeless to look in their minds, as Frege had suggested, to consult their beliefs about whom the expression picks out. *What is special about proper names as well as natural kind terms is that when it comes to answering (2), looking in the minds of competent users (specifically, consumers) is entirely pointless.* The answer resides instead in the associated practice.

The historical-chain theory made its earliest appearance in print as the *photograph theory*. Citing Kripke's talks, Kaplan suggests that the question "who is the referent" is analogous to one we might ask about a photograph: "whose photograph is it?"⁴ Suppose I am holding a printed photo of Putnam. Kaplan's answer to the "whose photograph is it?" question is: whoever was in front of the camera when the picture was taken from which the negative was then developed and reproduced to yield the print in my hand. This answer in no way depends on the minds, intentions of anyone: the photographer, the film developer, subsequent handlers of the photo. We have a causal process that is independent of participants' intentions, linking my print with Putnam himself. The causation involved in this process is like the cue ball hitting the 8 ball in a game of billiards. The photograph theory thus makes for a radical departure from the Fregean theory. Previously, the objection was: when answering (2), looking inside heads is not enough. Now there is a further claim: we need only look out-

erence is not determined in the heads of speakers but by the linguistic community as a whole): there is a linguistic division of labor in place, determining the reference of natural kind terms.

⁴Kaplan (1968/1971) writes:

If one or several witnesses describe the criminal to a police artist who then constructs a picture, I shall say that it is a picture *of* the criminal, even when after such a genesis the resulting picture has quite ceased to resemble the criminal... A police artist's reconstruction of Santa Claus, based on a careful reading of the poem *The Night Before Christmas*, is not a picture *of* anyone no matter how many people make themselves up so that it exactly resembles them, and no matter whether the artist regards the poem as fact or fiction. Even if in combining facial features of known statistical frequencies the artist correctly judges that the resulting picture will resemble someone or other, that person has no special causal efficacy in the production of the picture and so it still will not be a picture *of* anyone (133-4, emphasis in the original).

side heads; *all that matter are mind-independent causal links*. These are what make up the name-using practice—at least so the photograph analogy suggests.

The photograph theory is problematic for several reasons. For one thing, it posits that the introductory use causally involves the object named (as the photographing event causally involves the subject photographed). But there are successful name-using practices even when there is no such causal link to an object named. First, consider *empty names*—names without bearers, such as *names from fiction* like ‘Voldemort’ (Harry Potter’s arch enemy), and *nonfictional empty names* whose introducers were under the impression that they were naming something real (naming a certain planet ‘Vulcan’, say), but were subsequently proven wrong. (Still, the name-using practice for ‘Vulcan’ remains, the name is part of the English vocabulary, and I, for one, am a consumer of it.⁵) The photograph theory does not work for empty names: there is nothing ‘Voldemort’ and ‘Vulcan’ are names of, just as we cannot have a photo that is a picture of Santa Claus. Second, consider names of things to which we are not causally connected: on one plausible view, numbers are such (think of π or ‘Avogadro-number’).

Further, the photograph theory does not take into account participants’ intentions accompanying specific uses. Although Kripke’s (1972/1980) discussion of the role of intentions within the historical-chain theory is exceedingly brief, it is clear that he thought intentions were supposed to play a key role.⁶ It is well to distinguish four kinds of intentions, which may

⁵ There are, however, good reasons to think this name is without producers; see especially Evans 1982, 398-403.

⁶ Kripke (1972/1980) writes:

... of course *not every sort of causal chain reaching from me to a certain man will do for me to make a reference*. There may be a causal chain from our use of the term ‘Santa Claus’ to a certain historical saint, but still the children, when they use this, by this time probably do not refer to that saint. So other conditions must be satisfied in order to make this into a really rigorous theory of reference (93; emphasis added).

When the name is ‘passed from link to link’, *the receiver of the name must, I think, intend when he learns it to use it with the same reference as the man from whom he heard it*. If I hear the name ‘Napoleon’ and decide it would

appear in various combinations:

- an *introductory intention* is about starting a new name-using practice (“I shall name this aardvark ‘Napoleon’”);
- a *transmitting intention* is about joining an already established name-using practice;
- a *referential intention* concerns a specific object that the speaker believes exists (a token of the planet name ‘Venus’ may be accompanied by a referential intention, but so can a token of ‘Vulcan’, uttered by someone who is under the wrong impression and thinks such a planet exists);
- an *attributive intention* specifies a description that the speaker believes fits the referent (“that *island* (and not the *entire archipelago*), shall be called ‘Key West’).

Simultaneous intentions may come into conflict: for example, in using the name ‘Madagascar’, Marco Polo had the referential intention concerning the island, the attributive intention that the name picks out an island, and the transmitting intention to use the name in accordance with the African natives’ vernacular. These were in conflict because unbeknownst to him, the natives used the name for part of the African mainland. As things happened, the last, transmitting intention was thwarted, and Marco Polo inadvertently introduced a new name.⁷

be a nice name for my pet aardvark, I do not satisfy this condition. (Perhaps it is some such failure to keep the reference fixed which accounts for the divergence of present uses of ‘Santa Claus’ from the alleged original use.) (96-97, emphasis added).

⁷This in the spirit of the suggestion Kripke put forth in the 1972 Addenda, responding to Evans’ (1973) ‘Madagascar’ example:

...the phenomenon [of reference shift for ‘Madagascar’] is perhaps roughly explicable in terms of the predominantly social character of the use of proper names ...: we use names to communicate with other speakers in a common language. This character dictates ordinarily that a speaker intend to use a name the same way as it was transmitted to him; but in the ‘Madagascar’ case this social character dictates that *the present intention to refer to an island overrides the distant link to native usage* (Kripke 1972/1980, 163, emphasis added).

Devitt proposed to make amends by *incorporating intentions into the photograph theory*.⁸ According to him, the introductory use is grounded in the object that the name user intends to name; during transmitting uses, name users transmit to one another an ability: the ability to refer with the name. But this characterization of introductory uses is still not general enough: the introductory use may fail to be grounded in anything ('Vulcan'); or may target something to which we are not causally connected ('Voldemort', π); or might not even be accompanied by a referential intention (when a name for a fictional character is introduced, for example).⁹ The problem is that Devitt retains the idea that the introductory use involves a causal connection to the named object.¹⁰

A sufficiently general alternative theory is formulated in terms of *referential intentions* and does not require that there be successful reference to (grounding in) an object at any stage (whether it be during introduction or transmission). The introduction of a name combines:

- an introductory intention,
- usually either a referential intention or a make-believe referential intention, and
- optionally an attributive intention.

Meanwhile, a referential intention featured in a successful introduction (or transmission)

- does not require that the object exist,

⁸ See Devitt 1981, 129-138; for a more recent formulation, see Devitt and Sterelny 1999, 66-73.

⁹ Devitt discusses these cases briefly (1981, 174-177), but does not in the end provide a satisfying response. For names like 'Voldemort', he thinks the introductory use is not linked to or grounded in any object at all; instead, there is an imaginative act to which subsequent uses are causally linked (175). For names like 'Vulcan', he says there is a failed naming ceremony (there is nothing in which the name was grounded), to which subsequent uses are causally linked (176). But this simply concedes that a story in terms of grounding and transmitting the ability to *refer* will not cover names like 'Voldemort' or 'Vulcan'. Granted: in each case, the transmitting uses will be causally linked to previous uses; but the introductory use will not be causally linked to—grounded in—the object named.

¹⁰ Kripke did not seem to have Devitt's grounding in mind when he proposed his version of the historical-chain theory: he raised the possibility that one name a *mathematical object* 'Nancy' (Kripke 1972/1980, 116, n59).

- does not require contact with (say, perception of) the object,
- but it is object-involving in this sense: it is individuated in terms of its referent (if there is one).

The first feature allows that referential intentions accompany the introduction of names like ‘Vulcan’. The second feature leaves room for the following scenario: archeologists find the occipital bone of a prehistoric man who lived 350,000 years ago; their introductory use of the name ‘Samu’ is accompanied by a referential intention—to refer to whoever was the owner of that piece of skull.¹¹ The third feature guarantees the rigid-

¹¹ This happened in Vértesszőlős, Hungary in 1965. Crucially, despite the extremely minimal contact that the archeologists had with Samu (all they had to go on was a small piece of skull), I want to maintain (though I have no room to argue for it here) that his name is crucially different from descriptive names like ‘Julius’, introduced as follows: “let’s name the inventor of the zipper, if there was a unique such person, ‘Julius’” (Evans 1982, 31-32, 47-51). I take it that in the case of ‘Samu’ but not ‘Julius’ (or ‘Jack the Ripper’, for that matter), a referential intention is present during the introductory use. This difference is similar to Devitt’s (1981, 157-159) distinction between designational and attributive names.

Where I depart from Devitt is that I do not think a referential intention accompanying an introductory use requires *grounding*: perceptual contact, or something near enough. I thereby hope to provide a better account of the attributive-designational distinction, and of names like ‘Samu’. By contrast, Devitt remains quite vague about what grounding consists in and how that applies to naming a person based on a surviving piece of cranial bone (or a full skeleton even):

There are elements of vagueness about *perceiving an object*. The clear-cut cases are those of “face-to-face” perception of the object. These are also cases which yield paradigms of *having the object in mind*. Consider a case at the other extreme. Suppose that, at the time we come upon Smith foully murdered, we barely notice movement in the distance which we rightly take to be the murderer fleeing. Do we perceive the murderer? I shall not attempt to answer this question. However, I shall say that we could not, on the strength of this perception, have the murderer in mind in using ‘Smith’s murderer’; something close to “face-to-face” perception is required for a grounding (39-40, emphasis in the original).

Devitt then goes on to loosen considerably what he means by ‘perception’:

A name can be grounded in its object *indirectly* by being grounded in certain sorts of *representations* of the object. Thus, perceiving a film or

ity of a proper name:¹² that (if it refers at all), it refers to its actual referent, and does so in every counterfactual scenario in which that referent exists.¹³ Consider one consequence of this: ‘Vulcan’, given that it actually fails to refer, lacks a referent in every counterfactual scenario.¹⁴ To gain

painting of an object can serve as well to ground a name in the object as perceiving the object. I shall not attempt to specify the necessary and sufficient conditions for such a grounding perception. However, my talk of “perceiving the object” should not be taken to rule these out (59, again, Devitt’s emphasis).

¹²In fact, I take it that the object-involving nature of referential intentions is a deeper fact that *explains* rigidity, but I do not have room to argue for this here.

¹³Suppose that the name ‘Samuel’ that I use for the Biblical prophet had, unbeknownst to me, been introduced for a historical figure A. Meanwhile, in a counterfactual scenario in which I am in the same epistemic situation as my actual one, unbeknownst to me, the name ‘Samuel’ had been introduced for another historical figure B. Suppose that both actually and counterfactually, my use of ‘Samuel’ is accompanied by a referential intention. Then from the object-involving nature of referential intentions, it follows that I have distinct referential intentions in the two cases—because they target distinct individuals. This sounds quite plausible given that we have good reasons to think that in the counterfactual scenario, it is not *our* word ‘Samuel’ that is used, but a same sounding, yet distinct word. For more on this, see the next footnote. (The upshot: distinct referents → distinct referential intentions; but the converse, distinct referential intentions → distinct referents, need not hold: it is an open question how fine-grained we want referential intentions.)

The foregoing comes with an obvious consequence: which referential intention I have is not something that is transparent to me—that is available to me through introspection. But this is nothing new given that we have seen the historical-chain theory give up on the idea that looking in the minds of speakers (looking at information accessible to them) suffices to determine the reference of the names they use. Now we are saying that what is in the head does not even determine which referential intention that name user has. Links to prior uses of the name, mediated in part by the speaker’s intention to join one name-using practice rather than another, do determine which name-using practice we have at hand, to what the name refers, and which referential intention the speaker has.

¹⁴On reflection, this is a welcome result: how could *our* name ‘Vulcan’, actually without a referent, manage to hook onto an object in a counterfactual scenario? In a scenario in which there really is a planet where astronomers conjectured

full generality, we need additionally to revise Devitt's account of what gets transmitted in a name-using practice: it is not the ability to *refer*, but the ability to use the name with the same referential intention as previous users'. Such an intention can be present even when—due to the remoteness of the object named—introducing a name (like 'Samu') is surrounded by a great deal of uncertainty.¹⁵

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'Vulcan' would be, it is not our term 'Vulcan' that is introduced for the planet (and ends up naming it), but a same sounding, yet different name. This argument is made, among others, by Kripke 1972/1980, 157-158; Kaplan 1973, 506-508; Sainsbury, 2005, 77). This is also embodied in what I call the *inverse-Sinatra principle for proper names* (after Frank Sinatra's singing: "If I can make it there, I'll make it anywhere; it's up to you, New York, New York"): if a name cannot make it here, it cannot make it anywhere; that is, if it fails to refer in the actual world, it likewise fails to refer in other possible worlds (Zvolenszky 2007).

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