

## By Gödel I Do Not Mean Schmidt

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In *Naming and Necessity*, Saul Kripke attacks the descriptivist theory of proper names made popular by Gottlob Frege, Bertrand Russell, and P.F. Strawson. Kripke proposes several examples that point out weaknesses in the descriptivist theory as well as a more accurate picture of how names achieve reference to objects. Among Kripke's examples is a counterfactual situation in which Kurt Gödel does not produce the incompleteness theorem but fools the world into thinking that he has. There is some question in the descriptivist theory whether a person who only knows Gödel as the author of the incompleteness proof refers, using the name "Gödel," to the person Kurt Gödel or to the actual author of the incompleteness theorem. John Searle, in "Proper Names and Intentionality," responds on behalf of the descriptivists both to Kripke's better picture of naming and specifically to the Gödel example. While Searle believes that Kripke has mischaracterized the descriptivists and adopted their method into his own, Searle himself has misrepresented Kripke's argument and given a descriptivist answer that only strengthens Kripke's point against such theories. Consequently, Searle's reply to Kripke's Gödel example misunderstands the implications of this example for the descriptivist theory, and Searle fails to give an adequate reply.

Advocates of a descriptivist theory of proper names believe that names achieve reference by use of a definite description. There is some variety of opinions among these advocates as to how this occurs. Frege wrote that every name has an associated definite description that is the

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manner or sense in which it refers to the intended object (Frege, "On Sense and Nominatum" 200). Russell wrote that names are merely placeholders or abbreviations of definite descriptions and that the denoting phrase, rather than the object itself, is the constituent of a sentence (Russell, "On Denoting" 492-493). Russell did allow that if an object is known by a direct acquaintance, its name may simply present the object named, but problems with this theory pushed him to later reduce the set of names that work in this way to ostensibly defined sense data like "red here." So what we commonly call a name, at least for Russell's latter theory, is merely a disguised definite description.

The example of the name "Plato" may help to clarify the way names work according to these theories. "Plato" refers to an object because it contains or is the abbreviation of a definite description. "The man who was a student of Socrates and taught Aristotle," is such a definite description that seems to pick out the object we would normally want to refer to by the name "Plato." This definite description is the sense in which the name is used. A name may have more than one sense, but only one sense can be meant in any one use of the name. A descriptive sentence containing the name "Plato" asserts that what is referred to by the intended sense of this name has the properties indicated by the predicate of that sentence, or if the subject is predicated as the referent of a definite description, then the sentence asserts that the predicate description picks out the same object as the definite description which is the sense of the name used as the subject. Take the sentence "Plato is my favorite philosopher." According to Frege's theory, this sentence seems to show that the sense of "Plato," "the man who was a student of Socrates and taught Aristotle," picks out the same object as the predicate description, "my favorite philosopher." Russell's theory makes this work more directly. The sentence, according to Russell, should be understood as "the object which was a man, learned from Socrates, and taught Aristotle, is the same object as my favorite philosopher." So, generally, Frege and Russell assert that a name serves only to pick out an object by means of an inherent definite description.

Strawson criticized Russell's understanding of how definite descriptions work, though he maintained a descriptivist theory of proper names. Strawson clarified that a description itself does not refer, but the use of a

description by a person does (Strawson, "On Referring" 326–327). While Strawson says little about names specifically, his criticism of Russell seems to be relevant to the descriptivist theory. Since Strawson was a descriptivist, it follows from his use distinction of descriptions that names also do not refer. Only the use of a name by a person refers. The important point here is that for Strawson the definite description by which a name achieves reference is not part of the name, but is part of the intention of the speaker. If my seven-year-old son were named Plato, it is not likely that my command "Plato! Come and pick up your toys" would be directed to the student of Socrates who in turn taught Aristotle. This idea, that the definite description associated with a name is a reflection of the speaker's intention, will be returned to in discussing Searle's response to Kripke.

Kripke attacks the descriptivists with a number of counterexamples; one of which serves as the focus of this paper (Kripke, *Naming and Necessity*).<sup>1</sup> Kurt Gödel is most often known for producing the incompleteness of arithmetic theorem. Following the descriptivist theory, when a person uses the name "Gödel" he is able to pick out a certain person by an implied use of the definite description "author of the incompleteness proof." When I write the sentence, "Gödel was a mathematician," I mean that the author of the incompleteness proof was a mathematician. It may seem obvious that the author of the incompleteness theorem was a mathematician, but if this is what is commonly known about Gödel then my original statement is just as obvious. In any case, the descriptivist theory's treatment of this situation seems to reflect my intention in using the sentence.

To show the problem with this picture, Kripke describes a hypothetical situation in which the definite description used picks out someone other than the person intended. Say, for example, that Gödel was a brilliant man who did everything a biography says he did, except that he did not create the incompleteness proof. Suppose instead that his brilliant though obscure friend Mr. Schmidt actually came up with the entire proof,

<sup>1</sup> Kripke's book will hereafter be cited by the author's name followed by the page number.

<sup>2</sup> There is a problem with circularity when the definite description associated with a name also contains a name (Kripke 81–82). For this reason, Kripke writes that a better example would be of a person who "actually states a certain theorem, which he attributes to Gödel as the discoverer" (Kripke 83). For the purpose of this paper, it should be understood that the name "the incompleteness proof" inside the denoting phrase associated with Gödel should really be replaced with Gödel's proof of arithmetic's incompleteness in its entirety.

only discussing the matter with Gödel. Before having a chance to show anyone else, Mr. Schmidt mysteriously vanishes and is never found. Gödel, who it turns out was not such a good friend, takes Schmidt's manuscript and publishes it as his own. Now, when I say "Gödel was a mathematician" and mean "the author of the incompleteness proof was a mathematician," do I actually mean to indicate that Schmidt, whom I have never heard of, was a mathematician? This may be the case if I am using the name and associated definite description in what Keith Donnellan called the referential use; that is, if I mean to say that whoever authored the incompleteness proof was a mathematician, but this is not always the case (Donnellan, "Reference and Definite Descriptions" 285). A clearer example may be someone saying "I had Gödel's class at Princeton." Clearly this person does not mean she had a class from Schmidt; so, there is a problem which the descriptivist's must answer.

A descriptivist may respond to this apparent problem that the person, who was able to refer to Gödel directly rather than referentially, knew more about Gödel than just that he created the incompleteness proof. Hence, she could have intended another definite description or only the person who fits most of the properties she associates with the name "Gödel." Rather than explain why a cluster of properties is no more consistent in referring than a single property, let us modify the example to someone who only knows of Gödel that he authored the incompleteness proof and that he was introduced to him once at a party.<sup>3</sup> The day after the party this man may say to his wife, "Last night I was introduced to Gödel." Superficially, he could mean, "Last night I was introduced to the author of the incompleteness proof," but he could not mean that last night he was introduced to Schmidt, whom he has never heard of and certainly never met. It may be objected that the reference does not hold in such situations because the description is not of a necessary property and should not be expected to work in counterfactual situations. However, it is undoubtable that such situations, i.e. those in which we are mistaken as to whom a description refers, occur in the actual world and we would merely have to find one to show that this objection cannot hold. Furthermore, it would be impossible to rationally believe that names refer using only necessary

<sup>3</sup> Kripke discusses the cluster theory in his book (Kripke 64–68).

properties. Kripke admits that certain properties of a person are necessary such as the time in which they lived (Kripke 62), their parents, or their identity as a human (Kripke 46). Neither the time period of a person's life nor their identity as a human being could ever pick out a unique individual;<sup>4</sup> hence, such descriptions could never explain how a name is able to refer directly to a unique individual. Perhaps if we gave the exact second of a person's being born or that person's birth order relative to the person's parents, i.e. second born of Michael and Susan Jones, we could pick out a unique individual by necessary properties, but surely we do not know such information about every person to whom we refer using a name.

One may object that a different type of definite description would solve the problem. For instance, the partygoer may refer to Gödel as "the man introduced to me as Gödel" rather than by his original knowledge of Gödel as "the author of the incompleteness proof," but this at best describes the picture Kripke gives for the way names work. The objector may say that by "Gödel" I mean "the man called Gödel," but this is blatantly circular and hence problematic (Kripke 72). If instead "Gödel" is to mean "the person whom I learned from an acquaintance is called Gödel," then this becomes an example of the picture Kripke gives. According to the alternative picture of naming given by Kripke, a person or object is ceremoniously given a name.<sup>5</sup> It is only important here that there is a first use of the name in which it is given to an object. The name is then told to others by fixing the referent either by ostensive definition or by use of a definite description. So, the partygoer learns the name of a specific object, in this case a specific person, by being shown the reference, while in the original example the name was learned by being told it refers to the person who authored the incompleteness proof. In the first case, it seems obvious that the partygoer refers to a certain person whether or not he has any property other than being the man to whom I was introduced. In the second case, the description used to fix the reference could have been faulty, but I still

<sup>4</sup> While it may be that during a single second, or whatever unit of time one takes to be atomic, only a single individual was born, it is epistemically impossible that anyone, even one present at the delivery, could know this and use it for the purpose of referring. Since reference occurs as a person uses a name or description, and no one could ever know they were picking out someone uniquely by specifying the second they were born, the objection that unique reference by time of birth may be possible if one were specific enough is erroneous.

<sup>5</sup> While Kripke uses the image of a ceremony, it is unclear whether he means more than ostensibly assigning an arbitrary name.

understand Gödel to be Gödel and not Schmidt. Suppose I learned the name "Gödel" from a Mr. Smith, who was introduced to the man by those who named him, his parents.<sup>6</sup> Smith knows that I am not acquainted with Gödel's parents but that I know something about math, so Smith states the result of the incompleteness theorem and then that it was Gödel who proved this. If we are all mistaken and Schmidt actually authored the proof, then the name still refers, through a causal chain, back to Gödel himself. This picture of how names work shows why a person, who was told that Gödel is going to give a lecture and who only knows Gödel as the author of the incompleteness proof, does not expect upon going to the lecture to hear from Schmidt.

Searle asserts in "Proper Names and Intentionality," that Kripke has mischaracterized the descriptivist theory and that his picture seems to only work in a descriptivist way. Searle clarifies that the question these theories are trying to answer is, "How in the utterance of a name does the speaker succeed in referring to an object?" (Searle, "Proper Names and Intentionality" 309).<sup>7</sup> Searle goes on to characterize the descriptivist answer: "The answer given by the descriptivist is that the speaker refers to the object because and only because the object satisfies the Intentional content associated with the name" (Searle 309). Searle seems to believe, along with what was inferred earlier from Strawson, that names are able to refer to objects by use of a description which the name's speaker has in mind as he uses the name. In other words, when I say the name 'Gödel,' it is my intention to speak of the person who authored the incompleteness theorem, and so I am able to refer to that man with use of this name.

Searle tries to show that the causal theory is not a better picture of the way names work by demonstrating that the causal theory relies essentially on descriptivism in two ways. First, when a name is given in the initial naming ceremony, it must be given by description. When a man gives an object a name he either gives an ostensive description to what is to receive the name, like "this infant in our arms," or he gives a unique

<sup>6</sup> It will probably not be the case that most people learn the name Gödel from someone who knew his parents, but there must always be some chain back to them. This is especially true when one considers that Gödel learned his own name from his parents. In all cases, then, there will be a chain of people who heard the name from someone who heard the name etc., until we get to those who named the man Gödel.

<sup>7</sup> This article will henceforth be cited by the author's name followed by the page number.

description using known properties, like "the highest peak of that mountain range." In the latter case, it would not even be important that the man were acquainted with the thing named. It seems that Kripke would have to admit this point, but this only shows an initial reliance on description, not that this description must be in the mind of the person using the name in every case. In fact, it surely is not since most uses of the name will not be by those aware of the procedure of an object's naming ceremony. Second, Searle tries to show that the causal chain by which names are learned is not free from descriptivist intentionality. Kripke mentions that a speaker must have the intention to use the name the same way as the person from whom he learned it. Hence, to use the name Gödel, which I have learned from Mr. Smith, I must have as part of my intention the description "the person referred to by Mr. Smith using the name 'Gödel'" (Searle 310).

We may now understand why Searle believes that Kripke's Gödel example cannot be used against the descriptivist theory. Searle admits that in the counterfactual situation given when I use the name "Gödel," I am "referring to Gödel and not the man who satisfies this description" (Searle 318). However, Searle believes that the name must still carry the intentional content "the person called Gödel by those from whom I have learned the name." Now, there are times when the name is used in what Donnellan calls the referential sense.<sup>8</sup> For example, I may say that I believe Gödel's proof was the most important achievement in math since Euclid. In this case, it seems clear that by "Gödel" I mean whoever authored the proof of incompleteness, whether or not it was actually Gödel. Therefore, whenever I use the name Gödel, I have a definite description as part of my intention. Thus, Kripke's theory can be reduced to descriptivism; hence, this example and the larger picture of naming that it was intended to support cannot be used to refute descriptivism.

Kripke's theory easily defends against Searle's response to the Gödel example. It has been established that there are two types of descriptions which may be part of a speaker's intention when using a name. First, there is the type of descriptions classically used by descriptivists such as "the author of the incompleteness proof." If this type of description were the way in which a name achieved reference, then names are only used in the attributive sense; they can only refer to whomever fits their implied definite

<sup>8</sup> Searle calls this "secondary aspect uses of proper names" (Searle 318).

description. However, the Gödel example shows that when I use a name, I usually want the name to function like a referential definite description; I want it to pick out a certain object no matter what descriptions that object may actually fit. There may be examples where I want to use a name in an attributive sense. In the statement, "Gödel's proof is the greatest achievement in math since Euclid," the name "Gödel" seems to mean whoever wrote the proof rather than the actual man Gödel whether or not he was the author. It should be noted, however, that the subject of this sentence is not "Gödel," it is "Gödel's proof." This subject is a definite description which functions referentially since it picks out a certain proof whether it was actually created by Gödel or not. There may be another example in which we look at a version of the incompleteness theorem and say, "Gödel was a genius." This does seem to be attributive; it seems to mean that whoever wrote the proof was a genius. If Schmidt wrote the proof, then I mean Schmidt was a genius. However, this is not the way I always use a name, nor is it the most common way. It cannot, therefore, be said to generally be the way in which names achieve reference. Furthermore, it seems that in most cases of this last type, rather than saying that the speaker was right and merely using the name "Gödel" referentially, we would usually say that the speaker is mistaken. Here the Gödel example makes the problems of a purely descriptivist theory of names apparent. When I say something like, "Gödel taught at Princeton," if we were to understand "Gödel" as functioning attributively, then it seems I mean that Schmidt taught at Princeton. I clearly do not mean this. I mean that a specific person, to whom we refer using "Gödel," taught at Princeton. In this case we want to use the name referentially as the subject of a sentence, and as I have shown, this is usually the case

Searle proposes another type of definite description which answers the Gödel example. An example of this type would be like the partygoer's description, "the person who was introduced to me as Gödel." This may be stated more generally as "the person called Gödel in my community," to avoid the problems of having forgotten where I learned the name Gödel (Searle 310). It seems that when I say "Gödel taught at Princeton," I may mean "the person called Gödel in my community taught at Princeton."

Kripke admits that a person using a name he has learned must have an intention to use the name in the way he heard it used. Searle interprets this intention as a definite description of the partygoer's type. It seems that if the name requires such a definite description in the intention of the speaker to function, then the descriptivist theory is correct (Searle 310). In fact, this points out how names could always function attributively, though this type of description does not seem to be the type Frege, Russell, and Strawson had in mind. Ignoring that this response by Searle seems ad hoc, the question remains whether, after admitted that names require intentionality, Kripke's Gödel example can be used to show that the descriptivist theory of naming is faulty.

In explaining their theories, Frege, Russell, and Strawson never make reference to a description like, "the person called Gödel in my community." Perhaps this was because such a description is circular; it picks out the name Gödel by a description which contains the name "Gödel." There may be a question as to why this description seems to work in picking out the reference if it is indeed circular. The description has this ability because it does not refer to the object named; it refers to the causal chain by which the name is learned. The description "the person called Gödel in my community" was used in place of "the person whose name I learned from Smith was Gödel" to account for the fact that we may use a name when we are not sure from whom we learned it. In any case, I, or the members of my community, have learned the name from someone and so what is meant in this description is, "the person called Gödel by whomever I learned that name from." So, what did that person mean when they told me the name of the author of the incompleteness proof was Gödel? Normally, Smith would mean "the person called Gödel by whomever I learned that name from." Recall that in Mr. Smith's case, this means "the person called Gödel by the parents of Gödel." Who do the parents mean when they use the name Gödel or introduce this name to Gödel himself or to another person? They mean "the person who, as an infant, I took in my arms and said, 'I name this infant Kurt Gödel,'" or however they pronounced the ceremony. Therefore, the name Gödel merely presents the person so named and only secondarily requires an intention to use the name as it was learned. This intention may translate into a definite description, but this

definite description is only a secondary requirement and in fact refers to the causal chain from which the name was learned, not to Gödel himself. Kripke repeatedly mentions that this idea of a causal chain of naming does not give a new theory of naming; it simply offers a better picture. The Gödel example demonstrates that this picture is better. To say that names achieve reference by the use of a definite description must be wrong if we mean that they use a description like "author of the incompleteness theorem." To say that names achieve reference by the use of a definite description is deceptive if we mean that they use a description like "the person called Gödel in my community." If this second type were the type of description used in the vast majority of cases, to achieve reference, then Searle's descriptivist theory, which includes such descriptions, is deceptive. The idea that the name "Gödel" presents the object so named directly, and that this name was learned through a causal chain is more accurate. A description like "the person called Gödel in my community," may still be part of our intention, but stating that this description is the primary means by which the name Gödel receives reference is problematic.

Kripke's Gödel example shows that the causal picture of proper names is better than the picture given by the descriptivists. If in using the name "Gödel," part of my intention is the definite description by which the reference was fixed when I learned the name, such as "the author of the incompleteness theorem," then there are clearly cases in which it seems I should mean Schmidt when I actually mean Gödel. If instead, the only description which is part of my intention in using this name is "the person who was called Gödel by whoever first taught me that name," then there will be no such mistake. Kripke's picture shows that names only rely secondarily on intended definite descriptions. While this shows that there is some merit in the descriptivist theory, it is clear that saying this theory explains how names are able to refer to objects is deceptive. When using a name, a person may require a definite description as part of her intention if the name is able to achieve reference, or she may require a definite description to fix the referent of a new name. However, the Gödel example shows that in Kripke's picture names achieve reference only as they are learned from a causal chain, giving a better picture of the way names actually work.

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