

TLD- W14 – Descriptive Theory and Kripke's Response

Descriptivist theory of names

- is a view of the nature of the meaning and reference of proper names generally attributed to Gottlob Frege and Bertrand Russell.
- The theory consists essentially in the idea that the meanings (semantic contents) of names are identical to the descriptions associated with them by speakers, while their referents are determined to be the objects that satisfy these descriptions.

- In the 1970s, this theory came under strong attack from causal theorists such as Saul Kripke, Hilary Putnam and others.

- simple descriptivist theory of names can be thought of as follows:
 - for every proper name p , there is some collection of descriptions D associated with p that constitute the meaning of p .

For example,

- the descriptivist may hold that the proper name *Saul Kripke* is synonymous with the collection of descriptions such as
 - the man who wrote *Naming and Necessity*
 - a person who was born on November 13, 1940 in Bay Shore, New York
 - the son of a leader of Beth El Synagogue in Omaha, Nebraska
 - etc ...

- The descriptivist takes the meaning of the name *Saul Kripke* to be that collection of descriptions and takes the referent of the name to be the thing that satisfies all or most of those descriptions.
- A simple descriptivist theory may further hold that the meaning of a sentence S that contains p is given by the collection of sentences produced by replacing each instance of p in S with one of the descriptions in D . So, the sentence such as "Saul Kripke stands next to a table" has the same meaning as the following collection of sentences:
 - The man who wrote *Naming and Necessity* stands next to a table.
 - A person who was born on November 13, 1940 in Bay Shore, New York stands next to a table.
 - The son of a leader of Beth El Synagogue in Omaha, Nebraska stands next to a table.
 - etc ...

- A type of simple descriptivism was originally formulated by Frege in reaction to problems that confronted the predominant theory of names of the 19th century due to John Stuart Mill. Mill's theory suggests that the meaning of a proper name is simply its bearer in the external world (its direct referent).

Problems with Millian View

- First, it does not explain how and why names without bearers can still be meaningful even though they have no reference. Take the following two sentences:
 - (A) There is no Santa Claus.
 - (B) Santa Claus does not exist.

- According to Mill's theory, these sentences must be meaningless. This is the case because sentences obtain their meanings compositionally and one of the main constituents of these sentences--the predicate in the first and the subject in the second-- is meaningless.
- But such sentences obviously seem perfectly meaningful to most human beings and they are used constantly in everyday language to express true statements about reality. More evidence for the meaningfulness of sentences such as the ones presented above consists in the fact that they are *synonymous*. Furthermore, the conjunction of (A) and (B):
 - (C) There is no Santa Claus and Santa Claus does not exist.
is redundant. While the following sentence:
 - (D) Santa Claus does not exist but there is a Santa Claus.
is contradictory.

Frege's response – Sense and Reference

- In the case of proper names, the sense (or Sinn) of a term consists in the (usually) definite description that speakers associate with it.
- Thus, the sense of the proper name Santa Claus may be something like
 - “The benevolent, bearded elf that brings gifts to children at Christmas time.”
- This sense of a term is objective (it is an abstract object) for Frege and is definitely not to be confused with its subjective representation in the mind of each individual speaker.
- However, a proper name can have more than one sense associated with it. The name Santa Claus could be associated with
 - “The benevolent, bearded elf...” as well as with the description
 - “The fat, old gentleman with the red cape...”

- In Frege, the relationship between sense and representation is one of determination:
 - the references of names are determined by their senses as modes of presentation.
 - If referents are objects in the external world, then senses are simply different ways of grasping the same object through different means.
 - An object need not necessarily have a referent either in the external world or in the realm of abstract objects but it will always have a sense in the objective realm of thought for Frege.
 - Hence, problems concerning the meaningfulness of sentences like (A) and (B) as well as the types of problems associated with sentences (C) and (D) above do not arise on this view.

Russell's approach

- Russell's approach is somewhat different. First of all, Russell makes an important distinction between what he calls "ordinary" proper names and "logically" proper names. Logically proper names are indexicals such as *this* and *that*, which directly refer (in a Millian sense) to sense-data or other objects of immediate acquaintance.
- For Russell, ordinary proper names are *abbreviated definite descriptions*. Here definite description refers again to the type of formulation "The..." which was used above to describe Santa Claus as "the benevolent, bearded...."

- According to Russell, the name “Aristotle” is just a sort of shorthand for a definite description such as “The last great philosopher of ancient Greece” or “The teacher of Alexander the great” or some conjunction of two or more such descriptions.

- according to Russell's theory of definite descriptions, such descriptions must, in turn, be reduced, to a certain very specific logical form of existential generalization as follows:

– "The king of France is bald".

Becomes

$$\exists x(K(x) \wedge \forall y(K(y) \rightarrow x = y) \wedge B(x))$$

- This says that there is exactly one object "x" such that "x" is King of France and "x" is bald. Notice that this formulation is entirely general: it says that there is some x out in the world that satisfies the description, but does not specify which one thing "x" refers to.

- for Russell, definite descriptions (and hence names) have no reference at all and their meanings (senses in the Fregean sense) are just the truth conditions of the logical forms illustrated earlier. This is made clearer by Russell's example involving "Bismarck":
 - (G) "The Chancellor of Germany..."
- In this case, Russell suggests that only Bismarck himself can be in a relation of acquaintance such that the man himself enters into the proposition expressed by the sentence. For any other than Bismarck, the only relation that is possible with such a proposition is through its descriptions. Bismarck could never have existed and the sentence (G) would still be meaningful because of its general nature described by the logical form underlying the sentence.

- These differences apart, descriptivism and the descriptive theory of proper names came to be associated with both the views of Frege and Russell and both address the general problems in a similar manner.

- Another problem for Millianism is Frege's famous puzzles concerning the identity of co-referring terms. For example:
 - (V) "Hesperus is Phosphorus."
- In this case, both terms ("Hesperus" and "Phosphorus") refer to the same entity: Venus. The Millian theory would predict that this sentence is trivial, since meaning is just reference and "Venus is Venus" is not very informative. Suppose, however, that someone did not know that Hesperus and Phosphorus both referred to Venus. Then it is at least arguable that the sentence (V) is an attempt to inform someone of just this fact.
- Other problems for Millianism are those of negative existentials (e.g., "Batman does not exist")

Descriptivism Detailed

Basic idea

DES: the semantic content of a proper name n is the connotation provided by a description d associated with n

- 'Aristotle' = 'The teacher of Alexander the Great'
- 'Bucephalus' = 'The favorite horse of Alexander'
- 'Keanu' = 'The sad guy on the park bench'

Descriptivism Detailed

DES: The semantic content of a proper name n is the connotation provided by a description d that is associated with n

DES_{SD}: The semantic content of a proper name n is the connotation provided by a single description 'the F' that is associated with n (Frege, Russell)

DES_{CD}: The semantic content of a proper name n is the connotation provided by a *cluster of descriptions* 'the F, the G, and the H' that is associated with n (Searle)

Descriptivism Detailed

Against **DES_{SD}**: If we associate a singular description 'the F' with a name *n*, then the statement '*n* is the F' is a necessary truth that is *a priori* knowable.

But '*n* is the F' isn't always a necessary truth that is *a priori* knowable!

- Bucephalus & his being Alexander's favorite horse!
- Aristotle & his being Alexander's teacher!

Therefore, **DES_{SD}** is false – there isn't always a *single* description associated with a name

Kripke's Objections & the Causal Theory

- In his book *Naming and Necessity*, Saul Kripke struck several powerful blows against the descriptivist theory.
- Kripke starts with what he believes to be the tenets of the descriptivist theory. Kripke formally states a number of theses as the core of the descriptivist theory.
- He explains before stating the theory, "There are more theses if you take it (Descriptive Theory) in the stronger version as a theory of meaning"
- The descriptivist theory of meaning would include these theses and definitions, thus refuting these would suffice for refuting the descriptivist theory of meaning as a whole.

- Kripke identifies a range of basic commitments of the description theory. We can formulate them as follows
 1. To every name or designating expression 'X', there corresponds a cluster of properties, namely the family of those properties ϕ such that [speaker] A believes ' ϕX '
 2. One of the properties, or some conjointly, are believed by A to pick out some individual uniquely.
 3. If most, or a weighted most, of the ϕ 's are satisfied by one unique object y , then y is the referent of 'X'.
 4. If the vote yields no unique object, 'X' does not refer.
 5. The statement, 'If X exists, then X has most of the ϕ 's [corresponding to X]' is known *a priori* by the speaker.
 6. The statement, 'If X exists, then X has most of the ϕ 's [corresponding to X]' expresses a necessary truth (in the idiolect of the speaker).

- (1) States the properties or concepts related to any given proper name, where a name 'X' has a set of properties associated with it. The set of properties are those that a speaker, on inquiry of "Who is Barack Obama?" would respond "The President of the U.S., former Senator of Illinois, husband of Michelle Obama, etc." (1) does not stipulate that the set of properties ϕ is the meaning of X.
- (2) stipulates the epistemic position of the speaker. Note (2) says "believed by A to pick out".

- (3) Takes the properties in (1) and (2) and turns them into a mechanism of reference. Basically, if a unique object satisfies the properties associated with 'X' such that A believes that 'X has such-and-such properties', it picks out or refers to that object.
- (4) states what happens when no object satisfies the properties (Kripke talks in terms of taking a "vote" as to the unique referent).

- (5) Follows from (1)-(3). If there is a set of properties that speaker A believes to be associated with X, then these properties must be already known by the speaker. In this sense they are a priori. To know what a bachelor is, an individual must know what an unmarried male is; likewise an individual must know who is 'The President of the U.S., former Senator of Illinois, husband of Michelle Obama, etc.' to know who Obama is.

- (6) However is not a direct product of the theses. Kripke notes "(6) need not be a thesis of the theory if someone doesn't think that the cluster is part of the meaning of the name" (p. 65). However when the descriptivist theory is taken as a theory of reference and meaning, (6) would be a thesis.

- Taken as a theory of reference, the following would be true:
- If someone fits the description 'the author who wrote, among other things, 1984 and Animal Farm' uniquely, then this someone is the George Orwell. (Thesis 3)
- 'George Orwell wrote, among other things, 1984 and Animal Farm' is known a priori by the speaker. (Thesis 5)
- The idea in the second sentence is that one can't refer to something without knowing what he or she is referring to. Taken as a theory of reference and meaning, the following would be true:
- The author who wrote, among other things, 1984 and Animal Farm, wrote 1984 and Animal Farm. (Thesis 6)

- After breaking down the descriptivist theory, he (Kripke) begins to point out what's wrong with it. First, he offered up what has come to be known as “the modal argument” (or argument from rigidity) against descriptivism.
- Consider the name “Aristotle” and the descriptions
 - “the greatest student of Plato”,
 - “the founder of logic” and
 - “the teacher of Alexander.”
- Aristotle obviously satisfies all of the descriptions (and many of the others we commonly associate with him), but it is not a necessary truth that if Aristotle existed then Aristotle was any one, or all, of these descriptions, contrary to thesis (6). Aristotle might well have existed without doing any single one of the things he is known for. He might have existed and not have become known to posterity at all or he might have died in infancy.

- Suppose that Aristotle is associated by Mary with the description “the last great philosopher of antiquity” and (the actual) Aristotle died in infancy. Then Mary’s description would seem to refer to Plato. But this is deeply counterintuitive. Hence, names are “rigid designators”, according to Kripke. That is, they refer to the same individual in every possible world in which that individual exists.

- This is the counterintuitive result of thesis (6). For descriptivists Aristotle means “the greatest student of Plato”, “the founder of logic” and “the teacher of Alexander.” So the sentence “the greatest student of Plato, etc., was the greatest student of Plato,” is equivalent to “Aristotle was the greatest student of Plato, etc.” Of course a sentence like “ $x=x$ ” is necessary, but this just isn't the case with proper names and their descriptions. Aristotle could have done something else, thus he is not necessarily identical to his description.

- The second argument employed by Kripke has come to be called the “epistemic argument” or “the argument from unwanted necessity.” This is simply the observation that if the meaning of “Angela Merkel” is “the Chancellor of Germany”, then “Angela is the Chancellor of Germany” should seem to the average person to be a priori, analytic, and trivial, as if falling out of the meaning of “Angela Merkel” just as “unmarried male” falls out of the meaning of “bachelor.” If thesis (5) is to hold, the properties of Angela Merkel should be known a priori by the speaker. But this is not true. We had to go out into the world to see who the Chancellor of Germany is.

- Kripke's third argument against descriptive theories consisted in pointing out that people may associate inadequate or inaccurate descriptions with proper names. Kripke uses Kurt Gödel as an example. The only thing most people know about Gödel is that he proved the incompleteness of arithmetic. Suppose he hadn't proved it, and really he stole it from his friend Schmidt. Thesis (3) says that if most of the properties associated with 'Gödel' are satisfied by one unique object, in this case Schmidt, then Schmidt is the referent of 'Gödel.' This means that every time someone (in the world where Gödel stole the incompleteness theorem from Schmidt) says 'Gödel' he or she is actually referring to Schmidt. This is far too counter-intuitive for the descriptivist theory to hold.

Causal theory of reference

- theory of how terms acquire specific referents. Such theories have been used to describe many referring terms, particularly logical terms, proper names, and natural kind terms. In the case of names, for example, a causal theory of reference typically involves the following claims:
- a name's referent is fixed by an original act of naming (also called a "dubbing" or, by Saul Kripke, an "initial baptism"), whereupon the name becomes a rigid designator of that object.
- later uses of the name succeed in referring to the referent by being linked to that original act via a causal chain.

- Weaker versions of the position (perhaps not properly called "causal theories"), claim merely that, in many cases, events in the causal history of a speaker's use of the term, including when the term was first acquired, must be considered to correctly assign references to the speaker's words.
- Causal theories of names became popular during the 1970s, under the influence of work by Saul Kripke and Keith Donnellan. Kripke and Hilary Putnam also defended an analogous causal account of natural kind terms.

- In lectures later published as *Naming and Necessity*, Kripke provided a rough outline of his causal theory of reference for names.
- refused to explicitly endorse such a theory, he indicated that such an approach was far more promising than the then-popular descriptive theory of names introduced by Russell, according to which names are in fact disguised definite descriptions.
- Kripke argued that in order to use a name successfully to refer to something, you do not have to be acquainted with a uniquely identifying description of that thing. Rather, your use of the name need only be caused (in an appropriate way) by the naming of that thing.

- Such a causal process might proceed as follows: the parents of a new born baby name it, pointing to the child and saying "we'll call her 'Jane'." Henceforth everyone calls her 'Jane'. With that act, the parents give the girl her name. The assembled family and friends now know that 'Jane' is a name which refers to Jane. This is referred to as Jane's dubbing, naming, or initial baptism.

- However, not everyone who knows Jane and uses the name 'Jane' to refer to her was present at this naming. So how is it that when *they* use the name 'Jane', they are referring to Jane? The answer provided by causal theories is that there is a causal chain that passes from the original observers of Jane's naming to everyone else who uses her name. For example, maybe Jill was not at the naming, but Jill learns about Jane, and learns that her name is 'Jane', from Jane's mother, who *was* there. She then uses the name 'Jane' with the intention of referring to the child Jane's mother referred to. Jill can now use the name, and her use of it can in turn transmit the ability to refer to Jane to other speakers.

- Causal theories of reference were born partially in response to the widespread acceptance of Russellian descriptive theories. Russell found that certain logical contradictions could be avoided if names were considered disguised definite descriptions (a similar view is often attributed to Frege, mostly on the strength of a footnoted comment in *On Sense and Reference*, although many Frege scholars consider this attribution misguided. On such an account, the name 'Aristotle' might be seen as meaning 'the student of Plato and teacher of Alexander the Great'. Later description theorists expanded upon this by suggesting that a name expressed not one particular description, but many (perhaps constituting all of one's essential knowledge of the individual named), or a weighted average of these descriptions.

- Kripke found this account to be deeply flawed, for a number of reasons. Notably:
 - We can successfully refer to individuals for whom we have *no* uniquely identifying description. (For example, a speaker can talk about Phillie Sophik even if one only knows him as 'some poet'.)
 - We can successfully refer to individuals for whom the only identifying descriptions we have fail to refer as we believe them to. (Many speakers have no identifying beliefs about Christopher Columbus other than 'the first European in North America' or 'the first person to believe that the earth was round'. Both of these beliefs are incorrect. Nevertheless, when such a person says 'Christopher Columbus', we acknowledge that they are referring to Christopher Columbus, not to whatever individual satisfies one of those descriptions.)
 - We use names to speak hypothetically about what *could* have happened to a person. A name functions as a rigid designator, while a definite description does not. (One could say 'If Aristotle had died young, he would never have taught Alexander the Great.' But if 'the teacher of Alexander the Great' were a component of the *meaning* of 'Aristotle' then this would be nonsense.)

- A causal theory avoids these difficulties. A name refers rigidly to the bearer to which it is causally connected, regardless of any particular facts about the bearer, and in all possible worlds

Causal Theory of Reference (review)

The referent of a name is fixed by a causal history:

It's in virtue of our connection with other speakers in the community, going back to the referent himself, that we refer to a certain man

Baptism: how a name first comes to refer to a thing:

- **by ostension** – point at it and say ‘I name that ‘*n*’
- **by description** – describe it (*a la* ‘Hesperus’)

The causal chain: after baptism, the name can be transmitted to others via suitable causal links

Causal Theory of Reference

The causal picture of reference:

An utterance of a proper name ' n ' refers to x iff the utterance is at the end of a sequence of utterances of ' n ' the first member of which is an initial baptism of ' n ' and every other member of which is 'properly linked' via a causal chain to the previous member

❖ *Example:* Feynman was named by his parents, who then transmitted his name to others, who then transmitted it to others, who then (eventually) transmitted it to *us!*

Back to the Beginning

The necessary a posteriori

The ancients believed the Morning Star (Phosphorous) and the Evening Star (Hesperus) were distinct stars, though they are the planet Venus.

❖ ‘Hesperus is Phosphorous’ is *a posteriori*

➤ It took empirical investigation to discover it's truth

❖ ‘Hesperus is Phosphorous’ is *necessary*

➤ The names are rigid designators, and if two names are rigid designators and have the same referents, then they necessarily co-refer

Descriptivism Detailed

Descriptivist theory of proper names :

- (1) Every name '*n*' is associated with a *cluster of properties* that *x* believes are true of *n* (**DES_{CD}**)
- (2) Speaker *x* believes that these properties pick out a unique individual (otherwise, *n* wouldn't be a proper name!)
- (3) If *y* has most of these properties, then *y* is the referent of '*n*' (from **DES_{CD}**)
- (4) If nothing has most of these properties, '*n*' doesn't refer

Descriptivism Detailed

- (5) The sentence '*n* has most of these properties' is known *a priori* by *x*
- i. 'n' has the same semantic content as 'The thing that has most of these properties'
 - ii. Therefore, '*n* has most of these properties' means the same as 'the thing that has most of these properties has most of these properties'
 - iii. The statement 'the thing that has most of these properties has most of these properties' is *a priori*!
 - iv. Therefore, (5)!

Descriptivism Detailed

- (6) The sentence '*n* has most of these properties' as uttered by *x* expresses a *necessary truth*
- i. 'n' has the same semantic content as 'The thing that has most of these properties'
 - ii. Therefore, '*n* has most of these properties' means the same as 'the thing that has most of these properties has most of these properties'
 - iii. The statement 'the thing that has most of these properties has most of these properties' is *necessary!*

Descriptivism Detailed

(C) These properties must be chosen in such a way that there is no circularity (i.e. no use of the notion of reference)

CIR: For any theory of proper names T , if T tells us that a name n is associated with a description d that expresses a cluster of properties ϕ , either:

- (i) ϕ must not include the property *being called* n ,
- (ii) ϕ does include the property *being called* n but it is possible to eliminate *being called* n from ϕ , or
- (iii) T is circular

Descriptivism Detailed

If ϕ includes the property *is called the name 'n'*, then that theory would amount to telling us that a person P has the property *is called the name 'n'* just in case S is the referent of n

Aristotle is called 'Aristotle' iff he's called
'Aristotle'

If one was determining the referent of a name like 'Glunk' to himself and made the following decision, 'I shall use the term 'Glunk' to refer to the man that I call 'Glunk'', this would get one nowhere. One had better have some independent determination of the referent of 'Glunk'. [Kripke, *N&N*, p. 295]

Descriptivism Detailed

So, (1) – (6) are commitments of Descriptivism, (C) is a requirement any Descriptivist account must satisfy

Note: we could re-write (1) – (6) using a non-cluster Descriptivism; i.e. in terms of **DES_{SD}**

Now that we've built up Descriptivism, Kripke is going to tear it down...