Socio-historical Causal Descriptivism. A Hybrid and Alternative Theory of Names

CHEN BO
Department of Philosophy, Peking University, PR China

This paper argues for a hybrid and alternative theory of names—Socio-historical Causal Descriptivism, which consists of six claims: (1) the referring relation between a name and an object originates from a generalized "initial baptism" of that object. (2) The causal chain of the name N firstly and mainly transmits informative descriptions of N's bearer. (3) The meaning of N consists of an open-ended collection of informative descriptions of N's bearer acknowledged by a linguistic community. (4) With respect to practical needs of agents there is s weighted order in the collection of descriptions of N's bearer. (5) The meaning or even partial meaning of N, together with the background of a discourse, the network of knowledge, speaker's intention, etc., determines the referent of N. (6) All names have their own referents, including physical individuals, and parasitic, fictional, or intensional objects; there are few names absolutely without reference.

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In order to answer the questions "how does language work?" and "where does linguistic meaning come from?", I agued for Social Constructivism of Language and Meaning (SCLM for short) in another paper. SCLM consists of six theses: (1) The primary function of language is communication rather than representation, so language is essentially a social phenomenon. (2) Linguistic meaning originates from the causal interaction of humans with the world, and from the social interaction of people with people. (3) Linguistic meaning consists in the correlation of language to the world established by collective intentions of a language community. (4) Linguistic meaning is based on the conventions set up by a language community in their long process of communication. (5) Semantic knowledge is empirical and encyclopedic knowledge

condensed and distilled, and the uses of language accepted by a linguistic community. (6) Language and meaning change rapidly or slowly as the communicative practice of a linguistic community does. The crucial point of SCLM is to focus on the triadic relation among language, humans (a linguistic community) and the world, rather than the dyadic relation between language and the world (cf. Chen Bo 2015: 87).

In this paper, by an appeal to SCLM, I will review the "war" between descriptivism and referentialism in contemporary philosophy of language (cf. Lowe 2007: 27), and argue for a hybrid but still alternative theory of names—I call it "Socio-historical Causal Descriptivism" (SHCD for short). SHCD aims to answer the question of how people use names, especially proper names, to refer to their referents in natural language, and it contains other six claims: (1) The referring relation between a name and an object originates from a generalized "initial baptism" of the object. (2) The causal chain of name N transmits informative descriptions of N's bearer. (3) The meaning[1] of N is an open-ended collection of informative descriptions of N's bearer acknowledged by a linguistic community. (4) With respect to the practical needs of agents there is a weighted order in the collection of descriptions of N's bearer. (5) The meaning or even partial meaning of N, together with the background of a discourse, the network of knowledge, speaker's intention, etc., determines the referent of N. (6) All names have their own referents, including physical individuals, and parasitic, fictional, or intensional objects; there are few names absolutely without reference.

My position about theory of names is quite close to Frank Jackson's as follows:

> …What we do with them [viz. sentences containing proper names] makes it clear that we—we, the folk—know perfectly well that tokens of "*N* is *F*" stand at the information—delivering end of an information—preserving causal chain, sustained by the way our language community uses the token name "*N*" that figures in the sentence, a chain which starts with some kind of baptism of the object the information is about. The token name ties the sentence to the object the sentence gives information about via the causal chain. (Jackson 2010: 138)

Jackson once said: "…there have always been defenders of the description theory, and many of the things I say have been said in one form or another, somewhere or other, by someone or other" (1998: 201). His saying is almost completely applicable to my situation. When developing my SHCD, I have got different kinds of inspiration from different scholars, whether they are descriptivists or referentialists, e.g., Frege (1892), Russell (1905), Strawson (1950), Searle (1958, 1983), Donnellan (1970), Kripke (1972/1980), Dummett (1973, 1981), Evans

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[1] The word "meaning" has a wide sense and a narrow sense in modern philosophy of language. In its wide sense, "meaning" includes both the sense [*Sinn*] and reference [*Bedeutung*] of a linguistic expression; in its narrow sense, "meaning" only denotes the sense of an expression being understood and grasped by human minds. This paper uses the narrow sense of "meaning".

(1973), Putnam (1975), Plantinga (1978), Burge (1979), Devitt (1980), Lewis (1984), Kroon (1987, 2009), Stanley (1997), Jackson (1998, 2010), Devitt & Sterelny (1999), Soames (1998, 2002), Sosa (2001), Salmon (1986, 2005), Braun (2006), and so on. However, I want to emphasize addition that in my SHCD, I do not only choose something from what other scholars have said and combine them into an unitary theory, but I also make my own contribution. All of these will be clarified in what follows.

A1. *Names, including proper and general names, come from generalized "initial baptisms" of objects. We usually dub a physical object with a proper name by ostension, and dub a theoretical entity with a (general) name like "quark" by description.*

In *Naming and Necessity* (1980:71), Kripke reformulates six theses of cluster version of descriptivism as the target of his attack, and then states thesis (C):

> For a successful theory, the account must not be circular. The properties which are used in the vote must not themselves involve the notion of reference in such a way that it is ultimately impossible to eliminate.

He explains further, "(C) is not a thesis but a condition on the satisfaction of the other theses" (1980: 71). Consider some examples clearly violating the noncircularity condition. Someone uses the name "Socrates". How are we supposed to know to whom he refers? By using the description which gives the sense of it. According to Kneale (1962), the description is "the man called 'Socrates'". But this description tells us nothing at all. Taking it in this way it seems to be no theory of reference at all. We ask, "To whom does he refer by 'Socrates'?" And then the answer is given, "Well, he refers to the man to whom he refers". If this were all there was to the meaning of a proper name, then no reference would get off the ground at all (cf. Kripke 1980: 70).

Just as Kripke says, some descriptivists indeed make circular explanations in order to avoid the difficulties of finding appropriate description(s) which uniquely determine the referent of a proper name. For instances, metalinguistic descriptivism claims that the name "N" can be characterized by such descriptions as "the object called 'N'", "the bearer of 'N'", "the thing which is the bearer of 'N'", or "the self-same thing which is the bearer of 'N'" (cf. Bach 1981: 372; Katz 1990: 40, 46), etc. Some causal descriptivists think that the referent of N is determined by some descriptions like "the individual which has been named 'N' in its initial baptism and whose name 'N' has been got handed down the causal chain" or "the object referred to by others in my linguistic community or by my interlocutors as 'N'". Clearly, these are the cases of reference-borrowing. Moreover, in order to determine the referent of "Aristotle", descriptivists usually appeal to some description like "the teacher of Alexander". The problem is how to determine the referent of the new name "Alexander" involved in the new description. If appealing to some description like "the most powerful one of Aristotle's stu-

dents", we obviously commit the fallacy of circular account. If we assort to other descriptions which possibly involve other names, the question of "how to determine the referents of other names?" will still come out. The former is a obvious circle, and the latter is an infinite regress.

Other descriptivists design descriptions such as "the entity that this body of information is about" (Forbes 1990: 538–539), "the subject of this mental dossier" (Nelson 2002: 415). They think that in order to determine the referent of N, at first we have to identify a body of information or a dossier (how to do this if we don't know to which object N refers?), and then associate the body of information or the mental dossier with an object, and finally identify the object satisfying the body of information or the dossier as the referent of N. I think, there are too many, in Russell's term, "zigzags". Let's consider two possibilities: (i) at the beginning, we collect information about an object, and then dub the object with name N, finally appeal to the information to determine the referent of N; (ii) at the beginning, we dub an object with N, later on collect the information about the object, finally other people appeal to the information to identify the referent of N. I'd like to ask a question: which of the two alternations is nearly right? My answer: (ii) is more close to be correct than (i).

Strawson says: "…one reference may borrow its credentials, as a genuinely identifying reference, from another; and that from another. But this regress is not [should not be] infinite" (1959: 182n). Searle also considers the parasitic use of names, that is, one speaker's use of a name is parasitic on other speakers' prior use of the name. He points out that the parasitic use of a name is not enough for determining the referents of the name, and that it must terminate in somewhere in order to determine which object the name designates (1983: 243–244). I agree, and I directly assert that reference-borrowing must terminate in the generalized initial baptisms of objects. Be a descriptivist or referentialist, all of us actually have the same starting-point: we dub an object with a name in the baptism of that object. After that, we differ in replying the following question: How do those people being absent from the dubbing event or the subsequent users of the name identify the referent of the name?

In the initial baptisms of objects, we dub a physical object in front of us with a name by ostension, or dub an unseen object with a name by description. As one example of the second way of naming, Le Verrier used descriptions to name an astronomical object, i.e. Neptune, which had not been found at that time. Without initial baptisms, descriptivists have no way to avoid circularity. It is Kripke's thesis (C) that makes me, a firm (or stubborn?) descriptivist, be aware of this fact. Moreover, I want to emphasize that only after an initial baptism by which an object is named, does the object enter into our language and cognition. In most cases, we can't talk about an object beyond our horizon without a name: what attributes does the object have? What similarity and difference

between one object and another are there? Thus, for people who did not participate in the baptism of an object, it is absolutely necessary for them to know something about the object to which a name refers. Since a very small amount of people participate in the dubbing event of a particular object– only for them dubbing determines reference, most people are not in position to identify the referent of a specific name by pointing; they have to appeal to descriptions to identify that object. So, it is of general interest and great significance to investigate the question of how names refer to their referents by means of descriptions.

Here, my position is quite close to Evans' in his (1982). In terms of the roles that participants in a name-using practice might play, Evans distinguishes what he calls "producers" from "consumers" in the practice of using name α to designate object *o*. A "producer' in the practice of using α to refer to *o* is somebody who "know *o* as α". S know *o* as α if and only if S has a specific kind of rapport with *o*, where the use of α forms part of this rapport, e.g. S has the capacity to identify *o* demonstratively and recognize *o* after breaks in observation. A "consumer" with respect to the practice of using α to refer to *o* is a participant in the practice who does not know *o* as α. "…it is reasonable to attribute to a speaker the intention to participate, by his use of a name, in the same practice as was being participated in by those speakers from whose use of the name the information he has associated with the name derives" (1982: 387).

Here, I have other two comments about descriptivism and naming.

First, if not considering the initial baptism of an object in which the object was dubbed with a name, in order to avoid the fallacy of circularity, descriptivists have to assert that a term has the referent it does just because it is associated with a set of descriptions in purely general, non-indexical or particular involving terms; these descriptions are uniquely satisfied by an entity, which then counts as the reference of that term. As Strawson argues, this is an impossible task for descriptivists to accomplish: an identifying description "need not be framed in purely general terms. In general, indeed, it could not be so framed; it is impossible, in general, to free all identification of particulars from all dependence upon demonstratively indicatable features of the situation of reference" (1959: 182n). If baptizing a object with a name was introduced into descriptivist picture, then, the participants of the baptizing know the referent of the name. Other people can borrow reference from the participants, that is, their use of the name is parasitic to the use by those participants. Furthermore, when they describe other objects to other people, they can use those names which they already know what they refer to and how they refer to their referents, more straightforwardly, they can use descriptions containing other names. As Stanly presents, at least for some descriptivists, "the descriptions which fix referents can, and indeed often must, contain non-descriptive elements" (1997: 564).

Second, naming an object is a social event. Not everyone can give a name to an object; instead, denominators must have appropriate social status. For example, only parents or respectful persons invited by the parents can dub a newborn baby with a name. Naming is also a public event, a "game" in which the object to be named, the denominators, and the witnesses are involved. Moreover, the spread of a name is also a social process. It should also be socially evaluated whether or not a name is appropriate to an object. If a name is not considered to be proper, the relevant object may be re-named. A person can have his "nickname" or "penname". Sometimes the nickname or penname becomes so popular that the original was forgotten or only known by a small amount of people. Consider the names "Mark Twin" and "Samuel Clemens". So to speak, the naming relation of a name to an object is socially conventionalized: it is not only semantic relations of names to objects, but also social relations among names, the corresponding objects, and our linguistic community. Generally speaking, there are three ways to guarantee that an object is successfully named: (i) People who have appropriate social status name an object by pointing; (ii) People who have appropriate social status name an object by description; (iii) Experts in their professional fields name a theoretic entity like quark with which ordinary people are not familiar.

A2. *In the causal-historical chain of communication, the descriptive information about what name N refers to is passed on from one person to another and from one generation to the next; thus, the causal-historical chain of N is a chain starting from the dubbing of an object with N and preserving information about that object as N's bearer.*

Kripke claims that after the initial baptism, "through various sorts of talk the name is spread from kink to link as if by a chain" (1980: 91). He argues, the chain firstly and mainly transmits the referent of name N, although it also could transmit information about N's bearer so that it could be a chain for transmitting information. When hearing N from somewhere, even though speakers at the far end of the chain are non-informed (ignorance), mis-informed (error), or poorly-informed (insufficiency) about the referent of N, they still can use N to refer to that object. Kripke states the condition as follows for successful transmission of reference in the chain, and accept the possibility that something is mistakenly transferred in the chain:

> …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 heard the name 'Napoleon' and decide it would be a nice name for my pet aardvark, I do not satisfy this condition. (Kripke 1980: 96; emphasis added)
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> …Obviously, the name is passed on from link to link. But 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. (Kripke 1980: 93)

I have three comments about the causal chain of N.

(1) The causal chain of N is a chain preserving information about N's bearer; only by means of preserving information about N's bearer, can the chain transmit the referent of N. Without the least information such as "N is an *X*" (here *X* is a sortal), e.g. "Dan is my pet dog", nobody can take any word s/he heard to be a name. Only based on such information can a hearer judge that the word s/he heard is a name of an object. The following citation from Kripke is puzzling to me:

> …A mathematician's wife overhears her husband muttering the name 'Nancy'. She wonders, whether Nancy, the thing to which her husband referred, is a woman or a Lie group. Why isn't her use of 'Nancy' a case of naming? If it isn't, the reason is not indefiniteness of her reference. (Kripke 1980: 116n)

That is the alleged case of ignorance against descriptivism: even if one person know nothing about what thing a name designates, s/he still can use the name to refer to what it designates. Back to Kripke's example: although the mathematician's wife has no idea of what thing Nancy is, or of whom Nancy is, she still can use "Nancy" as a name to refer something or somebody. But I have serious doubt with this claim: how does the wife know that "nancy" is a name rather than a noise from her husband, since he also mutters something like "haha" and "bala"? why is "nancy" a name but "haha" or "bala" not? In my understanding, she takes "Nancy" as a name but does not take "haha" and "bala" as names, just because as one competent English speaker she has common sense that in English "Nancy" is usually used as the name of a female, but in few time "haha' and "bala" are used as the names of objects. However, "usually" does'nt mean "always", and "few" doesn't mean "never". Consider such a possibility: the mathematician pronounces "nancy" just for fun, exactly like he pronounces "haha" and "bala". All these "noises" serve the same purpose: to amuse himself and make himself relax. It is reported that some African people have very long and strange names: some words, such as "pain", "nuisance", "Good by", "Friday", are used in the names of African people. I think, if an agent is completely ignorant of a language, he has no reason to identify any word of that language s/he heard as the name of some object; also, if he has no information about an object to which a name refers and also cannot identify the referent of the name demonstratively, he has no reason to regard any word s/he heard as the name of that object, unless he names the object to which he faces by himself.[2]

Perhaps we should consider the cases of "Cicero" and "Feynman" discussed by Kripke (1980: 81). About what the name "Cicero" designates, many people know only that he was "a famous orator of ancient

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[2] Evans also investigates what conditions have to be satisfied by an expression x and an item y for x to be a name of y. In his view, "NN" is a name of x if (and only if): (i) There is a community in which people use "NN" to refer to *x*; (ii) It is common knowledge that "NN" is so used; (iii) The reference in (i) relies on the knowledge in (ii), and not on the knowledge that x satisfies some predicate embedded in "NN" (cf. Evans 1973: 1, 18).

Rome", and about "Feynman" only that he was "a physicist or something". Obviously that such description(s) is not sufficient for fixing the referent of the corresponding name uniquely, but people still use it as the name of a person. My reply: Yes, people still use "Cicero" and "Feynman" separately as a name for *Cicero* and *Feynman*, because they have known that Cicero is a famous Roman orator, and Feynman is a physicist. Based on such little information, they know that both "Cicero" and "Feynman" are used by other people as the names of two human beings. Since the information is so poor and insufficient, they are not in position to pick out two men to which two names refer. However, as the members of their linguistic community, their uses of two names are parasitic to the uses by other members of the community. Although they don't know exactly what individuals to which two names refer, but some other members know. They borrow reference from the other members of the community who know.

(2) In the causal chain of N, only information about N's bearer can guarantee that the intention of present speakers is in accord with that of previous speakers.

In order to guarantee that the referent of a name is transferred successfully down the chain, Kripke just mentions one condition that in using names which s/he heard from other speakers a hearer must keep the same intention with the speakers'. Kripke stops here and does not make further enquiry. But I want to ask a question: how do we make sure that the condition will be satisfied? In my view, if N's bearer is absent in the place of utterance, then speakers cannot transmit the referent of N to hearers by pointing. They have to say something about N's bearer in order to make hearers know that they are talking about the object to which name N refers. Just as my analysis of the case of "Nancy" shows, if without the least necessary information, there will be no successful reference-transmission, even no name transmitted. This is the first point which I want to emphasize here.

Secondly, different information will result in different reference, even result in different names. For instance, two guys talk about a man named "John Lycan", but one talks about a man born in a wealthy family, who himself is a distinguished professor of a well-known American university, publishes several good books, and often travels abroad to deliver lecture; another talks about a man born in an impoverished family, who himself is fortunately a gifted football player, makes a huge amount of money, and lives a quite decent life. Under such circumstance, two talkers will know soon that they are talking about different persons happened to have the literal "same" name(s).

Thirdly, mistaken or insufficient information will produce mistaken reference, called "reference-shift". For instance, Evans mentions the case of "Madagascar". Originally, it named a portion of the African mainland. But, *misunderstood* by Marco Polo, it became attached instead to the great island off the coast of Africa (Evans 1973: 11). Despite

the fact that there is a continuous "chain" of derived uses of the name 'Madagascar' going back to the baptism of the mainland, the name as used now refers to an island. The reason why the reference-shift happen is that the information is wrongly transmitted by Marco Polo. Kripke himself also mentions that "Santa Claus" might originally designate a certain historical saint, but today children use it to refer to a fictional figure in religion (Kripke 1980: 93). This is a case of "reference-failure": a name from "referring" to "empty", viz. not referring. Why does this phenomenon happen? One reasonable explanation is that there is no sufficient information transferred down to children today.

Fourthly, new information will result in new reference, even new names. I call such situation "reference-regeneration". For instances, a certain name was originally taken to designate a mythological figure, but new archaeological evidence shows that the name refers to a real historical figure, so the name changes from "empty" to "referring"; Or a certain name originally designated a fictional figure, but later people used this term to refer to a real person, and this man was so famous in history that people forgot the fact that this name once denoted a fictional character. Certainly, in the cases of so-called "reference-regeneration", actually there are two pairs of names which refer to two pairs of people, but we cannot ignore the fact that each pair of names is literally "same", and there is some kind of continuous history in that pair.

I'd like to include reference-shift, reference-failure, reference-regeneration together under the title "reference-shift". In my view, the fundamental reason why reference-shift happens is that when information about N's bearer is transmitted down a causal chain of N, people commit some mistakes about the information of N's bearer consciously or unconsciously.

Here, I want to talk something more about the causal chain of N. Actually, whether be descriptivists, such as Evans and Searle, or be referentialists, such as Kripke and Donnellan, there are quite many similarities between their conceptions of names: they both (at least *could*) agree that there are causal, historical, chains of communication, in which names get handed down from one person to another, from one generation to the next; and they both require intentional components (the intention to refer). What distinguish descriptivists from referentialists are their different answers to some key questions, e.g., *what is it that is transmitting down the causal chain about a name*? Clearly, it is not just the name; it is the name plus something else that is conventionally associated with the name. For descriptivists, what is conventionally associated with the name is a *sense* (or description, or cluster of descriptions, or way of picking something out); For Kripke, what is conventionally associated with the name is an *object*. Another key question is: *how are names connected to their referents*? Frege claims that there is an intermediary, i.e. a *sense*; Searle asserts that "objects are not given to us prior to our system of representation", and so our

representations intervene between name and referent (Searle 1983: 326). But Kripke maintains that the connection is unmediated: names are directly referential. It is these points which distinguish descriptivists and referentialists apart.

A3. *Only informative descriptions of N's bearer acknowledged by our linguistic community constitute the meaning or partial meaning of N. These descriptions describe the features of that object, and the collection is always open-ended and vague to some extent.*
At first, I want to make clear what is really the semantic reference of a linguistic expression. I agree with Strawson's claim: "'Mentioning', 'referring' is not something an expression does; *it is something that someone can use an expression to do*" (1950: 326; emphasis added). Even Kripke himself thinks that the semantic reference of a designator in a given idiolect (which usually includes a large linguistic community) is the thing which is determined by the conventions or rules of the idiolect together with facts about the world (e.g. which satisfies the descriptive property in question) on the occasion of use of the designator (cf. Kripke 1977: 111). In my view, since the conventions or rules of a language are the business of a linguistic community, the semantic referent of a designator could be said to be the thing to which *the linguistic community* takes the designator refer. Especially *for a definite description, its semantic reference is not the factual satisfier of that description, but the object which our linguistic community think satisfies that description.* I will make this idea clear further in what follows.

In my view, in the causal chain of name N, not all the informative descriptions of N's bearer are preserved: some are thrown away or forgotten, because they are not accepted as true by our linguistic community; some are revised, because they are partly true and partly false. Only those informative descriptions acknowledged by our linguistic community are preserved, getting handed down the causal chain. Finally, they become a part of public beliefs about that object, and enter into dictionaries or encyclopedias. In some sense, dictionaries or encyclopedias are just the summarization or refinement of our previous cognitive achievements, so they have experiential origins and contents, and can be enlarged, revised, or even replaced by our new epistemic achievements (cf. Chen Bo 2015: 103–104). It is important for agents to know the informative descriptions of N's bearer accepted as true by our linguistic community, because only these descriptions determine the referent of N, constitute a linguistic or cultural tradition about the use of N, and even a part of the capacity of a competent language-user to properly use N.[3]

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[3] Evans admits that there are indeed causal relations or causal chains with respect to the use of names, but Kripke "has mislocated the causal relation; the important causal relation lies between that item's states and doings and the speaker's body of information—not between the item's being dubbed with a name and the speaker's contemporary use of it" (Evans 1973: 13).

I will introduce symbols to characterize the meaning of name N: let lowercase letters, *a, b, c, d, e, f, g, h, i, j, k,...* separately stand for a description of N's bearer. Some descriptions are not accepted as true by our linguistic community, so they will not enter into the collection of descriptions as the meaning of N; only those description acknowledged by our linguistic community enter into the collection about N's bearer: $\{a, b, c, d, e, f, ... \}$, in which "..." shows that there are some members outside of the listed, and we can change the members of the collection if necessary, that is, let some old member(s) get out, and some new member(s) come in, if we get new evidence; so the collection is always open-ended and is vague to some extent. Since the collection illustrates the consensus of our linguistic community about N's bearer, and generally acknowledged by our linguistic community, so an operator $\bullet$ for consensus can be put in the front of the collection as a superscript: $\bullet\{a, b, c, d, e, f, ... \}$. This kind of collection of descriptions determines the referent of N. Of course, we could have some other collections of descriptions of N's bearer by means of our counterfactual imagination, e.g., $\{-a, -b, -c, -d, -e, f, g, h, j, k, ... \}, \{-a, b, -c, -d, e, -f, u, v, w, x, ... \}$, in which '$-a$' shows that *a* is absent, and so forth. These collections do not constitute the meaning or partial meaning of N, because they have not been agreed by our linguistic community. We can't use them to determine the referent of N, at least we can't use them to identify the object to which we *usually* use N to refer.

From this perspective, the so-called "counterexamples", such as Gödel/Schmidt case, Peano/Dedekind case, Johna-Moses-Aristotle cases, of descriptivism given by Kripke in his semantic argument, could be explained away. Here, I will consider the first two.

Kripke conceives a counterfactual situation. Gödel had a friend called "Schmidt", who had actually proved the incompleteness of arithmetic. But Gödel somehow got hold of the manuscript and published it in his own name. Then Gödel achieved fame as "the man who discovered the incompleteness of arithmetic". However, in fact, the real referent of that description is the man Schmidt. If "Gödel" is synonymous with the description "the man who discovered the incompleteness of arithmetic", does "Gödel" change its referent into the man Schmidt? Kripke replies "No", "Gödel" still designates the person called "Gödel" whereas the description "the man who discovered the incompleteness of arithmetic" refers to the man *Schmidt*, because Schmidt is *actually* the person satisfying that description, and we make a mistake when using the description to refer to Gödel.

I can reply to Kripke as follows. In your argument, I find an implicit supposition: the question of "how does some description(s) refer to an object?" just concerns the relation between the description(s) and its satisfier, between a language and the world, which are only the matters of fact, and has nothing to do with the intentions, conventions and customs of our linguistic community in using the description(s) and the

language. In other words, the semantic referent of some description(s) is just the object which *in fact* satisfies the description(s), rather than the object to which *our linguistic community takes the description(s) to refer*. But I have argued that this supposition is wrong (cf. Chen Bo 2013a: 423–433). Here, I just reply Kripke very shortly: your fabricated story is not acknowledged by our linguistic community; your fancy about Gödel is not in the causal chain of the name "Gödel". Therefore, we can still believe that the description "the man who discovered the incompleteness of arithmetic" designates the man *Gödel* rather than the man *Schmidt*. However, if your imagined situation is supported by good evidence and agreed by our linguistic community, perhaps we will cut off the connection of the name "Gödel" with the description "the man who discovered the incompleteness of arithmetic", and establish a new connection of the description with the name "Schmidt". Perhaps we will also build up the connection of the name "Gödel" with the new description "the notorious man who stole Schmidt's proof of the incompleteness of arithmetic". Just as Kripke himself says,

> In general our reference depends not just on what we think ourselves, but on other people in the community, the history of how the name reached one, and things like that. It is by following such a history that one gets to the reference. (Kripke 1980: 95)

Kripke also talks about Peano-Dedekind case. It is commonly believed that Peano is the man who discovered certain axioms which characterize the sequence of natural numbers. But actually it is Dedekind who discovered these axioms earlier; thus the description "the man who discovered certain axioms which characterize the sequence of natural numbers" denotes Dedekind. Many people mistake Einstein for both the discoverer of the theory of relativity and the inventor of the atomic bomb. But actually it was not a single person but a group of people who invented the atomic bomb. Similarly, many people regard Columbus as the first man to know that the earth was round and the first man to discover America. However, there might have been someone else who is the semantic referent of these descriptions, whereas "Columbus" still refers to the person originally called "Columbus".

My reply is similar to the Gödel-Schmidt case. What is of great significance is not what Peano, Einstein, and Columbus have actually done, but what is acknowledged by our linguistic community. Our community even makes a series of institutional arrangement about academic acknowledge, such as anonymous referee, open-access publication, objections and replies, discussion and debate, citation data as influential factor, public reward system, and so on. Only those descriptions of a scientist agreed by our community can be regarded as the part of the "official" history of the person and constitute the meaning or partial meaning of the relevant name. In contrast, those descriptions of the person rejected by our community will be forgotten, or just become

the topics of chat, gossip, or casual conversation at leisure time. We never consider those descriptions seriously.

In sum, my idea is this: the meaning of a name depends on consensus of our community rather than somebody's wild imagination, and a name or description designates what our language community agrees to use it to designate. In semantics, there is no pure matters of fact, the intentionality of a linguistic community must be considered.

A4. *With respect to the practical needs of agents, there is a weighted order in the collection of informative descriptions of N's bearer; that is, in the collection some descriptions are more important or central than others for determining the referent of N.*

When restating the cluster version of descriptivism about names, Kripke mentions thesis (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*'" (Kripke 1980: 71, emphasis added). That is to say, traditional descriptivists do not give equal weight to all the descriptions in the collection. When identifying what a name designates, some descriptions are more important or central than others. Evans thinks, the denotation of a name is fixed by the bodies of information; a particular object is the *dominant source* of the descriptions we associate with the name, and it is the *dominant* description that plays a *crucial role* in determining the referent of a name (Evans 1973: 15–17). Putnam notices that the stereotype of "tiger" includes such features as "being an animal", "being big-cat-like", "having black stripes on a yellow ground". He assumes that the feature "being an animal" is more central than others, because it is impossible to conceive that tigers might not have been animals (Putnam 1975: 188–190). In my view, the members of the collection of descriptions about N's bearer have to be organized into some kind of structure.

I suspect that Kripke might implicitly hold a similar position. For him, most descriptions are non-rigid designator because they usually describe the superficial or accidental features of their objects; however, some descriptions are rigid designator, such as "the positive odd number less than 2", "the element with the atomic number 79" and "H_2O", because they characterize the essence of the corresponding objects. Essence is what an object or natural kind necessarily has, i.e. what it has in all possible worlds in which it exists. According to Kripke, the essence of an individual such as "Aristotle" is its origin; the essence of an artefact such as "table" is its constituent material; and the essence of a natural kind like "tiger" is its internal structure. The descriptions about essence will refer to an object or a natural kind in all possible worlds in which the object or the kind exists, so they are rigid designators. Thus, essential descriptions of an object are more weighted than others.

I myself also think that not all the descriptions in the collection have equal weight. When determining the referent of a name, some descriptions are more important than others because they are essential descriptions. In a long interview by BBC, Quine says that so-called

"essence" is what is most important; the essence of a thing depends on how the thing is described. But he thinks that since we could not make it clear that what is the most important about an object, we could not explain clearly what essence is. So he rejects essentialism, taken it as a notorious form of Platonism. Putnam says that "importance is an interest-relative notion" (Putnam 1975: 157), that is, it depends on our interest to decide which properties more important than others. I applaud to this brand of essentialism. I think that the importance is relative to the agent's interest. By introducing the parameter "with respect to humans' interest", I will relativize and thus diversify the essence of an object. For example, the essence of human beings for zoologists is different from that for sociologists. If we can generalize common need of humans' cognition and practice, then we could find out the general essence of an object. For instance, the general essence of human beings might be "the animals that are able to speak, to think, and to make tools". This version of essentialism can be called "interest-relative essentialism", whose details and arguments have to be left to other papers.

In his paper (2011), Costa criticizes the traditional cluster theory of proper names because a cluster has no internal structure, being completely disordered: all descriptions belonging to the cluster seem to have the same value and play the same identifying role. He wants to put an order into this mess. He distinguishes all the descriptions of an object in the cluster into two groups. One consists of fundamental descriptions, including "(i) a localizing description, which gives the spatio-temporal location and career of the object, and (ii) a characterizing description, which gives what are considered the most relevant properties of the object, those that give us the reason to use the name in referring to it" (Costa 2011: 260). Another consists of auxiliary descriptions which seem to connect a name with its bearer in a more or less accidental fashion. The second group includes metaphorical descriptions, accidental but well-known descriptions, accidental and usually unknown descriptions, adventitious descriptions (Costa 2011: 261–262). Then, Costa formulates a meta-descriptive rule MDR:

A proper name N is used to refer to the object x belonging to a certain class C of objects, *iff* it can be assumed that x properly originates our awareness that

(i–a) x satisfies its localizing description for N, and/or
(i–b) x satisfies its characterizing description for N, and
(ii) x satisfies the description(s) sufficiently, and
(iii) x satisfies the description(s) better than any other object belonging to C.
        (Costa 2011: 270)

Obviously, Costa and I have a similar viewpoint that there is a structure in the descriptions-cluster of an object. But my position is quite different from his in other sides, e.g. I pay much more attention to the

role of a linguistic community for determining the meaning and reference of a name than he does. In my view, first, the distinction of fundamental and auxiliary descriptions makes sense only with respect to the practical needs of agents. Take "Aristotle" for an example. We can characterize Aristotle as a famous scholar, a philosopher, a linguist, a biologist, an educator, … so the relevant characterizing and auxiliary descriptions about him will be radically different: fundamental descriptions in one encyclopedia will become auxiliary ones in another, vice versa. Secondly, only those descriptions acknowledged by our linguistic community can become the meaning or partial meaning of the name which refers to the object. Thirdly, we cannot exactly determine how many descriptions an object has to satisfy in order to be the referent of a name, since in replying this issue, we consider not only the quantity of descriptions, but also the order of descriptions in the cluster, and even the practical needs of agents.

A5. *The meaning or even partial meaning of N, together with the background of a discourse, the network of knowledge, speaker's intention, etc., determines the referent of N.*

Kripke puts forward his semantic argument against descriptivism as follows:

> P1   If descriptivism is correct, then, the meaning of name N, which is given by one description or a cluster of descriptions, should provide a set of necessary and sufficient conditions for determining what N designates.
>
> P2   In fact, the corresponding description(s) cannot supply such a set of conditions for fixing the referent of N.
>
> C   Descriptivism is wrong.[4]

I judge that P1 of the semantic argument of Kripke's does not hold, because it relies on a problematic assumption, namely, descriptivists have to hold two claims: (i) If name N has its meaning and the meaning is given by some description(s), the description(s) should provide a set of necessary and sufficient conditions for determining the referent of N; (ii) It is possible for us to find out such a set of necessary and sufficient conditions for determining N's bearer. I have argued that the assumption is wrong (cf. Chen Bo 2013a: 435–438).

In my view, when determining what a name designates, it is absolutely necessary to fix different domains of discourse in different contexts. These domains are usually smaller than the Universe containing all the actual individuals in the external world, and much smaller than the Super-Domain containing all the possible individuals in all possible worlds. When determining the referent of a name by means of its meaning, actually we choose the referent from the specific domain of

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[4] Salmon regards the semantic arguments as "the strongest and most persuasive of the three kinds of arguments for the primary thesis of the direct reference theory" (Salmon 2005: 29).

discourse rather than always from the Universe or the Super-Domain. Under such contexts of utterance, only a few ordinary descriptions are required to identify the referent of a name, since only a finite number of individuals are in that place.

For example, "the girl dressed in red clothes" is not enough to determine the referent of any name, since there are too many girls dressed in red clothes in the world, let alone the amount in all possible worlds. However, there are only a small number of people in a particular context. When one asks "who is Lori?" someone else replies that "Lori is the girl dressed in red clothes". If there is exactly one girl dressed in red clothes in that place, only by using the description about surface feature of a person, can we identify to whom the name "Lori" refers. If there happen to be many girls dressed in red clothes, we can keep talking to give more descriptive information in order to identify the referent of "Lori".

I agree with Searle's idea that speakers' intention, Network and Background play a crucial role in determining what a name designates. Network includes personal convictions, scientific knowledge, and the existence of social practices and institutions, and it is in virtue of the network that humans succeed in having meaningful experiences or saying meaningful things. Background is the set of abilities, capacities, tendencies, and dispositions that humans have; it itself is non-representational and non-intentional. For example, when someone invites me to attend his/her wedding, I know that I have to dress formally and bring him/her significant gift(s); when someone invites me to join a country music, I know that I can dress casually and behave quite wild, even though the obvious request does not include this kind of details. Background beliefs give clues to my judgment and choice. Here, just consider one example as follows.

Donnellan (1970: 335–58) makes a bold envisagement. Suppose that all that a certain speaker knows or thinks he knows about Thales is that he is the Greek philosopher who said that all is water. But suppose that there was no Greek philosopher who said such a thing, and Aristotle and Herodotus were referring to a well digger who said, "I wish all was water so I wouldn't have to dig these damned wells". Further, suppose that there was a hermit who had no contact with anyone, who actually held that all was water. Furthermore, suppose that Herodotus had heard a frog at the bottom of a well making croaking noises that sounded like the Greek for "all is water"; this frog happened to be a family pet named "Thales", and this incident is the origin of the view that somebody held that all is water. Then, we will meet a serious question: when using the name "Thales", do we refer to the Greek philosopher, the well digger, the hermit, or the frog? Searle argues that in order to answer this question, we have to rely on the relevant Network of Intentionality. When we say "Thales is the Greek philosopher who held that all is water", we do not just mean anybody who held that all is water, we mean *that person* who was known to other Greek philoso-

phers as arguing that all is water, who was called in his time or subsequently by people as "Thales", whose works and ideas have come down to us posthumously through the writings of other authors, and so on.

> …in all these cases there will be an external causal account of how we got that information, but what secures reference is not the external causal chain, but the sequence of the transfer of Intentional contents. The reason we are not tempted to allow the hermit to qualify as Thales is that he simply does not fit into the Network and the Background. (Searle 1983: 252–253)

I think that in a specific context, sometimes we can determine what a name designates just by one description, while sometimes we can achieve this by a cluster of descriptions. Can we generally explain how many descriptions we need to determine the referent of a name? No, because we also have to consider the speaker's intention, Network and Background when determining the referent of a name. Therefore, just like the question "how does a name designate an object?", the question "how do we identify what a name refers to?" is also relative to many social factors; it depends on the interplay of these factors to determine the referent of a name.

I think, it is the right place to reply shortly Kripke's epistemic argument against descriptivism. The argument runs like this:

P1   If descriptivism is correct, that is, name N is synonymous with its relevant description "the F", then "N is the F" should be knowable *a priori*.

P2   In fact, "N is the F" is not knowable *a priori*.

C   Descriptivism is wrong.

For example, consider two sentences:

(1)   Aristotle is Aristotle.
(2)   Aristotle is the teacher of Alexander the Great.

Kripke thinks, according to descriptivism, "Aristotle" is synonymous with the description "the teacher of Alexander the Great"; then, if substituting the second occurrence of "Aristotle" with "the teacher of Alexander the Great" in (1), we get (2). Since (1) is knowable *a priori*, so is (2). Actually, (2) is essentially an empirical statement, we have to judge its truth value completely based on historical documents and other empirical evidence. So, (2) is absolutely not knowable *a priori*. Therefore, descriptivism is wrong.

I have two comments about the epistemic argument:

First, I don't think descriptivists have to hold such position that a name is synonymous with some relevant description(s). I take myself as a firm descriptivist, but don't accept the synonymy thesis that "Aristotle" is synonymous with "the teacher of Alexander the Great". In my view, the meaning of name N consists in the collection of informative descriptions of N's bearer acknowledged by our linguistic community, and these descriptions describe the features of the object. Since the object as the referent of N and our cognition about that object are always in the process of change, so the collection of informative descriptions of

N's bearer is open-ended, and is vague to one degree or another. Therefore, N cannot be strictly synonymous with any definite description, even with the collection of such descriptions.

Second, even if we temporarily accept the synonymy thesis, we still cannot get the conclusion that (2) is knowable *a priori*. As I argued in Chen Bo (2015: 106–108), *semantic knowledge is empirical and encyclopedic knowledge, including the uses of language accepted by a linguistic community; it is the condensation, refinement, and summarization of our previous epistemic achievements, so it has empirical content and origin.* Quine emphasizes: "The lexicographer is an empirical scientist, whose business is the recording of antecedent facts; and if he glosses 'bachelor' as 'unmarried man' it is because of his belief that there is a relation of synonymy between these forms, implicit in general or preferred usage prior to his own work" (Quine 1953: 24). Why we can substitute "Aristotle" with the description "the teacher of Alexander the Great" in (1)? Because empirical evidence shows us that Aristotle is the teacher of Alexander the Great, we make use of this empirical message to do the substitution, then we get (2). So, (2) is also based on empirical evidence, and is just knowable *a posteriori*. For more details, see Bo (2013b).

Let a is a proper name, b is the corresponding description relevant with a, I can generalize the form of Kripke's epistemic argument against descriptivism as follows:

> (1) It is knowable *a priori* that a is a;
> (2) $a = b$;
> So, (3) It is knowable *a priori* that a is b.

Kripke argues, since it is not knowable *a priori* that a is b, we should deny the descriptivist premise (2); Therefore, descriptivism about name is wrong.

But in my judgement, this argument is not sound, because it makes use of the principle of substitution which is problematic: $KF(a) \wedge (a=b) \rightarrow KF(b)$, here "K" means "know". Rather, It should appeal to the valid principle of substitution: $KF(a) \wedge K(a=b) \rightarrow KF(b)$. (3) can follow not from (1) and (2), but from (1) and (2′): It is knowable *a priori* that a is b. Since descriptivists don't accept (2′) as true, Kripke's epistemic argument collapses.

A6. *All names have their own referents, including physical individuals, and parasitic, fictional, or intensional objects. So there are few names absolutely without reference.*

In my view, the referential relation between a name and an object is not an objective relation between the two; on the contrary, a complete understanding of the referential relation of a name and an object involves three elements: speakers' intention, the meaning of name N, and the object to which N refers. Which object N designates depends on what a speaker intends to use N to designate. Moreover, what names

designate can be classified as follows: physical objects, parasitic objects, fictional objects, and intensional objects. The last three groups may be called "abstract objects".

Obviously, in our language, many names refer to physical objects which exist in the actual world, i.e. in space and time, can be perceived by us, and have causal effect with each other. For example, there are names of people, such as "Socrates" and "Einstein"; names of natural objects, such as "Sun" and "Earth"; names of places, such as "Oxford" and "Tokyo"; names of countries, such as "China" and "United States"; names of organizations or political parties, such as "UNESCO", "Japan's Liberal Democratic Party"; names of books, such as "*The Organon*" and "*Origin of Species by Means of Natural Selection*"; names of events, such as "American War of Independence" and "the Second World War". And so on. Physical objects are very close to "primary substance" called by Aristotle: "Substance, in the truest and primary and most definite sense of the word, is that which is neither predicable of a subject nor present in a subject; for instance, the individual man or horse" (*Categories*, 2^{a}13–14). "Moreover, primary substances are most properly called substances in virtue of the fact that they are the entities which underlie everything else, and that everything else is either predicated of them or present in them" (*Categories*, 2^{b}14–17). Moreover, physical objects include theoretical entities in natural sciences, such as atoms, electrons, photons, and other particles, which cannot be directly perceived by humans, but can be discerned by means of instruments.

There are also names designating parasitic objects supervened on physical individuals. Individuals come first, but they are not bare particulars without any property or quality. An individual itself has certain properties and also is related to other individuals. Individuals can be classified into different kinds or classes, such as animal, human being, and plant. In biology, there is a classification system consisting of species, genus, family, order, class, phylum, and kingdom. There are natural kind terms such as "cat", "tiger", and "lion". Without natural kind terms, we have to meet serious difficulties in our ordinary talk, and even our scientific system will collapse. Although kinds or classes are the results of abstract thinking, they still have some kinds of objective existence. An object has property, and there are some relations between or amongst objects; these constitute so-called "states of affairs" or "facts". Although states of affairs or facts are different from individuals since they are very difficult to be individualized, they are still objective. What mass terms such as "gold", "wood", "water", "fire", and "soil" designate cannot be individualized either, but they certainly exist in the actual world. Physical individuals always exist in space and time. Moreover, everything is in process of change, and their change follows regularities and laws. Since things are objective, so are the regularities and laws followed by them. In this way, we have a variety of entities supervened on or being parasitic to physical objects, such as qualities,

relations, classes or kinds, laws, etc. Certainly, these entities do not exist in space and time as substances, but it is reasonable to affirm that there are such kinds of supervened or parasitic entities; otherwise, physical objects will become pure abstraction or nothingness. Besides, there are another kind of abstract objects, such as natural numbers, real numbers, and complex numbers.

There are names denoting fictional objects, which do not exist in the actual world, but are created by human intellects. For example, there are various characters in Greek mythology, such as Gaea, Zeus, Poseidon, Apollo, Athena, Hermes, Dionysus; various characters in science fiction such as Superman, Spiderman, Harry Potter, Batman; a variety of literary figures such as Hamlet and Sherlock Holmes. Names denoting such kinds of objects are usually called "empty names", because the objects to which they refer are not real, i.e., not exist in the actual world. The phrase "empty names" may come from Russell's "robust feeling for reality":

> Logic, I should maintain, must no more admit a unicorn than zoology can; for logic is concerned with the real world just as truly as zoology, though with its more abstract and general features. (Russell 1919: 169)

I think that Russell's position conflicts with our linguistic intuition and common sense. In natural languages, there are many names denoting fictional characters. We usually consider that these names are referring to something rather than nothing, because we can talk and exchange our opinions about them understandably. Besides, some mythological and literary figures have played very important roles in shaping the cultural identity of a nation.[5] Why does logic, philosophy, and semantics exclude these names? Is the talk about them beyond the limit of reason? I do not think so, I do not like the phrase "empty names".

There are names denoting intensional objects, including concepts, propositions, beliefs, thoughts, theories, and doctrines, etc. For instances, the concept "prime number," the proposition that no bachelor is married, Archimedes Principle, Law of Universal Gravitation, Social Contract Theory, and Pragmatism. These objects depend on our linguistic actions, and can be grasped by different human minds, so they are inter-subjective. There are fierce debates about the existence of such kind of objects. We often meet two extremes: one is held by Frege and Popper, admitting objective thoughts or knowledge as entities; and the other is by Quine, rejecting any intentional entities like meaning and proposition.

I call physical and parasitic objects "actual existence" or "reality". There are causal relations among actual objects and between actual objects and human beings. We can give the following criteria for "reality": all actual objects have causal effects on perceivable material bodies, and we explain the changes of these material bodies by means of such

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[5] In his paper "Nonexistence" (1998), Salmon acknowledges the existence of literary figures like Sherlock Holmes and mythical objects like Vulcan.

effects. For example, force, macro-objects like Earth and human beings, micro-objects including atoms and other basic particles, are related together and have mutual effects; thus we admit the reality of force and atoms. So, in my opinion, "the actual" include both concrete objects like physical individuals, and at least some parasitic objects, such as properties, relations, classes, and laws. Moreover, I call fictional and intensional objects "ideal objects", existing in humans' epistemic system articulated by language. Ideal objects can be shared by different people, and occur as the products of human intellect. In addition, there are delicate relations between ideal existence and actual existence. In some sense, ideal objects are the reconstruction of actual objects by cognitive subjects in a variety of ways. Even for the queerest and strangest creations of human thinking, we can still discern the shadows of actual objects on them. As Popper emphasizes, once ideal objects are created by people, they usually transcend their producers and get their own independent lives.

* * *

I support Russell's view that a logical and semantic theory may be tested by "its capacity for dealing with puzzles" (Russell 1905: 484). So, in order to test the effectiveness of my SHCD, we can examine how it reply to Kripke's arguments against descriptivism, including the epistemic, the semantic and the modal, and other logical puzzles about names, e.g. the puzzle about belief presented by Kripke (1979), and what differences there are between my SHCD and other versions of descriptivism, and between SHCD and referentialism in dealing with these matters. However, all these tasks are far beyond the space-limit of this paper, and also some of them have been done in my other published papers (Chen Bo 2011, 2012, 2013a, 2013b, 2015), at whom some reader, if interested, may have a look.

References

Bach, K. 1981. "What's in a Name?" *Australasian Journal of Philosophy* 59 (4): 371–386.

Braun, D. 2006. "Names and Natural Kind Terms." In Ernest Lepore and Barry Smith (eds.), *Handbook of Philosophy of Language*. Oxford and New York: Oxford University Press: 490–515.

Burge, T. 1979. "Individualism and the Mental." In P. French, T. Euhling and H. Wettstein (eds.), *Midwest Studies in Philosophy*. Minneapolis: University of Minnesota Press: 73–121.

Chen Bo. 2011. "Proper Names, Contingency *A Priori* and Necessity *A Posteriori*." *History and Philosophy of Logic* 32 (2): 119–138.

____2012. "Descriptivist Refutation of Kripke's Modal Argument and of Soames's Defense." *Theoria: A Swedish Journal of Philosophy* 79 (3): 225–260.

____2013a. "Kripke's Semantic Argument against Descriptivism Reconsidered." *Croatian Journal of Philosoph*y 13 (39): 421–445.

____2013b. "Kripke's Epistemic Argument against Descriptivism Revisited." *Journal of Chinese Philosoph*y 40 (3–4): 486–504.

____2015. "Social Constructivism of Language and Meaning." *Croatian Journal of Philosophy* 15 (43): 87–113.

Costa, C. F. 2011. "A Metadescriptivist Theory of Proper Names." *Ratio* 24 (3): 259–281.

Devitt, M. 1981. *Designation*. New York: Columbia University Press.

Devitt , M. & Sterelny, K. 1999. *Language and Reality*. Cambridge, MA: MIT Press, 2nd ed.

Donnellan, K. 1970. "Proper Names and Identifying Descriptions." *Syntheses* 21 (3–4): 335–58.

Dummett, M. 1973. *Frege: Philosophy of Language*. New York: Harper & Row; 2ⁿᵈ edition, 1981. The citation is from the second edition.

____1981. *The Interpretation of Frege's Philosophy*. London: Duckworth.

Evans, G. 1973. "The Causal Theory of Names." *Aristotelian Society Supplementary* 47: 187–208; reprinted in his *Collected Papers*. Oxford: Clarendon Press, 1985: 1–24. The reference number is of the reprinted.

____1982: *The Varieties of Reference*: Ed. John McDowell. Oxford: Oxford University Press.

Frege, G. 1892: "On *Sinn* and *Bedeutung*." Reprinted in Michael Beaney (ed.) *The Frege Reader*. Oxford: Blackwell Publishers, 1997: 151–171.

Forbes, G. 1990. "The Indispensability of *Sinn*." *Philosophical Review* 99 (4): 535–63.

Jackson, F. 1998. "Reference and Description Revisited." In J. E.Tomberlin (ed.), *Philosophical Perspectives* 12*: Language, Mind and Ontology*. Oxford: Blackwell.

____2010. *Language, Names, and Information*. West Sussex and Oxford: Wiley-Blackwell.

Kaplan, D. 1973. "Bob and Carol and Ted and Alice." In Hintikka, et al. (eds.) *Approach to Natural Langue*. Dodrecht and Boston: Reidel: 490–518.

Katz, J. J. 1990. "Has the Description Theory of Names Been Refuted?" In G. Boolos (ed.), *Meaning and Method: Essays in Honour of Hilary Putnam*. Cambridge: Cambridge University Press: 31–61.

Kneale, W. 1962. "Modality *de dicto* and *de re*." In E. Nagel, P. Suppes and A. Tarski (eds.), *Logic, Methodology and Philosophy of Science, Proceedings of the 1960 International Congress*. Stanford: Stanford University Press: 622–33.

Kripke, S. 1972/1980. "Naming and Necessity." In D. Davidson and G. Harman (eds.), *Semantics of Natural Language*. Dordrecht: D. Reidel Publishing Co.: 253–355. *Naming and Necessity*. Cambridge, Mass.: Harvard University Press, 1980.

____1979. "A Puzzle About Belief." In A. Margalit (ed), *Meaning and Use*. Dordrecht: Reidel: 239–283.

Kroon, F. 1987. "Causal Descriptivism." *Australasian Journal of Philosophy* 65 (1): 1–17.

_____2009. "Names, Plans, and Descriptions." In David Braddon-Mitchell and Robert Nola (eds.), *Conceptual Analysis and Philosophical Naturalism*. Cambridge, Mass.: MIT Press: 139–158.

Lewis, D. 1984. "Putnam's Paradox." *Australasian Journal of Philosophy* 62 (3): 221–36.

Lowe, E.J. 2007. "Does the Descriptivist/Anti-descriptivist Debate Have Any Philosophical Significance?" *Philosophical Books* 48 (1): 27–33.

Nelson, M. 2002. "Descriptivism Defended." *Noûs* 36 (3): 408–436.

Plantinga, A. 1978. "The Boethian Compromise." *American Philosophical Quarterly* 15 (2): 129–138.

Putnam, H. 1973. "Meaning and Reference." *The Journal of Philosophy* 70 (19): 699–711.

Quine, W. V. 1953. *From A Logical Point of View*. Cambridge, Mass.: Harvard University Press. Second edition, revised, 1961. New York: Harper Row, Publishers. The reference number is of 1961 version.

Russell, B. 1905. "On Denoting." *Mind* 14 (56): 479–493. Reprinted in his *Logic and Knowledge*. Ed. R. C. Marsh. London: George Allen and Unwin, 1956: 41–56.

——1911. "Knowledge by Acquaintance and by Description." In his *Mysticism and Logic and Other Essays*. London: Longmans, Green, and Co: 209–232.

_____1919. *Introduction to Mathematical Philosophy*. London: George Allen and Unwin.

Salmon, N. 2005. *Reference and Essence*, 2nd edition. Amherst, New York: Prometheus Books.

_____1986. *Frege's Puzzle*. Cambridge, Mass.: MIT Press.

_____1998. "Nonexistence." *Nous* 32 (3): 277–319.

Searle, J. 1958. "Proper Names." *Mind* 67 (266): 166–73.

_____1983. "Proper Names and Intentionality." In his *Intentionality: An Essay in the Philosophy of Mind*. Cambridge: Cambridge University Press: 231–261.

Soames, S. 1998. "The modal argument: wide scope and rigidified descriptions." *Noûs* 32 (1): 1–22.

_____2002. *Beyond Rigidity: The Unfinished Semantic Agenda of Naming and Necessity*. New York: Oxford University Press.

Sosa, D. 2001. "Rigidity in the Scope of Rusell's Theory." *Noûs* 35 (1): 1–38.

Stanley, J. 1997. "Names and Rigid Designation." In B. Hale and C. Wright (eds.), *A Companion to the Philosophy of Language*. Oxford: Blackwell Publishers: 555–585.

Strawson, P.F. 1950. "On Referring." *Mind* 59 (235): 320–344.

_____1959. *Individuals: An Essay in Descriptive Metaphysics*. London: Methuen.