

Entry title: Reference, philosophical theories
Author: Arthur Sullivan
Affiliation: Memorial University of Newfoundland
Email address: arthurs@mun.ca
Commissioned wordlength: 5000 (actual wordlength of main text: 5253)
Date of this draft: Oct 26, 2004

100-word abstract

§1 gives a preliminary explanation of the concept of reference. §2 is an analysis of descriptivism, the first systematic theory of reference. §3 begins with criticisms of descriptivism, and then details the development of the causal-historical theory of reference, which has been the orthodox view of reference since the 1970s. §4 is an exposition of three concepts that play major roles in recent debates—skepticism, naturalism, and minimalism about reference. §5 gives a brief summary of the article (including a short list of the theories surveyed and acronyms employed).

Main text

§1: What is reference?

Reference is the relation that obtains between a use of a linguistic expression and what it stands for or denotes. Philosophical theories of reference aim to explain this relation. They address such questions as: Can we specify necessary or sufficient conditions for a use of an expression to single out some particular referent? What makes it the case that a sequence of marks or noises refers to what it does? What grounds the conventional word-referent relations that we take for granted in the unreflective course of linguistic communication?

Reference is a fundamental concept within the sub-discipline of philosophical inquiry that studies language and thought. It is intimately tied to some other core concepts, such as meaning, truth, and representation, and it lies at the root of various general philosophical issues. To cite a few illustrative examples (some of which are discussed below): [1] there is a venerable tradition of using data about referring expressions to support metaphysical and epistemological conclusions about their referents, running at least from Aristotle's *Categories* through to many influential twentieth-century works; [2] the ancient problem of non-being—cf. Plato's *Parmenides* for a classic discussion, and Lewis (1986) for discussion of some contemporary variants—is in part a problem about reference to non-actual, or non-concrete, objects; [3] reference plays a central role in some of the most provocative and broad-ranging recent work in philosophy, including in particular the varieties of externalist arguments spurred by Kripke (1972) and Putnam (1975).

Proper names take center stage in debates about reference, as names are explicitly introduced to refer to specific individuals. Other much-discussed, basic cases of reference include uses of demonstratives (such as 'that duck') and indexical pronouns ('she') to refer to individuals which the speaker currently has in mind. Beyond these paradigm cases, though, there is not much uncontested ground. For example, there are longstanding debates over whether definite descriptions—expressions of the form 'the F'—should be classified as referring expressions (for discussion see DESCRIPTIONS).

In addition to such differences of opinion, there are also significant differences of usage. In its strictest sense, 'reference' applies only to the relation between singular terms (such as names and pronouns) and what they are used to single out. On this usage, 'reference' names the simplest sort of word-object relation; and whatever the semantic relations are, precisely, that are

involved in, say, general terms ('justice') or predicates ('is tall'), they are distinct from reference. In a broader sense of the term 'reference', any expression that makes a difference to the truth-conditions of sentences in which it occurs thereby has a referent—general terms refer to universals, predicates refer to properties, and so on. So, in the former, strict sense of the term, the theory of reference is more or less co-extensive with the study of the semantics of singular terms, while in the latter, broad sense, the business of the theory of reference is to assign semantic values to all independently meaningful expressions.

There are also differing views as to whether the term 'reference' just applies to language-world relations, or whether mental phenomena, such as concepts, should also be said to refer. On the one hand, some treat 'reference' as a two-place relation between a representation and what it represents, and so take the term to apply in kind to (at least) word-world and concept-world relations. In this inclusive sense, all thought or talk about something in particular involves reference to it. On the other hand, there are those who hold that there are important differences between referring to something and thinking of it, and so restrict to the term 'reference' to language-world relations. Their point is not so much to deny that the problems of word-reference and of concept-reference are intimately related—that is true on virtually any approach to the relation between language and thought. Rather, their point is that referring is something that speakers do in the course of performing speech acts, not something that words themselves do. These theorists hold that the fundamental notion in the theory of reference is *speaker's reference*—an irreducibly four-place relation involving a speaker, an expression, an audience, and a context.

For comprehensiveness, I will use the term 'reference' in a fairly broad, inclusive sense. For brevity, I will concentrate on uses of words, and I will treat reference as a two-place relation

between a use of a word and its referent. Given these preliminaries and assumptions, the central problem for a theory of reference is to come up with a true, informative account of what the 'R' stands for in the schema:

[Ref] 'X' refers to Y if 'X' stands in relation R to Y

§2: Descriptivism

2.1: Descriptivist theories of reference

Even though philosophical problems that turn on the notion of reference are more or less as old as philosophy, the development of theories of reference—of explicit attempts to articulate how it is that terms reach out to their referents—does not occur until the seminal semantic work of Frege and Russell. (Some might argue that the idea theorists of the early Modern period had a theory of reference—see IDEATIONAL THEORY OF MEANING for discussion.) Down different avenues, Frege and Russell both defend descriptivist views about reference, and their views dominated the scene for most of the twentieth century.

Descriptivists take the definite description ('the tallest woman in Mongolia', 'the millionth car to roll off this assembly line') as the paradigm for understanding the word-object referential link. The relation between descriptions and their referents is relatively straightforward: the term expresses an identifying condition, and designates whatever (if anything) uniquely satisfies that condition. In its most general sense, 'descriptivism' names the view that this is how reference works, that words refer to specific things by expressing an identifying condition which singles out the referent. For starters, then, let us characterize the core tenet of a descriptivist theory of reference as follows:

[D] 'X' refers to Y if Y satisfies the descriptive condition expressed by 'X'

There are more specific variants of descriptivism, that just apply to a distinctive category of terms, as opposed to making claims about reference in general. (For example, Lewis (1970) develops a descriptivist approach to theoretical terms.) The most common usage of ‘descriptivism’, though, specifically designates an approach to ordinary proper names. According to this view, names like ‘Aristotle’ or ‘Romania’ hook onto and express information about something in particular, akin to descriptions, by expressing a uniquely identifying condition and designating whatever satisfies the condition. This approach to ordinary proper names is the kernel in common among Frege’s and Russell’s otherwise rather divergent views about reference.

2.2: Frege’s and Russell’s versions of descriptivism

In their earliest work, Frege and Russell both espoused referentialist views of meaning, according to which the meaning of an expression is whatever it is to which the expression refers. However, they came to believe that referentialism must be rejected or modified, because two terms can have the same referent but differ in meaning.

Frege’s signature example concerns the names ‘Hesperus’ and ‘Phosphorus’.

According to the lore, the Evening Star (the brightest heavenly body in the evening sky at certain times of the year) was baptized ‘Hesperus’, while the Morning Star (the brightest body in the dawn sky at certain times) was baptized ‘Phosphorus’. With the growth of astronomical knowledge, it turns out that Hesperus *is* Phosphorus, and that is not a star at all but the planet Venus. Frege and Russell agree that pairs of sentences such as the following differ in meaning:

1a) Hesperus is Hesperus.

1b) Hesperus is Phosphorus.

2a) The ancient Babylonians believed that Hesperus is visible in the evening.

2b) The ancient Babylonians believed that Phosphorus is visible in the evening.

However, since these sentences are constructed from co-referential parts, the referentialist view is committed to treating them as synonymous.

Frege (1892) concludes that, in general, the meaning of a term is not just its referent. Instead, every significant linguistic expression is associated with a sense that determines its referent. The sense specifies the condition that must be met in order to be the referent, which clearly differ for the cases of 'Hesperus' and 'Phosphorus'. Co-referential expressions can have distinct senses, and expressions need not have an actual concrete referent to have a sense. Thus, on Frege's view:

[D, Frege] 'X' refers to Y if Y satisfies the sense 'X' expresses

This type of view is called 'mediated' or 'indirect' reference. The link between word and referent is *indirect* because there is something *mediating* the word-referent link. On this approach, any referential relation involves three terms: [1] a sign or symbol, [2] its sense, and [3] the referent picked out by the sense. (Note that there may be no actual entity to serve as term [3]—as in the case of, say, 'Santa Claus' or 'Pegasus'. However, such cases still fit with the general picture, as the names express a sense that specifies the condition that must be met to count as the referent.) (See SENSE AND REFERENCE for more on Frege's view.)

Russell rejects Frege's views, arguing that the postulation of intermediaries between word and referent creates rather than solves problems. Russell's view is premised on a firm distinction between the following two sorts of term: "(1) a *name*, which is a simple symbol, directly designating an individual which is its meaning, and having this meaning ... independently of all other words; (2) a *description*, which consists of several words, whose

meanings are already fixed, and from which results whatever is to be taken as the ‘meaning’ of the description” (1919: 283). (Following Russell (1918), I’ll call the former ‘logically proper names’.) Concerning logically proper names, Russell is a direct reference theorist, an unrepentant referentialist. Reference is *direct* in that there is no third term mediating the word-referent relation. The meaning of a logically proper name is its referent. (See DESCRIPTIONS, DIRECT REFERENCE for more on some of these points.)

However, for the reasons illustrated by (1a-b) and (2a-b) above, Russell argues that ordinary proper names (such as ‘Hesperus’ or ‘Aristotle’) belong in the category of descriptions, not of logically proper names. He holds that it is not possible for co-referential logically proper names to differ in meaning—“For the name itself is merely a means of pointing to the thing ... so that if one thing has two names, you make exactly the same assertion whichever of the two names you use ...” (1918: 245). In contrast, descriptions (such as ‘the inventor of bifocals’ and ‘the first Postmaster General of the US’) can differ in meaning while describing the same referent. Russell concludes that, since ordinary proper names are subject to the phenomena illustrated by (1a-b) and (2a-b), they are really just disguised or abbreviated descriptions—“Common words, even proper names, are usually really descriptions” (1911: 253). Thus, Russell also espouses a form of descriptivism:

[D, Russell] For any ordinary proper name ‘N’, ‘N’ refers to Y if Y satisfies the description ‘the F’ which the speaker has in mind in uttering ‘N’

2.3: *Differences between descriptivist views*

Despite the fact that Frege and Russell both espouse descriptivist accounts of ordinary names, their approaches to reference are quite far apart. On Russell’s direct reference view, there must

be some primitive cases where it is impossible to have sameness of referent but distinctness of meaning. He holds that we must be directly acquainted, and not just indirectly linked via descriptions, with the referents of some of our terms. (Otherwise "... we get the conclusion that we know nothing at all about ..." the referents of our terms, as Russell puts the point in a letter to Frege (reprinted in Frege 1980: 169).) So, apart from, and more fundamental than, his views about ordinary names, Russell espouses an acquaintance-based theory of reference:

[A] 'X' refers to Y if Y is the entity with which the speaker is acquainted that the speaker intends to single out by uttering 'X'

(It is crucial to Russell's view that acquaintance is *immediate*, in that for any co-referential pair 'X'-'X*', one cannot be acquainted with their referent and yet judge that X is distinct from X*.)

Russell holds that one can only use a logically proper name to refer to something to which one is directly acquainted (1918: 201). Further, even in the case of a description, one can only understand a description if one is acquainted with the meanings of the terms of which it is composed (1911: *passim*)—i.e., to understand the term 'the tallest woman in the room', one must be acquainted with the meanings of 'tallest', 'woman', 'room', and so on.

According to Russell, one needs to fall back on something like [A] in order to address questions that are subsequent to, and more fundamental than, a commitment to some version of [D]. In effect, [D, Russell] reduces the ordinary-naming-relation to the description-relation; but still, according to Russell, we do not yet have a theory of reference. In order to explain how 'the tallest woman in the room' expresses the specific identifying condition that it does, one needs an account of the referents of its primitive parts—i.e., a theory of reference for 'tallest', 'woman' and so on. Further, this account had better not just appeal to more descriptions, or else we are not

getting anywhere. So, Russell holds that [D] needs to be supplemented, if we are to have an account of how our utterances get hooked up to particular referents.

This problem never seems to have bothered Frege; and yet it is not clear whether this is an oversight. (Perhaps Frege's senses are relevantly different from Russell's descriptions; perhaps the moral is that a direct-reference-descriptivism needs to be supplemented by something like [A], whereas an indirect-reference-descriptivism does not.) In any case, it can be argued that [D] is not yet a theory of reference, because it presupposes, rather than explains or grounds, reference. To help oneself to some specific Y as that which satisfies the descriptive condition expressed by 'X', so this Russellian allegation goes, is to beg the very question that a theory of reference ought to answer.

No such worry applies to [A]. Acquaintance is a clear and distinct answer to the fundamental question of reference. However, it puts rather tight constraints on reference. By (1918), Russell's insistence that one must be immediately acquainted with something in order to refer to it led him to the view that only 'this', used to refer to current sense impressions, qualifies as a referring expression. Subsequent theorists have found this unacceptable, and so reject Russell's tight restrictions on reference.

For decades, work in the theory of reference consisted largely of the development of other variants of descriptivism (cf. Searle (1958), Strawson (1959)). However, some deep criticisms of descriptivism emerged in the 1970s, which led to another major wave of original work in the theory of reference.

§3: Anti-descriptivism and the causal-historical theory of reference

3.1: Problems with descriptivism

Kripke (1972) is the most thorough and influential critic of descriptivism, while Donnellan (1970), Putnam (1975), and Kaplan (1977) also develop important criticisms. Three widely discussed problems with descriptivist theories of names are known as the modal problem, the epistemic problem, and the semantic problem.

To illustrate the modal problem, take any proper name (say, 'Aristotle') along with descriptions that are true of its referent ('the most famous of Plato's students', or 'the teacher of Alexander'). Consider the differences in truth-conditions of the following:

- 1) Aristotle had brown hair.
- 2) The most famous of Plato's students had brown hair.

Even if (1)-(2) actually agree in truth-value, they need not have. Had things gone differently (and, say, Aristotle died young, or went into commerce), then the truth-values of (1)-(2) could vary independently—i.e., each might have been true while the other is false. A similar contrast could be drawn using virtually any name-description pair, and many take this phenomenon to indicate a deep difference between names and descriptions.

To illustrate the epistemic problem, if 'Aristotle' meant something like 'Plato's most famous student', then the following would be self-evident to anyone who understands it:

- 3) Aristotle is Plato's most famous student.

This consequence is false, as (3) is not at all trivial or self-evident. Again the point generalizes, having nothing to do with this specific example; and the putative upshot is that names like 'Aristotle' are not equivalent in meaning to any particular descriptions.

The semantic problem is that speakers may be competent to use a name even if the descriptive conditions they associate with the name does not suffice to single out the referent. That is, one might just think that 'Aristotle' names some famous Greek guy (or perhaps even

confuse Aristotle with Heraclitus), but yet nonetheless one could still refer to Aristotle by uttering ‘Aristotle’. Again, the conclusion seems to be that there are important differences between reference by name and the satisfaction of descriptive conditions. (See PROPER NAMES, RIGID DESIGNATION for discussion.)

Collectively, these three problems are widely thought to spell the end for descriptivist accounts of names. (This is not unanimous, though—cf. Searle (1983), Bach (1987) for descriptivist replies.) Kripke (1972) and Putnam (1975) develop similar problems for some varieties of general terms. Still other, related problems for descriptivism are raised by indexicals—even if satisfactory descriptivist accounts could be given for some terms, it is not plausible to hold that all reference is descriptive, as is shown by cases like ‘It is quiet here now’ (cf. Kaplan (1977)).

3.2: The causal-historical theory of reference

The critics of descriptivism put forth a different picture of reference, known as the causal-historical theory. Originally, the theory is only developed for proper names (cf. Donnellan (1970), Kripke (1972)) and natural kind terms (cf. Kripke (1972), Putnam (1975)). However, there have been attempts to fashion more general, comprehensive views of reference along these lines (for discussion see Stalnaker (1997), Devitt and Sterenly (1999)).

The crux of this picture is that certain expressions refer to certain things in virtue of a causal-historical relation between word and object, initially fixed during a dubbing or baptism and propagated from there to subsequent speakers, who implicitly defer to that initial dubbing in using the expression to refer. The view has it that descriptivists are wrong to demand that, in order to significantly use a term, speakers are required to have an identifying description of its

referent. Rather, once a word-referent convention is in place, all that is required in order to use the term to refer is a deferential intention to comply with the convention—i.e., the (implicit) intention to use ‘X’ to refer to what others have used ‘X’ to refer to. On this approach, reference depends not simply on what the speaker thinks, but also on certain factors external to the speaker’s head, factors pertaining to the speaker’s linguistic community and to the environment in which the expression in question evolved. The basic idea is:

[CHT] ‘X’ refers to Y if ‘X’ stands in the right sort of causal-historical relation to Y

(See CAUSAL THEORIES OF REFERENCE AND MEANING for more detail.)

Many of Russell’s successors have worked to loosen the tight restrictions on his notion of reference, by replacing acquaintance with something more broadly applicable and accessible. The [CHT] is a significant step forward in this direction. It is an externalist theory of reference. Internalist views of reference hold that reference is fully determined by the intrinsic content of the speaker’s head; externalists deny this. Externalists hold that two speakers could be in the same mental state and utter the same sounds, but nonetheless their utterances have different referents—because of differences in the histories of how the words reached them, or of differences in the environments to which they are causally connected. (For discussion see EXTERNALISM ABOUT CONTENT.)

Intuitively, reference is a relation involving (at least) a speaker, an expression, and a referent; externalists hold that it is a mistake to think that the nature of this relation could be fully characterized by analyzing only one term of this relation (i.e., the intrinsic content of the speaker’s head). Most theorists who articulated views about reference prior to the [CHT] (including Frege and Russell) are commonly characterized as internalists. In the wake of the [CHT], though, externalism about reference has become the norm. Most subsequent theorists

agree that the [CHT] makes a progressive step forward, in giving some of the weight in determining reference to the extrinsic relations in which speakers stand to other speakers and to their environments.

The [CHT] led to a resurgence of interest in the notion of direct reference. Many take the arguments against descriptivism to apply to all indirect reference theories, and so to make it plausible that the meaning of a term is just its referent. In addition, many see a complementary fit between the causal-historical chain of transmission story about reference and the direct reference approach to the question of meaning or content. (See DIRECT REFERENCE, PROPER NAMES for discussion.)

3.3: Problems with the causal-historical theory

There are many problems with the causal-historical theory of reference. For instance, Evans (1973) points out that some words have in fact changed their referents over time, even despite the deferential intention to preserve the convention in question, and argues that the [CHT] cannot account for this phenomenon. For another example, Searle (1983: 249) offers as a *reductio* of the theory the putative consequence that his utterances of ‘Aristotle’ might refer to a barstool in Hoboken “if that is what the causal chain happened to lead to”. To cope with these and other problems, many have sought to defend hybrid views, which aim to combine the strengths while avoiding the weaknesses of [D] and [CHT] (cf. Evans (1973, 1982)).

More generally, though, the [CHT] leaves important questions unaddressed. One problem concerns specifying exactly what should count as ‘the right sort of causal-historical relation’. As Stalnaker (1997: 543) puts it: “Causal connections are ubiquitous ... there are a great many individuals causally implicated in [any] use of [any] name A proper causal theory of

reference would have to specify just what sort of causal connection is necessary and sufficient for reference, and that is a notoriously difficult demand.” Kripke (1972: 96) is explicit that he is not offering a reductive analysis of reference: “When the name is ‘passed from link to link’, the receiver of the name must, I think, intend to use it with the same reference as the man from whom he heard it ...”, “[T]he preceding account hardly *eliminates* the notion of reference; on the contrary, it takes the notion of intending to use the same reference as a given.” (Cf. Kaplan’s (1990) discussion of the point that the intention to preserve reference is not itself a causal notion.) Here we see why the [CHT] is open to the allegation that it begs the key question in the theory of reference, by helping itself to successful reference. Critics allege that it boils down to the relatively toothless claim that: ‘X’ refers to Y if everyone else has used ‘X’ to refer to Y.

Of course, the [CHT]’s developers recognize the need for a separate story about what determines reference in the first link in a causal-historical chain of transmission. However, their remarks about baptisms or dubbings fall far short of a comprehensive account. (Cf. Devitt and Sterenly’s (1999) discussions of the ‘qua’-problem for a sense of some of the relevant unfinished business.) So, while most agree that the [CHT] provides a better picture than [D], it has yet to be fleshed out into a specific, comprehensive theory of reference.

§4: Skepticism, naturalism, and minimalism about reference

Some influential thinkers are skeptical about the prospects of coming up with a satisfactory theory of reference. Chomsky (1993), for instance, argues that the debates about reference are hopelessly flawed because they presuppose an implausible, unscientific conception of language. The precise import of Chomsky’s complaints is unclear, though. In particular, and explicitly,

they do not apply to the relatively concrete and tractable notion of speaker's reference (i.e., a four-place relation between speaker, expression, audience, and context).

Quine (1960) is perhaps the most influential skeptic about reference, arguing that there are no determinate facts about reference, no objective thing to be gotten right. Quine takes this conclusion (which he calls the 'inscrutability of reference') to be an instance of the general point that theories are underdetermined by evidence—i.e., for any finite set of data, there are an infinite number of distinct theories that are consistent with, and could purport to explain, the data. In the case of reference, the claim is that, for any finite set of evidence about a given speaker, there are a number of distinct word-referent assignments that are compatible with it. (To take one of Quine's central examples, no data will tell us whether a given speaker is using 'rabbit' to refer to rabbits, to time-slices of rabbits, to undetached rabbit parts, and so on.) There is no principled way of deciding between these competing assignments; and hence, there is no determinate fact of the matter as to what words are used to refer to. From here, Quine draws pessimistic conclusions about the scientific credentials of such notions as reference.

Many aspects of Quine's approach have been criticized. Still, much subsequent work on reference is addressed to Quine's underlying challenge of explaining reference within the ontology and methodology of the natural sciences. This is known as the demand for a naturalistic theory of reference, and a number of candidates were proposed in recent decades.

One such candidate is another causal theory of reference—also called the 'information-theoretic' approach (cf. Stampe (1977), Dretske (1981), Fodor (1990)). The general idea is that information is a species causal co-variance, that for a word 'X' to mean something Y is for tokens of 'X' to reliably indicate Y. As applied to reference, the view comes to something like:

[CT] 'X' refers to Y if Y tends to cause or bring about tokens of 'X'

However, in addition to inheriting some of the general worries about [CHT], [CT] is subject to counterexamples. For almost any word-referent pair 'X'-Y, it is not difficult to find conditions in which things distinct from Y tend to cause 'X's, and conditions in which Y does not tend to cause 'X's. Despite ingenious work to patch things up, the consensus seems to be that this type of causal theory can only succeed in delivering an account of reference that accommodates our intuitions about the normativity and determinacy of reference by smuggling in intentional, semantic notions, and thus by helping itself to reference and forgoing naturalism. (For discussion see Loewer (1997), CAUSAL THEORIES OF REFERENCE AND MEANING.)

Another naturalistic approach to reference is the teleological theory, whose most thorough proponent is Millikan (1984). The idea here is that:

[T] 'X' refers to Y if it is the function of 'X's to indicate Y

Here 'function' is a familiar notion from evolutionary biology—roughly, X's function is what X does, that explains why X exists. However, this theory, too, has serious troubles accounting for the normativity and determinacy of reference (cf. Fodor (1990), Loewer (1997)). While teleological considerations afford a compelling story about why agents like us have developed the capacity to refer, it is a long way from there to specifying necessary or sufficient conditions for determining the referent of a given use of a word.

Another reaction to this long and sordid history is the minimalist (or 'deflationary') approach (cf. Horwich (1998), Field (2001)). Minimalists hold that reference is simple, not reducible to anything more fundamental. (Minimalism about reference is often conjoined with minimalism about truth—see TRUTH for discussion.) Our meaning what we do by 'refers' consists entirely in our inclination to accept disquotational schemas—'Aristotle' refers to

Aristotle, 'Romania' refers to Romania, and so on—and there is nothing else to be said, by way of necessary or sufficient conditions. Rather, all that should be said is something like:

[M] 'X' refers to X

[M] is of course no definition: reference is not reduced to, or explained in terms of, anything more basic. However, one conclusion that is fairly well supported by the failed attempts to define reference is that such a reductive analysis may well be unattainable. To some extent, it is a matter of taste whether one classifies minimalist views as theories of reference or as a variety of skepticism about reference.

Even if there is something right about the minimalist approach, though, [M] hardly seems to illuminate the content of the concept 'reference'. Further, there are specific objections to minimalism (cf. Loar (1995), Loewer (forthcoming)). For example, it is not clear that there could be a satisfactory minimalist account of indexical expressions. (That is, the disquotational line on 'Aristotle' and 'Romania' does not carry over smoothly to 'I' or 'here'.) Since these are core, basic cases of reference, this might point to something deeply suspect about minimalist views.

§5: Summary

The fundamental problem in the theory of reference (given our preliminary assumptions) is to come up with a true, informative account of what the 'R' stands for in the schema:

[Ref] 'X' refers to Y if 'X' stands in relation R to Y

Work in the theory of reference largely consists of disputes between two camps, descriptivists and causal-historical theorists:

[D] 'X' refers to Y if Y satisfies the descriptive condition expressed by 'X'

[CHT] 'X' refers to Y if 'X' stands in the right sort of causal-historical relation to Y

Descriptivists tend to be internalists, and descriptive reference is mediated or indirect, whereas the causal-historical theory is externalist and more friendly to direct reference. As we have seen, though, while [D] and [CHT] are major players in the semantics of proper names, both are—albeit from different directions—open to the allegation that they presuppose rather than explain or ground reference.

Bracketing off reference via descriptive conditions and reference via deference to causal-historical chains (as well as the hybrid views), there are at least four other basic answers to the fundamental question of reference (respectively, acquaintance, causation, teleology, and minimalism):

[A] ‘X’ refers to Y if Y is the entity with which the speaker is acquainted that the speaker intends to single out by uttering ‘X’

[CT] ‘X’ refers to Y if Y tends to cause or bring about tokens of ‘X’

[T] ‘X’ refers to Y if it is the function of ‘X’s to indicate Y

[M] ‘X’ refers to X

The problem with Russell’s version of [A] is that it is incompatible with the platitude that reference is a tool used in the intersubjective communication of information—i.e., acquaintance is a private subjective affair, but reference is not. However, there is a recent resurgence of interest in the notion of acquaintance, and it promises to avoid some of these problems. [CT] and [T] have certainly not been ruled out, but counterexamples have yet to be satisfactorily addressed. (Note that it is indicative that there are two causal theories on this short-list—most philosophers concede that causal relations between speakers and their environments have to play a fundamental role in a satisfactory theory of reference.) Proponents of [M] also have some

specific problems to account for, over and above its general tendency to elicit the atavistic impulse that the question of reference has not really been addressed.

Much philosophical work continues on these problems, and these debates are not in danger of conclusive resolution any time soon.

Bibliography

Bach, K. (1987) *Thought and reference*. Oxford: Oxford University Press.

Chomsky, N. (1993) *Language and thought*. Wakefield: Moyer Bell.

Devitt, M., & Sterenly, K. (1999) *Language and reality* (2nd edn.). Cambridge MA: MIT Press.

Donnellan, K. (1970) 'Proper names and identifying descriptions'. *Synthese* 21, 256-80.

Dretske, F. (1981) *Knowledge and the flow of information*. Cambridge MA: MIT Press.

Evans, G. (1973) 'The causal theory of names'. *Proceedings of the Aristotelian Society* 47, 187-208.

Evans, G. (1982) *The varieties of reference*. Oxford: Oxford University Press.

Field, H. (2001) *Truth and the absence of fact*. Oxford: Oxford University Press.

Fodor, J. (1990) *'A theory of content' and other essays*. Cambridge MA: MIT Press.

Frege, G. (1892) 'On sense and reference'. In Sullivan, A. (ed.) *Logicism and the philosophy of language*. Peterborough: Broadview, 2003. 175-92.

Frege, G. (1980) *Philosophical and mathematical correspondence*. H. Kaal (trns.). Oxford: Blackwell.

Horwich, P. (1998) *Meaning*. Oxford: Oxford University Press.

Kaplan, D. (1977) 'Demonstratives'. In Almog, J., Perry, J. & Wettstein, H. (eds.) (1989)

- Themes from Kaplan*. Oxford: Oxford University Press. 481-564.
- Kaplan, D. (1990) 'Words'. *Proceedings of the Aristotelian Society* 64, 93-120.
- Kripke (1972) *Naming and necessity*. Cambridge MA: Harvard University Press.
- Lewis, D. (1970) 'How to define theoretical terms'. *Journal of Philosophy* 67, 427-46.
- Lewis, D. (1986) *On the plurality of worlds*. Oxford: Blackwell.
- Loar, B. (1995) 'Reference from the first-person perspective'. In Villanueva, E. (ed.) *Contents*.
Astacadero: Ridgeview. 55-76.
- Loewer, B. (1997) 'A guide to naturalizing semantics'. In Hale, B. & Wright, C. (eds.) *A
companion to the philosophy of language*. Oxford: Blackwell. 108-26.
- Loewer, B. (forthcoming) Comments on Field's 'Truth in the absence of fact'. *Philosophical
Studies*.
- Millikan, R. (1984) *Language, thought, and other biological categories*. Cambridge MA: MIT
Press.
- Putnam, H. (1975) 'The meaning of 'meaning''. In Gunderson, K. (ed.) *Mind, Language, and
Reality*. Cambridge: Cambridge University Press. 131-93.
- Quine, W.V. (1960) *Word and Object*. Cambridge MA: MIT Press.
- Russell, B. (1911) 'Knowledge by acquaintance and knowledge by description'. In Sullivan, A.
(ed.) *Logicism and the philosophy of language*. Peterborough: Broadview, 2003. 249-62.
- Russell, B. (1918) *The philosophy of logical atomism*. In Marsh, R.C. (ed.). *Logic and
Knowledge*. London: Unwin Hyman, 1956.
- Russell, B. (1919) 'Descriptions'. In Sullivan, A. (ed.) *Logicism and the philosophy of language*.
Peterborough: Broadview, 2003. 279-87.
- Searle, J. (1958) 'Proper names'. *Mind* 67, 166-73.

Searle, J. (1983) *Intentionality*. Cambridge: Cambridge University Press.

Stalnaker, R. (1997) 'Reference and necessity'. In Hale, B. & Wright, C. (eds.) *A companion to the philosophy of language*. Oxford: Blackwell. 534-53.

Stampe, D. (1977) 'Toward a causal theory of linguistic representation'. *Midwest Studies in Philosophy* 2, 42-63.

Strawson, P. (1959) *Individuals*. London: Methuen.

Keywords

Demonstratives, descriptions, indexicals, meaning, proper names, pronouns, representation, semantics, sense, singular terms, truth.

Other relevant entries in the encyclopedia

Fundamentals – Metaphysics and language, Philosophy of language, Proper names, Representation; Key concepts, terms, and tools – Causal theories of reference and meaning, Descriptions, Direct reference, Empty names, Externalism about content, Ideational theory of meaning, Rigid designation, Sense and reference, Truth.