Demonstratives in Philosophy and Linguistics

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Abstract

Demonstrative noun phrases (e.g., *that guy*, *this*) are of interest to philosophers of language and semanticists because they are sensitive to demonstrations or speaker intentions. The interpretation of a demonstrative therefore sheds light on the role of the context in natural language semantics. This survey reviews two types of approaches to demonstratives: Kaplan’s *direct reference* treatment of demonstratives and other indexicals, and recent challenges to Kaplan’s approach that focus on less obviously context-sensitive uses of demonstratives. The survey then covers selected research on demonstratives in linguistics. This research offers new empirical puzzles and contrasting theoretical approaches to demonstratives.

Demonstrative noun phrases in English are noun phrases containing *this*, *that*, *these*, or *those*, as shown in (1). English also has two demonstrative degree modifiers, as in (2). For the purposes of this short survey we will set aside the degree words, but see Maclaran for discussion. Note also that the demonstrative pronoun *that* in (1a) should not be confused with the homophonous complementizer in (3).

(1) a. I like *this* better than *that*.
    b. I like *this painting* better than *that painting*.
    c. I like *those* better than *these*.
    d. I like *those paintings* better than *these paintings*.

(2) a. Johnny is *this tall* already!
    b. It’s hard to believe that Johnny is *that tall*.

(3) Fred said *that* it was raining.

Demonstrative pronouns are also known as *simple demonstratives*, while demonstrative noun phrases with nominal content, as in (1b), are known as *complex demonstratives*.

All known languages have demonstratives of some kind, though not necessarily with the same syntactic structure as English demonstrative noun phrases (Diessel). The demonstrative noun phrases of a language are those noun phrases with a characteristic use in which the speaker gestures towards, or demonstrates, the intended referent. It is this special sensitivity to extra-linguistic gestures that has captured the most attention from philosophers of language and natural language semanticists.
The purpose of this survey is to review the highlights of research on demonstratives in philosophy and linguistics, and to suggest some potential starting points for new research on demonstratives. Readers who are primarily interested in an introduction to philosophical work on demonstratives will prefer to concentrate on sections 1 and 2. Researchers looking for new debates about demonstratives will also want to turn to the final two sections, in which I discuss two lines of research in linguistics that to date have attracted less attention in the philosophical literature. I believe that these lines of research contribute not only new empirical results, but suggest perspectives on the meaning and use of demonstratives that contrast with the received philosophical view in interesting ways.

**Demonstratives as Indexicals**

The core uses of demonstratives are *indexicals*, showing a special sensitivity to the context of utterance. Other indexicals include first and second person pronouns, *here*, and *now*. Notice that (4)

(4) I am here now.

appears to be used to make a different assertion every time it is uttered. So if I utter (4) at noon on January 1, 2008 in Rochester, NY, then I have (most saliently) asserted that Lynsey Wolter is in Rochester at noon on January 1, 2008. If Gordon Brown utters (4) on January 2 in London, then he has asserted that Gordon Brown is in London on January 2. And so on. This suggests that the referent of *I* is the speaker (or the agent) of the context, that that referent of *here* is the location of the context, and that the referent of *now* is the time of the context, i.e., the contribution of each of these words is determined by the context. Note that one can also assume that the proposition expressed by (4) is determined by the context, but this assumption is not necessary. One possibility is that the denotation of *I*, *here*, and *now*, and by extension therefore also the proposition expressed by (4), is determined by the context (see, e.g., Schlenker for a concrete proposal consistent with this idea). Another possibility is that (4) expresses an open proposition and that the context subsequently sets the values of the free variables in this proposition (see, e.g., Bach, ‘On Referring and Not Referring’, for comments consistent with this idea).

In his classic work on demonstratives and indexicals, Kaplan (‘Demonstratives’) introduces a distinction between *character* and *content* that allows us to capture our intuitions about the interpretation of indexicals like *I*. When implemented in a possible-worlds framework, the *content* of a sentence in a context is a function from worlds of evaluation to truth values, i.e., what might be called the *sense* of the sentence in Fregean terms. The *character* of a sentence is a function from contexts to contents. The theory is compositional, with the constituents of a sentence each contributing a character and a content. What is special about indexical
noun phrases is that their content in a context is simply an entity; for example, the content of *I* as uttered in (4) by Gordon Brown is Gordon Brown. The *character* of *I* is the function from a context to its speaker (or perhaps its agent).

Turning back to demonstratives, we find that their interpretation is intuitively similar to indexicals like *I*. A speaker who utters a demonstrative often gestures at an entity (the *demonstratum*) at the same time. While other noun phrases also sometimes co-occur with extra-linguistic gestures, demonstratives (and so-called demonstrative uses of personal pronouns) are unique in that their reference may be fixed by the gesture. For example, suppose that (5) and (6) are uttered in an art gallery, and that the speaker gestures towards one painting. In this context, (5) is felicitous, and the apparent referent of the demonstrative is the demonstratum, while (6) is infelicitous.

(5) I like that painting.
(6) I like the painting.

Intuitively, the demonstrative in (5) appears to depend on the speaker’s demonstration in the same way that a first person pronoun depends on the speaker. Kaplan (‘Demonstratives’) pursues this idea, suggesting that a demonstration determines the reference for a demonstrative in a context; Reimer, among others, also argues for this approach. However, in subsequent work, Kaplan (‘Afterthoughts’) suggests an alternative: that demonstratives are actually sensitive to speakers’ referential intentions, rather than to demonstrations; see also, e.g., Bach (‘Intentions and Demonstrations’) for discussion. A further complication is that intention-based theories of demonstratives differ with respect to what kinds of intentions are relevant to demonstratives. For example, Bach’s theory suggests that the audience may have a role in identifying the relevant intentions, while Kaplan’s theory suggests that the relevant intentions are entirely determined by the speaker. Abstracting away from these complications, the central idea of Kaplan’s proposal is that the character of a demonstrative is a function from contexts to entities that makes crucial reference to a demonstration or speaker intention, while the content of a demonstrative is simply the entity returned by this function. To sum up what we have seen so far, distinguishing character from content allows us to distinguish between indexicals – those expressions whose interpretation depends on a parameter of the context – and non-indexicals – those expressions whose interpretation does not depend on a parameter of the context and whose characters are therefore constant functions.

The discussion above omits one important complication. Though it is generally taken for granted that the referent of *I* is the speaker or the agent, the referent of *here* is the place of the utterance, and the referent of *this* or *that* is the demonstratum of the speaker’s demonstration, Nunberg has pointed out a serious challenge to this simple and appealing approach. Nunberg’s argument is based in part on examples like (7–9) below.
Condemned prisoner: I am traditionally allowed to order whatever I like for my last meal (20).

(Pointing at two sample plates in a china shop): These are over at the warehouse, but those I have in stock here (24).

(Pointing at the Speaker of the House): That representative is usually of a different party from the president (28).

Notice that (7) does not describe a tradition pertaining to the particular person who speaks, but rather a tradition that applies to condemned prisoners in general. Likewise, the speaker of (8) demonstrates two (singular) plates but makes an assertion about two sets or kinds of plates that are exemplified by the demonstrata. And (9) is most plausibly understood as a comment about the political affiliation of whoever is the U.S. Speaker of the House, rather than a claim that the particular demonstrated representative changes his or her party affiliation in response to the identity of the President.

In each of these examples, we have clear intuitions that the sentence is used to make a claim about an individual or kind which stands in a salient relation to the demonstratum or contextual index. Nunberg therefore argues that indexicals are sensitive to contextual indices, and that the referent of a demonstrative or other indexical is an entity that stands in a salient relation to the index. That is, pragmatics may play an additional role in determining the apparent referent of an indexical, by determining the nature of the relation between the index and the referent. In many cases the referent is the value of the index, but, on Nunberg's view, (7–9) show that this is not always the case.

Demonstratives and other indexicals are also famous for their interaction, or lack thereof, with scope-taking operators. In contexts where other noun phrases, such as definite descriptions, would interact with scope-taking operators to give rise to two truth-conditionally distinct readings, demonstratives systematically fail to give rise to such readings. One classic example making this point, due to Kaplan, is shown in (10). Intuitively, (10a) has a true reading on which the denotation of the person I'd be pointing at co-varies with the worlds introduced by the modal, i.e., the definite description takes narrow scope under the modal. This reading is lacking in the intuitively false (10b), showing that the interpretation of the demonstrative that person does not depend in the same way on the worlds introduced by the modal.

(10) (pointing at John) If John and Mary switched places . . .
   a. . . . the person I'd be pointing at would be a woman.
   b. . . . that person would be a woman.

In principle, the interpretation of (10b) could be explained in two ways. One possibility is that demonstratives, for some reason, take wide scope only. Kaplan takes a different approach, arguing instead that the interpretation of (10b) can be tied to the nature of indexical meaning. Recall that the
content of a demonstrative on the direct reference theory is simply an entity. The truth-conditional ambiguity of (10a) arises when the modal and the descriptive content of the definite description interact at the level of the content. Because the contribution of the demonstrative to the content is an entity, no such ambiguity can arise in (10b). See Kaplan for additional discussion; it should be noted that the arguments for the direct reference theory also draw on considerations about the interpretation of demonstratives in sentences without scope-taking operators.

In a possible-worlds framework, the direct reference theory of demonstratives and indexicals can be related to Kripke’s theory of proper names as rigid designators. According to Kripke, a rigid designator denotes the same entity in every possible world (48). Working with this definition, it follows that directly referential expressions are rigid designators. Not all rigid designators need be directly referential, as the definition of rigid designation does not mention the context, but direct reference can be viewed as one possible reason for rigidity, and Kaplan furthermore suggests that proper names are directly referential (‘Demonstratives’ 497). Some caution is necessary before we collapse the two theories completely, however: in ‘Afterthoughts’, reporting on personal correspondence with Kripke, Kaplan notes that he and Kripke appear to have different assumptions about the denotations of names vs. indexicals in worlds where the intended referent doesn’t exist (569–71), and that directly referential terms may not in fact be rigid designators in Kripke’s preferred sense of the latter term.

In addition to their sensitivity to demonstrations, the English proximal demonstratives *this* and *these* indicate that the demonstratum is close to the speaker, while *that* and *those* are used when the demonstratum is far away from the speaker or when the distance from the speaker is irrelevant, and are arguably unmarked for distance (Lyons). In other languages, demonstrative systems encode a variety of spatial contrasts (see Diessel for a survey). The status of the locative information associated with demonstratives is perhaps not as well understood as one would like. It is arguably not part of the content of a demonstrative in Kaplan’s sense, for the same reason that demonstrations are not part of the content: locative information does not interact with scope-taking operators to give rise to truth-conditionally distinct readings. The locative information is semantically relevant, though, in that it can resolve the reference of a use of a demonstrative. Roberts and Wolter both assume without discussion that the proximity condition on *this* and *these* is a presupposition, but in principle other treatments (as a conventional implicature, for example, or a purely pragmatic condition on use) are possible.

The spatial contrasts indicated by demonstratives are straightforward to characterize when the demonstratives are used to refer to entities that are physically present, but these contrasts become more challenging to characterize when demonstratives are used in other contexts. Fillmore has
argued convincingly that the difference between *this* and *that*, and related contrasts in other languages, reflect proximity in all uses, and that ‘proximity’ may be extended to dimensions other than physical distance. For example, the fact that proximal demonstratives but not distal demonstratives have a ‘cataphoric’ (backwards anaphoric) use, as shown in (11), can be understood as reflecting a metaphorical extension of ‘proximity’ into the discourse context: at the utterance of *these candidates*, the speaker but not the addressee knows the identity of the candidates, and privileged information can be seen as ‘proximal’ to the participant who has access to it.

(11) There are still these candidates to interview: Lugton, Barnes, Airey, and Foster (Huddleston and Pullum 1509).

Much of the philosophical research on demonstratives subsequent to Kaplan’s work has focused on complex demonstratives, and in particular, on the contribution of the nominal complement of demonstrative determiners (e.g., *painting* in (1b)). Kaplan himself (‘Demonstratives’ 524–7) argues that the direct reference theory applies to complex demonstratives as well as simple demonstratives. This suggests that the contribution of the nominal complement, like other aspects of demonstrative meaning, plays a role at the level of the character rather than the content. This idea has been developed in detail by Braun (‘Structured Characters and Complex Demonstratives’; ‘Complex Demonstratives and Their Singular Contents’), Borg, and Salmon (‘Demonstrating and Necessity’). Glanzberg and Siegel have argued that the nominal complement of a complex demonstrative plays a ‘policing’ or presuppositional role that is consistent with the direct reference approach. In addition, Davies pursues an approach to complex demonstratives that converges with Kaplan’s direct reference theory. Lepore and Ludwig depart from this hypothesis, arguing that the nominal complement of a complex demonstrative *does* interact with the compositional semantics at the level of the content; this leads them to a hybrid theory in which demonstrative pronouns and determiners refer directly, in effect contributing to the character, while the nominal complement of a demonstrative contributes to the content. Other researchers interested in the interpretation of complex demonstratives have challenged the direct reference theory, arguing that demonstratives are not as uniformly context-sensitive as Kaplan’s analysis suggests. We turn next to an overview of recent challenges to the Kaplanian theory of demonstratives.

*Apparently Non-Indexical Demonstratives*

Kaplan hints (‘Demonstratives’ 489) that demonstratives are lexically ambiguous: on the one hand are the indexical demonstratives, which refer directly, and on the other hand are other demonstrative noun phrases, such as anaphoric demonstratives, which the direct reference theory is not intended to account for and which may simply have a distinct meaning.
In recent years, some researchers have become more ambitious, aiming instead for a theory that accounts for all uses of demonstrative noun phrases. Once we make this move, we quickly encounter demonstratives that are not as clearly indexical and which appear to have quantifier- or definite-description-like narrow-scope readings under various operators. Representative examples of demonstrative noun phrases with such readings are shown in (12) to (14) below. Note that the interpretations of the demonstratives in (12) and (13) depend on the nominal quantifiers every dog and every father respectively, while the interpretation of the demonstrative in (14), on the most salient reading, depends on the worlds introduced by possible.

(12) Every dog in the neighborhood, even the meanest, has an owner who thinks that that dog is a sweetie. (Roberts, ex. (11))
(13) Every father dreads that moment when his oldest child leaves home. (King, Complex Demonstratives 10)
(14) It is possible that that last flower you picked could have been a peony instead of a rose. (cf. King, Complex Demonstratives 90)

Although seemingly non-rigid demonstratives have attracted considerable attention, there is not yet consensus about which demonstrative noun phrases allow non-rigid interpretations and which do not. King (Complex Demonstratives) argues that any demonstrative noun phrase can in principle interact with any scope-taking operator to give rise to truth-conditionally distinct readings, though sometimes some contextual support is required to make the relevant readings salient. I have argued in my own work that the scopal possibilities of demonstratives and definite descriptions are constrained by their use, with use to refer to entities in the physical context of utterance inducing rigidity. At the other end of the spectrum, Braun (‘Problems for a Quantificational Theory of Complex Demonstratives’) argues that a number of King’s examples do not in fact have two truth-conditionally distinct readings, casting doubt on the argument that demonstratives can ever give rise to such ambiguity; Salmon (‘The Theory of Bondage’) and Altschuler, among others, also challenge some of King’s specific claims about the scopal possibilities and (non-)rigidity of certain uses of demonstratives. Braun furthermore suggests the possibility that some of our intuitions about scope are colored by propositions that are pragmatically conveyed by the utterance of a sentence but which do not correspond to the literal content of that sentence. (See also King’s and Braun’s replies to one another, and Salmon’s ‘That F’, in the same journal for further discussion.) One open question, then, is simply what the facts are in this area, and how we should best diagnose the readings of sentences containing demonstratives and scope-taking operators.

Those researchers who agree that some demonstratives are non-rigid are, of course, led to reject Kaplan’s treatment of demonstratives as having their reference fixed at the level of the character, and must instead assume
that the semantic contributions of (complex) demonstratives and non-indexical constituents are composed at the same level. Researchers who take this approach can be described as pursuing ‘indirect reference’ theories of demonstratives (as contrasting with ‘direct reference’; see Roberts for discussion of this term). The indirect reference theories that have been put forward differ in part with respect to how the meaning of a demonstrative is formally implemented. King analyzes demonstratives as quantifiers. In my own work I have taken a Fregean approach to demonstratives, analyzing them as expressions of type <s,e>; see also Elbourne. Finally, Roberts adopts a DRT-style analysis of demonstratives in which demonstrative noun phrases contribute conditions on the interpretation of discourse referents.

Even though the various indirect reference theories depend on slightly different assumptions about the facts, they have a common goal: to predict on principled grounds when the interpretation of a demonstrative interacts with other elements in the sentence and when they display ‘direct reference effects’, i.e., apparently fail to interact with other elements of the sentence in the same way that other noun phrases do. After all, Kaplan’s original observations about stubbornly non-ambiguous demonstratives must also be explained. The three indirect reference accounts tie the scopal possibilities of demonstratives to different mechanisms. For King, speaker intentions continue to play an important role. King proposes that demonstratives express quantifiers with two extra arguments whose values are determined by speaker intentions: a property argument and a property of properties such as jointly instantiated or jointly instantiated in world w at time t. When the latter argument makes reference to the world and time of the context, it has a rigidifying effect, causing the demonstrative to behave as if it were referring directly. For Roberts, demonstrations continue to play an important role, but her theory depends on two significant theoretical assumptions that differ from other indirect reference theories. First, given the DRT model, Roberts takes demonstratives to denote discourse referents rather than entities. Second, she argues that a demonstration may have as its demonstratum either an entity or a previously mentioned linguistic constituent. In an example like (10b), for Roberts, the demonstration associated with the demonstrative picks out an entity, and the referent of the demonstrative is a discourse referent whose value is the demonstratum; the analysis thus retains much of the Kaplanian view. Roberts argues that other interpretations of demonstratives, such as that in (12), come about when the demonstration associated with a demonstrative picks out a linguistic constituent and the referent of the demonstrative is a discourse referent that depends in some way on the interpretation of this more abstract ‘demonstration’. Finally, I have argued that the scopal possibilities of demonstratives are tied to a different pragmatic factor, namely whether the demonstrative is used to refer to something in the context, to depend on a previously mentioned referring expression, or to refer on the basis...
of the nominal content; I have further argued that deictic use induces a ‘direct reference effect’ for definite descriptions as well as demonstratives.

In short, although demonstratives have been intensively studied, the most basic questions – how exactly do demonstratives interact with the compositional semantics, what semantic type is their meaning, to what extent are demonstratives similar to uncontroversial indexicals like the first person pronoun, to what extent are demonstratives similar to proper names – remain open for debate.

We turn next to work on demonstratives that has received less attention in the philosophical literature. The next two sections should be read as case studies rather than comprehensive surveys of the field. My hope is that by considering quite different empirical puzzles and theoretical perspectives, researchers will find new and productive angles to bring back to the central debates in philosophy.

**Demonstratives in Copular Sentences**

The interpretation of simple demonstratives presents special complexities in copular sentences. Some of these complexities were noticed early on by Higgins, who treats copular sentences with demonstrative noun phrases in pre-copular position (as in (15)) as the special class of *identificational sentences*. In addition to this special class of copular sentences, Higgins distinguishes three other types of copular sentences: predicational sentences like (16), identity sentences like (17), and specificational sentences like (18).4 Intuitively, a specificational sentence is interpreted as if its pre-copular phrase were the heading of a list and the post-copular phrase were the single item on that list.

(15) That is Stella.
(16) John is a doctor.
(17) Hesperus is Phosphorus.
(18) What I don’t like about John is his tie.

Higgins takes identificational sentences to be a special class of copular sentences in part because of their syntactic structure: identificational sentences allow both definite and indefinite noun phrases in post-copular position, in contrast with predicational sentences on the one hand, which allow a broader range of post-copular phrases, and identity and specificational sentences on the other, in which the post-copular phrase is consistently definite, e.g., a definite description or a name.5 Higgins also observes that identificational sentences are uttered in a characteristic type of context, one in which the speaker is introducing or identifying an entity. For example, (15) is typically uttered as an introduction, while a sentence like (19) would be uttered in a context where the demonstratum is hard to identify, either because it is hard to perceive, or because the addressee has not encountered such an entity before.
(19) That is an emu.

In addition, identificational sentences are one of only two constructions in which a simple demonstrative in English appears to refer to a human (Higgins; Maclaran). The other construction involves predicates of perceptual similarity (Carlson), as in (20). Compare these with the utterly infelicitous (21), which contains a simple demonstrative whose intended referent is a human.

(20) That looks/sounds like Stella.
(21) (Pointing at Stella) *I had lunch with that.

One still unanswered question, then, is why demonstrative pronouns in English ordinarily do not refer to humans, and why this restriction is lifted in copular sentences and reports of perceptual similarity.

Higgins does not develop an analysis of identificational sentences, and in recent years, there has been a burst of new interest in the interpretation of copular sentences with pre-copular demonstratives, especially those with pre-copular simple demonstratives. This line of work addresses two big questions: (1) What is the interpretation of identificational sentences, and what contribution is made by the demonstrative? (2) Is it justified to treat copular sentences with pre-copular demonstratives as a separate class, or can these sentences be incorporated into an analysis of a larger class of copular sentences?

Mikkelsen argues that copular sentences with pre-copular simple demonstratives are in fact a special case of specificational sentences (cf. (18)), which she treats as inverted predicational sentences in which the pre-copular phrase contributes an extension of type <e,t> and the post-copular phrase contributes an extension of type <e>. Thus, for Mikkelsen, the intension of the pre-copular phrase in (15) or (19) above is a property. She points out that simple demonstratives have property interpretations elsewhere, as illustrated in (22), where that is interpreted as a property anaphor whose antecedent is beautiful.6

(22) They said that Sheila was beautiful and she is that. (Mikkelsen, quoting Ross)

In a sentence like (15), according to Mikkelsen, the pre-copular demonstrative expresses a property, and its interpretation may be linked either to an explicit property-denoting phrase or to a salient property in the context. For example, if (15) is uttered after the interlocutors hear a knock on the door, that may be interpreted as the property knocking on the door, and (15) may be paraphrased as (23) below. By drawing an explicit parallel between the interpretation of (15) and (23), Mikkelsen’s analysis revives the ‘truncated cleft’ analysis of copular sentences with pre-copular simple demonstratives, an approach which dates back at least to Poutsma.

(23) That is Stella who is knocking on the door.
One advantage of Mikkelsen’s approach is that it leads to a straightforward answer to the puzzle of why simple demonstratives appear to refer to humans only in sentences like these: the demonstrative in fact does not refer to a human, and a general ‘non-human’ condition on simple demonstratives can be maintained. However, Mikkelsen’s analysis is controversial. It has been challenged by Birner, Kaplan and Ward, who point out that although demonstrative pronouns can serve as property anaphors with an explicit antecedent, it is less clear that a demonstrative pronoun can denote a property that is merely salient in the context. That is, (24) cannot be interpreted as (25) in a context where we observe Stella knocking on the door.

(24) Stella is that.
(25) Stella is knocking on the door.

Mikkelsen’s analysis of sentences like (15) and (19) has also been challenged by Heller and Wolter, who observe that such sentences do not pattern with specificational sentences with respect to several syntactic diagnostics developed by Higgins (as Mikkelsen’s analysis would predict), and instead pattern with predicational sentences. Heller and Wolter take two additional facts as their starting point: the characteristic use of sentences like (15) and (19) in presentational contexts, and the restriction of the post-copular phrase in such contexts to noun phrases. They adopt a model suggested by Geach and Gupta, on which trans-world identity is relativized to principles of identity associated with nouns, and propose an analysis of identificational sentences in which the simple demonstrative refers to an entity without establishing a means of trans-world identification, and the post-copular expression provides a means of trans-world identification. The implication of the analysis for simple demonstratives is that simple demonstratives can refer without providing information about exactly how the referent is to be traced across other worlds; one open question for theorists interested in demonstratives, then, is whether this claim can be maintained for demonstratives in other contexts.

Working from quite a different theoretical perspective, Birner, Kaplan, and Ward discuss three copular constructions in which the interpretation of simple demonstratives is influenced by discourse-level pragmatic factors. They consider a construction with a demonstrative subject, epistemic would, and copula, which they name ‘That would be X’ or ‘TWBX’, as in (26); a type of cleft beginning with a simple demonstrative, as in (27); and non-modal copular sentences with pre-copular demonstratives, as in (28).

(26) Dad: Uh . . . Who’s that boy hanging out in our front yard, Danae?
Danae: That would be Jeffrey, my not-so-secret admirer (320).
(27) . . . and the Sergeant himself said, ‘Leave him alone, he’s too short’. . . . I mean, the, that was the platoon sergeant that said that. I call that a pretty good guy (322).
Birner et al. argue that the interpretation of sentences like (26–8) depends on the presence of a salient open proposition (OP), that is, a proposition in which one or more elements have been replaced by variables. In some cases, the OP is evoked in the discourse by a question: for example, the question in (26) evokes the OP ‘The boy hanging out in the front yard is X’. In other cases, the OP is inferable by the discourse participants: for example, the discourse participants in (28) can infer from A’s assertion the OP ‘X suffers in silence’.

The TWBX construction – or perhaps epistemic would more generally – appears to require a salient OP, and thus is infelicitous out of the blue: I cannot walk into the room holding an envelope and assert, This would be my new credit card (321). The other two constructions, by contrast, are consistent with use out of the blue, but in that case, the simple demonstrative has a deictic interpretation, as shown in (29).

Note that the simple demonstratives in (26) to (28) are differ from those in (29) in that they do not necessarily refer to entities that are physically present. Thus, the presence or absence of a salient OP appears to influence the interpretation of the demonstrative.

Birner et al. also discuss the fact that when the constructions in (26) to (28) are uttered in contexts with relevant salient OPs, the demonstrative may mismatch the referent in number and the sentence may occur in the present tense even when the demonstrative appears to refer to a past time. The authors argue that in these constructions, the simple demonstrative can refer to ‘the instantiation of a variable in a salient OP’ (327), and that this is equated with a post-copular phrase that gives information about the nature of the entity instantiating the variable. They argue that the morphosyntactic idiosyncrasies of the constructions reflect this special kind of reference. It would be extremely interesting, of course, to consider the nature of ‘reference to an instantiation of a variable’ and how this type of (discourse) reference fits into a broader theory of reference. Even if one pursues an alternate analysis of these constructions – or ultimately deals separately with this pragmatic phenomenon and the semantics of demonstratives – the observation that the interpretation of a demonstrative pronoun may be influenced by what questions have been raised in previous discourse contributes to our pre-theoretic empirical base.

More generally, each of these recent studies of demonstratives in copular constructions has made a new proposal about the semantic contribution of simple demonstratives which suggests a starting point for future research.
It is also clear that demonstratives interact with the copula in interesting and complex ways, suggesting the need for researchers to bring together work on demonstratives with work on identity and identification.

**Salience-Based Treatments of Demonstratives**

Another line of research in linguistics and psychology, which has been relatively independent of philosophical research to date, takes a strongly pragmatic approach to demonstratives and referring expressions. The guiding intuition behind this type of approach is that in choosing the form of a referring expression, a speaker considers the ‘cognitive status’ or ‘salience’ of the intended referent for the addressee. I will focus here on Gundel, Hedberg, and Zacharski’s exceptionally well-developed and influential work in this tradition; interested readers may also wish to consult Ariel, Givón, and Prince (‘Toward a Taxonomy of Given-New Information’), as well as work in Centering Theory, e.g., Walker, Joshi and Prince. In discussing this line of research, my intention is not to suggest that researchers who are primarily interested in semantics are somehow negligent in ignoring pragmatic theories or that they must incorporate pragmatic effects into their theories. Instead, my hope is that researchers who are beginning to explore demonstratives will be inspired to collect as much data as possible about the interpretation and use of demonstratives before deciding which data to explain with which theoretical framework. At the very least, this will help us all to clarify our assumptions about scope of our theories. At best, sharing observations across subfields might inspire an entirely new theory of the semantics or pragmatics of demonstratives.

Gundel et al. posit a universal hierarchy of implicationally related cognitive statuses and argue that the form of a particular referring expression indicates that the referent has reached a particular level on the hierarchy. Because this is a pragmatic theory, the authors take the conventional meaning of an expression to be a condition on its use, and therefore argue that ‘[e]ach status on the hierarchy is a necessary and sufficient condition for the appropriate use of a different form or forms’ (275). The authors apply their analysis to the complete inventory of referring expressions in English, Russian, Spanish, Japanese, and Chinese, but for present purposes let us focus on demonstratives and definite descriptions in English. According to Gundel et al., a use of a simple demonstrative indicates that the intended referent is ‘activated’, or represented in the speaker’s short-term memory. A use of a complex demonstrative indicates that the intended referent is ‘familiar’, or represented in the speaker’s memory, either short- or long-term. Note that ‘activated’ entities are ‘familiar’ but not all ‘familiar’ entities are ‘activated’. Finally, a use of a definite description indicates that the intended referent is ‘uniquely identifiable’, that is, the addressee can access a mental representation of the intended referent, either by drawing
on memory or by constructing a new representation. Note that ‘familiar’ entities are ‘uniquely identifiable’ but not all ‘uniquely identifiable’ entities are ‘familiar’. Furthermore, Gundel et al. argue that the implicational relations among the various statuses induce scalar implicatures. For example, a definite description implicates that its referent is not ‘familiar’, but this implicature can be defeased.

The Gundel et al. analysis, then, takes the most important differences among (30a–c) below to be the following conditions on their context of use: (30a) does not require the addressee to have known that the neighbors have a dog, (30b) does require the addressee to know that the neighbors have a dog, and (30c) requires the addressee to have a representation of the neighbors’ dog in short-term memory, either in virtue of perceiving the dog in the context of utterance, or in virtue of the previous discourse having included some previous mention of the dog.

(30) I couldn’t sleep last night . . .
   a. . . . The dog next door kept me awake.
   b. . . . That dog next door kept me awake.
   c. . . . That kept me awake.

Gundel et al.’s analysis, and salience-based pragmatic theories more generally, contribute new data about the distribution of demonstratives and other referring expressions. For example, Gundel et al. observe that anaphoric demonstratives with this require the antecedent to have been mentioned by the same speaker. Example (31) shows that when this requirement is not met, the demonstrative is somewhat degraded.

(31) A: The neighbors’ dog certainly barks a lot.
    B: ?Yes, this dog kept me awake all night.

Considering pragmatic theories of demonstratives forces us to pay attention to pragmatic effects that we wouldn’t necessarily consider, such as the role of the addressee’s perspective. I find this interesting for its own sake, but here is why I think it is important even for researchers whose aim is a purely semantic analysis of demonstratives. It is uncontroversial that demonstratives and other indexicals are context-dependent. Therefore, all of the relevant facts to be explained depend on observations about uses of demonstratives in specific contexts – if nothing else, we must consider the context in order to observe the role of demonstrations. If we do not make a point of thinking about pragmatic effects, we risk mixing facts that are relevant to semantics that are those that are relevant to pragmatics. By taking the time to explicitly consider pragmatic effects, we gain a more complete understanding of how demonstratives are used in context and can choose with more confidence which facts to address.

Salience-based approaches to the distribution of referring expressions lend themselves well to experimentation and have therefore drawn the attention of psycholinguists. However, the experimental results have not
always supported salience-based approaches. One significant challenge to this family of approaches is due to Kaiser and Trueswell, who show that Finnish demonstrative pronouns and personal pronouns are sensitive to different degrees to different factors which plausibly contribute to salience (namely linear precedence and hierarchical structure). This suggests that it may not be possible to construct a unified ‘salience hierarchy’ that can be used to account for the distribution of all referring expressions. A second challenge is due to Brown-Schmidt, Byron and Tanenhaus, who show that demonstrative pronouns are more likely than personal pronouns to refer to composite entities. For example, (32a) below is intuitively an instruction to move the cup again, while (32b) is intuitively an instruction to move both the cup and the saucer. 10

(32) Put the cup on the saucer . . .
   a. . . . now put it over by the lamp.
   b. . . . now put that over by the lamp.

It is not clear whether or how the cup-plus-saucer composite differs in salience from the cup; thus salience-based approaches cannot account for this fact. But then again, none of the theories that we have considered make any clear predictions about (32), and so we conclude with yet another unanswered question: why is a demonstrative preferred when referring to a composite entity? Perhaps this is the puzzle that will lead to a new breakthrough in philosophical research on the interpretation of demonstratives.

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Short Biography

Lynsey Wolter researches semantics and pragmatics from the perspectives of linguistics and cognitive science. Her dissertation develops a Fregean analysis of the semantics and pragmatics of demonstrative noun phrases in English. Her ongoing research interests include the interaction of semantics and pragmatics in the interpretation of referring expressions; the nature of identification and identity in the natural world; the formal pragmatics of belief and acceptance; and experimental approaches to pragmatics.
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Notes

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1 Thanks to the anonymous reviewer for helping me to separate issues of reference from those of propositional content.

2 The formal details will differ slightly in a structured propositions framework, which Kaplan in fact prefers.

3 The anonymous reviewer suggests an alternative analysis on which the literal content of (7), for example, is the obviously false proposition the speaker is traditionally allowed to order whatever he or she likes for his or her last meal, and that in uttering (7), the speaker asserts a different proposition. That is, it may be possible to maintain a simple account of the semantics of indexicals if one adopts a theory in which the semantic content of a sentence is not always the main assertion made by the speaker of that sentence. To my knowledge, this approach to Nunberg’s data has not been presented in published work, and it seems to me that fleshing out this idea would be a useful test case for a theory of non-literal meaning.

4 Copular sentences in general have attracted a great deal of attention in linguistics; different classes of copular sentences display strikingly different syntactic effects, and the compositional semantics of the various classes of copular sentences is controversial. Higgins is the classic reference and the source for most of the data under discussion today; see also Mikkelsen, Heller, and references therein for an overview of current syntactic, semantic, and pragmatic analyses of copular sentences.

5 See Heller for arguments that Higgins’s classes of copular sentences are best characterized in terms of the relation between the pre- and post-copular phrases, as opposed to the syntactic structure of the post-copular phrase.

6 Michael Glanzberg (personal communication) suggests the possibility that property interpretations of demonstrative pronouns are a special case of the disconnect between an index and the apparent referent of an indexical as discussed by Nunberg.

7 A substantial line of research in pragmatics draws on the notion of ‘Open Proposition’. See Prince, ‘On the Syntactic Marking of Open Propositions’ for a classic example of research in this line, and Ward and Birner for a recent overview of constructions that have been related to various open propositions.

8 I follow Birner et al’s informal characterization of OPs here; their notion of OP can of course be formalized either in terms of lambda-abstraction or via structured propositions.

9 It should be noted that the anonymous reviewer does not share Birner et al’s intuition; perhaps there is more to be said about the uses of this construction.

10 This phenomenon was also noticed independently by Isard.

Works Cited


