Reference and Ambiguity in Complex Demonstratives

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Introduction

The last decade has seen a flurry of activity on the topic of complex demonstratives, most of which has focused on the question of whether they are singular referring expressions, like names, or structured denoting complexes, like quantifiers and definite descriptions. At the heart of this question is the status of standard referential uses of complex demonstratives, such as an utterance of (1) while pointing at my border collie Tally:

(1) That dog is smart.

The orthodox view of (1), due originally to David Kaplan, is that it expresses a singular proposition, relative to the context of use, that predicates the property being smart of Tally. On the orthodox view, the semantic contribution of the complex demonstrative ‘that dog’ in the context is the object or individual determined by the speaker’s demonstration or accompanying referential intentions (Kaplan, 1989a; 1989b). Thus on the orthodox view, complex demonstratives are context-sensitive singular referring expressions.

The orthodox view is both formally elegant and intuitively satisfying. On the orthodox view, demonstratives are indexicals, where the central semantic feature of an indexical is the distinction between its context-independent meaning and its content in a particular context. Kaplan’s distinction between character and content is the classic example of this distinction: for Kaplan, the character of an indexical is its context-independent meaning, which serves to determine the content of the indexical in each context (indeed Kaplan represents character as a function from contexts to contents), and demonstratives are just a special class of indexicals whose character is determined by an accompanying demonstration or referential intention. Alternative versions of the orthodox view treat the context-independent meaning of
a demonstrative as a rule to the effect that the content of a particular use of a demonstrative is the object
determined by the demonstration accompanying that use.

This formal picture meshes seamlessly with our intuitions about standard referential uses of
complex demonstratives. There is a strong intuition that when one utters a sentence like (1) while pointing
at a particular dog, one is saying of the dog one is pointing at that it is smart. Metaphorically, the move
one makes in the language game when one utters a sentence like (1) while pointing at a particular dog has
two distinct parts: one indicates a particular object about which one wishes to say something, and then
one says something about it. Demonstratives are an indispensible tool for communication in that they
allow us to indicate things, in order to say something of them, without having to introduce names for
everything we wish to indicate. (And even the act of naming itself often requires that we first indicate
something with a demonstrative.) So when I utter (1) while pointing at Tally, I am intuitively saying of
Tally that she is smart. Yet to say of Tally that she is smart is just to assert the singular proposition that
predicates being smart of Tally. This proposition is just what the orthodox view assigns to (1) in the context
of my use.

There are uses of complex demonstratives, however, that are not accompanied by any
demonstration or referential intention. Imagine an utterance of (2) by a speaker in a contemporary
anthropology class:

(2) That hominid who discovered how to start fires was a genius.

The example is due to Jeff King (2001, p. 9), who calls it an NDNS use (for no demonstration, no speaker
reference). I will call it a non-referential use, to contrast it with the standard referential uses of complex
demonstratives. Non-referential uses of complex demonstratives cannot be straightforwardly incorporated
into the orthodox view for two reasons. First, insofar as such uses are not accompanied by any
demonstration or referential intention, the account of the reference of a use of a complex demonstrative
on the orthodox view does not apply. Second, the complex demonstrative ‘that hominid who discovered
how to start fires’ is intuitively non-rigid relative to the context of the speaker’s utterance of (2). Yet
standard referential uses of complex demonstratives are clear examples of rigid designators.
Thus the challenge for any semantic theory of complex demonstratives is how to subsume both standard referential uses and non-referential uses of complex demonstratives under one semantic theory. One way to meet this challenge is to present a unified semantic account of all uses of demonstratives. Theories along this line will differ in the relative importance attributed to semantics and to pragmatics. At one extreme are theories that attempt to capture as much as possible in the semantics. On this approach, one must abandon the orthodox view of complex demonstratives as singular referring expressions altogether. The idea behind this approach is that the non-referential uses of demonstratives reveal demonstratives’ true semantic nature as structured denoting complexes, and the content of a referential use is just a denoting complex that has been rigidified in some manner. Jeff King’s (2001) quantificational semantics for complex demonstratives is the most thoroughly worked out such theory to date.³

A more modest unified semantic approach would be to argue that the orthodox theory is the correct semantic theory for all uses of complex demonstratives, and to offer a pragmatic account of the contents of non-referential uses of complex demonstratives. David Braun (2007) considers such an approach, according to which (2), relative to a context of utterance, semantically expresses a gappy proposition – a structured proposition in which there is nothing at the location corresponding to the location of the complex demonstrative in (2) – yet an assertive utterance of (2) in the context would convey a descriptive proposition.

There are subtle variations on both of these unified semantic approaches. There is, however, also a very different way to meet the challenge of non-referential uses. This is to present an ambiguity theory: a semantic theory that treats referential and non-referential uses of complex demonstratives differently. On this approach to the semantics of demonstratives, referential uses are semantically distinct from non-referential uses. The latter may be treated as structured denoting complexes, but the former need not be. The virtue of an ambiguity theory is that it allows us to preserve our intuitions about referential uses of complex demonstratives, while doing full justice to the phenomenon of non-referential uses. Eros Corazza (2003) has developed a view along these lines in his response to King.
The view I present here is a variety of this third approach. On my view, the rules governing the use of demonstratives in English distinguish between referential and non-referential uses. For referential uses, the semantic rules for demonstratives constitute a set of constraints on the content of a use in a context. Standard referential uses on this view come out directly referential; the constraints only come into play clearly in cases of deferred reference. On this view, deferred reference is a semantically licensed phenomenon that occurs only with referential uses. This consequence of the view plays an important role in my response to King's arguments against ambiguity theories. For non-referential uses of complex demonstratives, the semantic function or role of demonstratives is the same as that of definite descriptions. This theory thus preserves the intuitive appeal of the orthodox view's treatment of referential uses, while also capturing the non-referential uses that the orthodox view cannot handle.

The structure of this paper is as follows. In section 1, I review the challenge to the orthodox view, paying particular attention to the recent debate between Jeff King and Nathan Salmon over King's examples of quantifying into complex demonstratives. Against both King and Salmon, I argue that the real significance of what King calls QI (for quantifying-in) uses is that some of them are clear examples of non-referential uses of complex demonstratives. There are also referential QI uses, but these do not present a challenge to the orthodox theory. This conclusion supports the claim, in the introduction, that the real challenge to the orthodox view is the phenomenon of non-referential uses. In section 2, I present an ambiguity theory of the semantics of demonstratives, show how it avoids a powerful objection from King to any ambiguity theory, and briefly discuss the subtlety of our judgments about referential uses of demonstratives. Section 3 concludes.

1. **The Limitations of the Orthodox View**

The limitations of the orthodox view of demonstratives are exposed in examples like (2) (repeated below) and (3), both due to Jeff King:

(2) That hominid who discovered how to start fires is a genius.

(3) Most avid skiers remember that first black diamond run they attempted to ski.
King calls (2) a *no demonstration, no speaker-reference use*, or *NDNS* use, but I prefer the more general description *non-referential use* (when discussing King’s view in particular, however, I may revert to his term). What distinguishes non-referential uses is that the usual contribution to referential uses from the context is missing – whatever the speaker does or intends in virtue of which a referential use of a demonstrative refers to an object or individual in a context is not present for non-referential uses. King calls (3) a *quantifying-in use*, or *QI* use of the demonstrative phrase ‘that first black diamond run they attempted to ski’. What distinguishes QI uses is that the demonstrative phrase contains a pronoun, in this case ‘they’, that is bound by an operator elsewhere in the sentence, in this case ‘most avid skiers’.

The challenge to the orthodox view posed by non-referential uses of sentences like (2) is clear. These uses are not accompanied by the kind of demonstration or referential intention that the orthodox view requires in order to fix the reference of a use of a complex demonstrative. Furthermore, non-referential uses of complex demonstratives are intuitively non-rigid. An utterance of (2) is intuitively true at a world \( w \) if and only if the \( x \) in \( w \) such that \( x \) is the hominid who discovered how to start fires in \( w \) was a genius in \( w \). The truth conditions of the utterance thus depend on different individuals in different possible worlds. If the complex demonstrative in (2) were a rigid designator, we would expect the utterance of (2) to be true at a world \( w \) if and only if the \( x \) in \( w \) such that \( x \) is the hominid who discovered how to start fires in the actual world was a genius in \( w \). Singular referring expressions are paradigmatic rigid designators, and one of the benefits of the orthodox view is that it offers a simple and satisfying explanation for the intuitive rigidity of referential uses of complex demonstratives. But the orthodox view cannot offer any explanation for the intuitive non-rigidity of non-referential uses.

The challenge posed by QI uses, however, is less clear. Nathan Salmon has initiated a vigorous debate with King over QI uses (Salmon, 2006a; 2006b; King, 2008), but confusion over their significance has left this debate unresolved. It is worth reviewing this debate not only to address lingering issues that have been raised in the debate itself, but also to make as clear as possible what the problem raised by QI uses is, and what it is not. In the remainder of this section, I focus on examples like (3); in the following section, I broaden the discussion again to include both QI uses like (3) and NDNS uses like (2).
According to King’s original discussion of QI uses like (3), the problem they raise for the orthodox view is that a semantics that assigns an object, relative to a context, to the complex demonstrative ‘that first black diamond run they skied’ gets the intuitive truth conditions of an utterance of the sentence in a context wrong. An utterance of (3) is true in a context if and only if for most $x$ such that $x$ is an avid skier, there is a unique $y$ such that $y$ is the first black diamond run $x$ skied, and $x$ remembers $y$. The denotation of the complex demonstrative varies with the value of the variable bound by ‘most avid skiers’; there is no one object that can be assigned to it to preserve these intuitive truth conditions.\(^6\)

According to Salmon, however, (3) no more tells against a direct reference semantics for complex demonstratives than ‘$(\forall x)Fx$’ tells against a direct reference semantics for variables. Salmon focuses his criticism on the principle K2 in the following reconstruction of King’s argument:

K1. Any sentence $\varphi_\beta$ containing a directly referential occurrence of a singular term $\beta$ not within the scope of an indirect, intensional, or quotational operator expresses as its semantic content a singular proposition in which the designatum of that same occurrence of $\beta$ occurs as a component.

K2. If a singular term $\beta$ is directly referential, then every occurrence in a sentence of $\beta$ not within the scope of an indirect, intensional, or quotational operator is a directly referential occurrence.

K3. [(3)] does not express a singular proposition in which the designatum of the occurrence of the complex demonstrative in it (‘that first black diamond run they skied’) occurs as a component.

K4. Hence by K1 and K3, the occurrence of ‘that first black diamond run they skied’ in [(3)] is not a directly referential occurrence.

K5. Hence by K2 and K4, ‘that first black diamond run they skied’ is not directly referential. (King, 2008, pp. 106-7)

(King calls this argument ADR – short, I assume, for Against Direct Reference.) Salmon’s principal criticism of K2 is that it confounds the semantic properties of expressions with the semantic properties of occurrences.
of expressions. He offers the example of the variable to show that this is a confusion. A variable relative to an assignment of values to variables is *the* paradigm of a directly referential expression, yet not all occurrences of variables receive a value given an assignment of values to variables. A bound occurrence of a variable does not. What the example of the variable shows us is that an expression can be directly referential in virtue of its semantics, even though some bound occurrences of the expression are not directly referential occurrences.

The following propositional semantics for a simple quantificational language with negation, conjunction, and universal quantification illustrates Salmon’s point:

(P1) The content of a variable v relative to a context c and assignment f of values to variables is f(v).

(P2) The proposition expressed by an atomic formula P_n t_1...t_n relative to a context c, and assignment f of values to variables is <P*, <o_1,...,o_n>>, where P* is the property expressed by P_n, and for each i between 1 and n, o_i is the content of t_i relative to c and f.

(P3) The propositions expressed by ~S and (S&T) relative to c and f are <NEG, Prop S> and <CONJ, <Prop S, PropT>> respectively, where Prop S is the proposition expressed by S relative to c and f, Prop T is the proposition expressed by T relative to c and f, NEG is the truth function for negation, and CONJ is the truth function for conjunction.

(P4) The proposition expressed by (∀v)S relative to c and f is <EVERY, g>, where EVERY is the property of having an empty complement set and g is the function that maps each object o’ to the proposition expressed by S relative to c and f/ o’, (the function that differs from f at most in that it assigns o’ to v).

The first thing to note about this semantics is that (P1) does not say anything about occurrences of variables. (P1) tells us what the content of a variable – an expression – is relative to a context and assignment function. Furthermore, according to (P1), the content of a variable relative to a context and assignment function just is the object or individual that the function assigns to the variable. It is hard to see what else is required for an expression to be directly referential than that it is governed by a semantic rule like (P1).
Yet it is also a consequence of this semantics that bound occurrences of variables are not directly referential. Relative to an arbitrary context $\epsilon$ and an assignment $f$ that assigns an object $o$ to the variable ‘$x$’, this semantics will assign to the open formula

$$(4) \quad Fx$$

containing ‘$x$’ free the structured proposition

$$(5) \quad <F^*, o>$$

(Where $F^*$ is the property expressed by the predicate ‘$F$’.) The content of ‘$x$’ relative to $f$ is a constituent of this proposition. Yet relative to the same context and assignment function, the semantics will assign to the sentence

$$(6) \quad (\forall x)Fx$$

the proposition

$$(7) \quad <\text{EVERY}, g>$$

where $g$ is the function that maps each object $o'$ to $<F^*, o>$, that is, to the proposition expressed by (4) relative to $\epsilon$ and $f \cdot x \cdot o'$. The content of ‘$x$’ relative to the assignment $f$ is not a constituent of (7).

This observation about the content of (6) is an example of a general phenomenon: the principle of compositionality does not hold in a semantics, like (P1)-(P4), that assigns content directly to expressions. It is not the case that the content of (6) relative to $\epsilon$ and $f$ is composed of the contents of the expressions that occur in it relative to $\epsilon$ and $f$—(4) occurs in (6), yet the content of (4) relative to $\epsilon$ and $f$ is not a constituent of the content of (6) relative to $\epsilon$ and $f$.

In order to preserve compositionality in this sense, we need a semantics that assigns content directly to occurrences, rather than expressions. The rules (P1)-(P4) are not such a semantics. Salmon has developed such a semantics for occurrences, on which expressions are assigned content relative to assignment functions and sequences of variables. The rules for this semantics are as follows:

$\Lambda_0$ The 0-fold bondage content of $\varphi$ relative to the 0-tuple of variables $<>$ and assignment $f$ of values to variables is the customary content of $\varphi$ relative to $f$ (where in this case the
customary content of \( \varphi \) relative to \( f \) is the content of \( \varphi \) relative to \( f \) according to \((P1)-(P4))\).

\[ A_{n+1} \quad \text{The \((n+1)\)-fold bondage content of } \varphi \text{ relative to the } (n+1)\text{-tuple of variables } <v_{n+1}, v_n, v_{n-1}, \ldots, v_1> \text{ and an assignment } f \text{ is the function } \lambda [\text{the } n\text{-fold bondage content of } \varphi \text{ relative to the } n\text{-tuple of variables } <v_n, v_{n-1}, \ldots, v_1> \text{ and } f_{v_{n+1}}]. \]

\textbf{Def.} The content of an occurrence of an expression \( \varphi \) in the scope of the variable binding operators \( Qv_n, Qv_{n-1}, \ldots Qv_1 \), [in that order] and relative to the assignment \( f \) is the \( n \)-fold bondage content of \( \varphi \) relative to \( f \) and the sequence \(<v_n, v_{n-1}, \ldots, v_1>\).

The proposition (7) above provides an example of how this semantics preserves compositionality: the constituents of (7) are the second-order property EVERY (the property of having a null complement set) and the function \( g \). EVERY is the content of (the occurrence of) ‘\( \forall x \)’ in (6), and \( g \) is the content of the occurrence of (4) in (6) (because \( g \) is the 1-fold bondage content of (4) with respect to the assignment \( f \) and sequence \(<'x'>\) (Salmon, 2006b, pp. 430-431)). Thus the constituents of the proposition expressed by (6) relative to \( f \) are the contents of the occurrences of its constituent expressions relative to \( f \).

Salmon’s semantics also allows us to state precisely the conditions for being a directly referential occurrence of an expression:

\textbf{Def.} An occurrence \( U \) of an expression \( E \) is directly referential [in a context \( C \)] if and only if (i) the customary content of \( E \) [in \( C \)] relative to an assignment \( f \) is the object or individual the expression denotes relative to \( f \) (and \( C \)) (i.e., the expression is directly referential), and (ii) the content of \( U \) [in \( C \)] relative to \( f \) is the customary content of \( E \) [in \( C \)] relative to \( f \).

It follows from this definition and the semantics above that only free occurrences of ‘\( x \)’ are directly referential occurrences. The content of the bound occurrence of ‘\( x \)’ in (6) is not the customary content of ‘\( x \)’ relative to \( f \); it is the 1-fold bondage content of ‘\( x \)’ relative to an assignment \( f \) and sequence \(<'x'>\). On the semantics above, this is the function \( \lambda [f_{x}(x')] \) – the identity function that maps each object to itself.

Note that it does not follow from the definition of ‘directly referential occurrence’ and the semantics for occurrences above that \textit{every} free occurrence of a variable is directly referential. This is
because on the standard definition of ‘free occurrence’, an occurrence of a variable is free if and only if it is not in the scope of a quantifier (or other variable binding operator) that binds that variable. On this definition, the occurrence of ‘x’ in (8) is free:

(8) \( (\forall y)Fx \)

Yet on Salmon’s semantics, the 1-fold bondage content of ‘x’ relative to the sequence <‘y’> and an assignment \( f \) is the constant function \( \lambda i[f_y('x')] \) that maps any object to \( f('x') \) (since for any \( i \), \( f('x')=f_y('x') \)). Thus this function is also the content of the free occurrence of ‘x’ in (8). To avoid confusion over this feature of Salmon’s semantics for occurrences, let us define a totally free occurrence of a variable \( v \) as an occurrence of \( v \) not within the scope of any quantifier. Then it does follow from the definition and semantics above that every totally free occurrence of a variable \( v \) is a directly referential occurrence.

The above discussion shows that K2 is subject to clear counterexamples. By (P1), the variable ‘x’, relative to an assignment of values to variables, is directly referential, yet there are occurrences of ‘x’ not within the scope of an indirect, intensional, or quotational operator, such as the occurrences of ‘x’ in (6) and in (8), that are not directly referential occurrences. Thus the argument ADR is unsound.

For King, however, this criticism of K2 and ADR misses the point, because it relies on a definition of ‘directly referential expression’ that he rejects:

My preferred terminology is one on which we call an expression ‘directly referential’ only if all of its occurrences are. The only thing I object to about K2 is that it entails that if an expression has occurrences that aren’t directly referential, the expression isn’t directly referential, even if it has other occurrences that are directly referential. Again, my preference in such a case is not to say anything about the expression and talk only about which occurrences are and are not directly referential. (King, 2008, p. 109)

The point of this passage seems to be that for King, the notion of a directly referential occurrence is in some sense conceptually prior to that of a directly referential expression: we determine whether an expression is directly referential by looking at all of that expression’s occurrences. This suggests that on
King’s view, our above definition of ‘directly referential occurrence’ in terms of ‘directly referential expression’ is backwards. For if we had to know whether an expression E was directly referential in order to determine whether a particular occurrence of E was directly referential, but we also had to determine whether each occurrence of E was directly referential in order to establish whether E was directly referential, we would be caught in a vicious circle.

King’s understanding of ‘directly referential expression’ sets a very high standard for expressions to be directly referential. As King acknowledges, this standard makes ADR trivially sound:

Hence on this usage, an expression could fail to be directly referential even if some of its occurrences are directly referential. But the conclusion of ADR should be exactly this strong. The conclusion, in effect, is that at least some occurrences of complex demonstratives are not directly referential. (ibid., emphasis in the original)

Thus on King’s view, Salmon’s argument is aimed at a strawman. At most, the lesson of the variable spelled out above shows that if we adopt the standard interpretation of ‘directly referential expression’, then K2 is false. The lesson of the variable does not show that K2 is false on King’s preferred interpretation of ‘directly referential expression’, because on that interpretation K2 is trivially true.

It seems to me that there is something missing from this response. King’s preferred terminology establishes a very high standard for expressions to be directly referential. Yet King does not say why a semantic rule like (P1), which (to repeat) tells us what the content of a variable – the expression – is relative to a context and assignment function, is not sufficient to justify saying that variables are directly referential. Without an explanation of this, it is not clear why we should prefer King’s high standard over the standard set by a semantic rule like (P1), and thus not clear why we should accept ADR as an argument against the view that complex demonstratives are directly referential.

Here is another way to see the point. Let us grant King his stipulative definition of ‘directly referential’ and introduce a stipulative definition of ‘Millian’ as follows: a term E is Millian if and only if every totally free occurrence of E is a directly referential occurrence. Now let us consider the argument ADRV:
1’. (K1) Any sentence $q_\beta$ containing a directly referential occurrence of a singular term $\beta$ not within the scope of an indirect, intensional, or quotational operator expresses as its semantic content a singular proposition in which the designatum of that same occurrence of $\beta$ occurs as a component.

2’. (K2) If a singular term $\beta$ is directly referential, then every occurrence in a sentence of $\beta$ not within the scope of an indirect, intensional, or quotational operator is a directly referential occurrence.

3’. (6) does not express a singular proposition in which the designatum (relative to the assignment $f$) of the occurrence of the variable ‘$x$’ in it occurs as a component.

4’. Hence by premises K1 and 3, the occurrence of ‘$x$’ in (6) is not a directly referential occurrence.

5’. Hence by 4 and K2, ‘$x$’ is not directly referential.

Given King’s stipulation, ADRV is also trivially sound, because the conclusion, 5’, is equivalent to the claim that there is at least one occurrence of ‘$x$’ that is not a directly referential occurrence. Yet on this understanding of ADRV, it gives us no reason to abandon the semantics for variables above. That is, ADRV does not present any challenge to (P1). This result, however, merely reflects the fact about the semantics (P1)-(P4) that variables are not directly referential (on King’s stipulative definition). But variables are Millian on (P1)-(P4), and if we were to substitute ‘Millian’ for ‘directly referential’ wherever the latter occurs in ADRV, the resulting argument would not be sound. (This is just the lesson of the variable above.) For the same reasons, ADR presents no challenge to the thesis that complex demonstratives are Millian.

Yet one of the most interesting philosophical questions for the semantics of a particular expression is whether that expression is Millian (in our stipulated sense). As the above discussion makes clear, a term is Millian in virtue of the semantic rules governing the expression (since totally free occurrences are assigned the customary content of the expression). On the conception of semantics on which the orthodox view is founded, the semantic property of having a particular content is most fundamentally a property of
expression types in contexts of use. The semantic properties of occurrences of expressions relative to a context are derived from the semantic properties of the expressions themselves relative to the same context in systematic ways. (It is in this sense that Salmon presents his semantics for occurrences as “a conservative extension of conventional expression-based semantics” (2006b, p. 432).) Taking the semantic properties of occurrences relative to a context as basic obscures the systematic relationship between the semantic properties of different occurrences of an expression relative to the same context, because these properties can no longer be understood as derived in systematic ways from a more basic semantic property of the expression relative to the context.

Thus Salmon is right to criticize K2, and hence ADR, on these grounds. The correct principle linking expressions and their occurrences is K2’:

K2’ If a singular term β is directly referential, then every totally free occurrence in a sentence (or open formula) of β not within the scope of an indirect, intensional, or quotational operator is a directly referential occurrence. (compare to Salmon’s M’, in (Salmon, 2006a, p. 268))

If we replace K2 in ADR with the correct principle K2’, the resulting argument is not valid, because the occurrence of ‘that first black diamond run they skied’ is bound in (3). The conclusion of ADR’ (ADR with K2’ in place of K2) does not follow from K2’ and K4.

Yet Salmon’s point, while correct, is not sufficient to defend the orthodox view from examples like (3). The debate over directly referential occurrences fails to address the real significance of this example. King’s example of a QI use is a problem for the orthodox view not because the complex demonstrative contains a pronoun bound by a higher quantifier, but because the most natural use of the complex demonstrative in (3) is non-referential. It is extremely difficult to get a referential reading of the complex demonstrative in (3), even if we imagine someone uttering it while pointing at a particular black diamond ski run (such an utterance strikes me as quite awkward or infelicitous). As I imagine using (3), there is no accompanying demonstration or referential intention. Furthermore, on the natural interpretation of (3), the free occurrence of ‘that first black diamond run they skied’ in
\( (3') \quad x_i \text{ remembers that first black diamond run they skied} \)

is non-rigid. As King has pointed out, what is said by an utterance of \((3)\) in a context is true at a world \(w\) if and only if most \(x\) in \(w\) such that \(x\) is an avid skier in \(w\) are such that there is a unique \(y\) in \(w\) such that \(y\) is the first black diamond run \(x\) skied in \(w\), and \(x\) remembers \(y\) in \(w\).\(^9\) This means that the denotation of \( (3' ) \) relative to an assignment varies from world to world. This issue is simply not addressed by Salmon’s criticism of K2. These two properties – being unaccompanied by a demonstration or referential intention, and being non-rigid – are the hallmarks of non-referential uses.

Even though it is difficult to imagine a referential use of \((3)\), there are examples of referential QI uses. King (2001, p. 77) himself offers the example of someone waiting in line at a club who points to another person in line and says to the doorman:

\[ (9) \quad \text{The owner of the club wants that friend of his to be let in.} \]

This certainly looks like a referential use of ‘that friend of his’. Furthermore, (as King also notes) it is intuitively rigid, designating the person pointed at in all possible worlds. As a result, this use poses no problem for the orthodox view; it can be handled along the same lines as variables in our semantics (P1)-(P4) above. Treating the definite description ‘the owner of the club’ as a quantifier, the above semantics for occurrences will assign to the occurrence of ‘that friend of his’ in \((9)\) relative to the context \(c\) of the utterance the (constant) 1-fold bondage content \(\lambda i[\text{the individual demonstrated by the speaker in } c]\). This yields the intuitively correct result.

Let us sum up the discussion of this section: the real limitation of the orthodox theory is that it does not offer any account of non-referential uses of complex demonstratives. These include King’s NDNS uses, as well as some QI uses. The mere existence of QI uses is not a problem for the orthodox view. Salmon’s argument against ADR shows that referential QI uses pose no threat to the orthodox view of demonstratives. Thus the real challenge for a semantic theory of demonstratives is how to account for both referential and non-referential uses in one theory.

As we saw in the introduction, there are basically two ways of meeting this challenge. One way is to adopt a unified semantic theory – a theory that is supposed to apply to all uses of complex
demonstratives. As I noted in the introduction, there are a handful of such theories in the literature. For lack of space, I am not going to survey these here. I will note only that *prima facie*, it would be surprising if such radically different ways of using complex demonstratives were governed by the same semantic rules. Following this intuition, I will turn to the other way of meeting the challenge of referential and non-referential uses: the view that complex demonstratives are ambiguous. On the theory I propose in the next section, referential uses and non-referential uses are governed by distinct semantic rules.

2. **An Ambiguity Theory for Complex Demonstratives**

There are two main features of the semantics that I propose for referential uses of demonstratives. The first is that it is based on a particular philosophical picture of the relationship between semantics and assertion. On this picture, a semantics for a language L is a set of rules that constrains what speakers who use a sentence S of L can literally say or assert, but those rules may not uniquely determine a particular proposition in a particular context of utterance. For indexical languages, we can say that the semantic content of a sentence S in a context C constrains what speakers who use S in C can literally assert, though the content of S in C might not be a complete proposition. Further, when the semantic rules do assign a unique proposition to a sentence S in a context C, this proposition counts as being asserted by the speaker of C only if it is an obvious, a priori, and necessary consequence of the primary proposition that the speaker intends to assert in uttering S.\(^\text{10}\)

To understand the significance of this view, it is important to see that there are two ways in which it opens a gap between semantics and assertion. One feature of this view is that a great deal of what is asserted and conveyed in an assertive utterance of a sentence goes beyond what is linguistically encoded in the sentence. It is consistent with this that the semantic content of a sentence S in a context C is a kind of minimal proposition that is always conveyed in any assertive utterance of S in any context C’ that shares the same relevant parameters as C.\(^\text{11}\) The view I adopt in this paper rejects even this. On the resulting philosophical picture, the semantic content of a sentence S in a context C is not part of what is asserted by a speaker uttering S in C unless certain specific conditions hold. These conditions are (i) that the content
of $S$ in $C$ is fully propositional, and (ii) that the content of $S$ in $C$ is an obvious, a priori, and necessary consequence of the primary proposition that the speaker intends to assert in $C$.\(^\text{12}\) Semantic content, on this picture, typically operates in the background in communication—when speakers and hearers encode and decode information in language, linguistic meaning is often only a rough guide to what is said. Of course, all of this is not to say that a speaker cannot intend just to assert the literal content of a sentence $S$ in $C$: such cases are limiting cases of condition (ii) above, as long as condition (i) is satisfied.

The second feature of the semantics I propose is that it applies the above conception of semantics as constraints on assertion to the phenomenon of deferred reference.\(^\text{13}\) Examples of deferred reference include pointing at a photograph of Rafael Nadal holding a tennis racquet and uttering (10):

(10) That is my favorite sport,

or pointing to an especially dirty car that we have never seen before and uttering (11):

(11) That person does not take care of their car.

In the first example, I am not pointing at the sport of tennis, yet it is clear that I have said of tennis that it is my favorite sport. The first example illustrates one of the common uses of deferred reference—to refer to something abstract by calling attention to some concrete instance of it—but the phenomenon arises whenever we have to distinguish between the object demonstrated by the gesture accompanying a use of a demonstrative and the content of that use. I am not, in the second example, saying anything about an abstract object, yet we must still distinguish between the object of my demonstration and the content of my use of ‘that person’.

The phenomenon of deferred reference has been investigated extensively by Geoffrey Nunberg in his study of indexicals in natural language (Nunberg, 1993). Nunberg’s central observation is that deferred reference is not unique to the demonstratives ‘this’ and ‘that’. Other indexicals exhibit the same phenomenon. Two of his more interesting examples are (12) and (13):

(12) We might have been liberals

(13) He is usually Italian
Suppose that Supreme Court Justice Samuel Alito utters (12). He might be taken to say that there is a counterfactual situation in which the current actual Justices of the Supreme Court are all liberals, but he might also be taken to say that there is a counterfactual situation in which the Justices of the Supreme Court, whoever they are in that counterfactual situation, are all liberals. This second reading clearly requires that we distinguish between what the indexical picks out in the context (Alito) and what it contributes to what Alito says in using it. Similarly, suppose that I utter (13) while pointing at the Pope. I have said that it is usually the case that the person in the office of the Pope is an Italian, but this reading requires that we distinguish between what my use of the indexical picks out (the Pope, at whom I am pointing), and what it contributes to what I say in using it. In both of these cases, it is worth noting that what the indexicals contribute to what is said by the speakers using them are more closely akin to the contents of definite descriptions than they are to the contents of singular referring expressions.

On the basis of examples like these, Nunberg distinguishes between the *index* of an indexical in a context, and the content of the indexical in the context. The orthodox view of indexicals and demonstratives identifies these, but Nunberg takes the above examples to show that this is a mistake (or more specifically, that they are not *always* identical). According to Nunberg’s theory, the meaning of an indexical comprises three distinct parts. The first is a *deictic component*; this identifies a particular feature of a context of utterance as the index. The deictic component of ‘I’ and ‘we’, for example, is a rule that picks out the speaker of the context. (It is in this respect that both ‘I’ and ‘we’ are first-person pronouns.) The second is a *classificatory component*; this determines what properties the content, or denotation of the content in the context, has to instantiate. Straightforward examples include the property of being male (part of the classificatory component of the meaning of ‘he’), or being more than one in number (part of the classificatory component of ‘we’). The third is a *relational component*; this restricts the content of an indexical in a context, given its index in that context. For example, the content of ‘we’ in a context has to either include the speaker (the index), or be a property that the speaker instantiates. In many instances, including the standard uses that motivated the orthodox theory of indexicals, the relation between the content of an indexical in a context and the index of the indexical in the context is identity, but the examples above
show that other relations are possible. In my utterance of (13), for example, the relation is something like ___ is the maximally salient property in the context that is instantiated by ___.

Nunberg’s discussion of indexicals is insightful, but he does not offer any concrete proposal for incorporating his insights into a particular semantic theory. Building on these insights, I propose the following rules for the semantics of referential uses of that NP in English:

(TD) If u is a referential use of that NP then an object o is the index of that NP in the context Cu of u if and only if o is the object of the speaker Su’s referential intention in Cu.

(TC) If u is a referential use of that NP, then for any x, x is the content of that NP in Cu only if

(i) x satisfies is an NP in Cu, or (ii) the denotation of x in Cu satisfies is an NP in Cu.

(TR) If u is a referential use of that NP, then for any x, x is the content of that NP in Cu if and only if there is a maximally salient relation R in Cu such that the index o of that NP in Cu bears R to x.

The rule (TD) constitutes the deictic component of referential uses of complex demonstratives, while (TC) constitutes the classificatory component, and (TR) the relational component. (As stated, (TC) and (TR) can be combined into one rule; I state them separately here in order to distinguish the roles of the two aspects of meaning.)

These three rules together do not uniquely determine a content for a referential use of that NP in a given context. Rather, they comprise a set of constraints on what that content can be, given how the demonstrative is used.14 On the picture of referential uses of complex demonstratives that these rules suggest, a speaker who uses a complex demonstrative referentially has an intention or performs a demonstration that picks out some object or individual, which becomes the index of the use. The rule (TR) then constrains what content the speaker’s referential use of the complex demonstrative can have in the context: the content must be something that bears a salient relationship to the index of the use. In standard referential uses of complex demonstratives, the kind that motivated the orthodox view originally, this relation will simply be identity. Indeed, we might go further and say that the identity relation is a kind of default, and it is only when another relation is made more salient in a context that the reference is
deferred. Finally, the rule (TC) places a further constraint on the content: it must satisfy the noun phrase of the complex demonstrative.

To see how these rules work with a particular example, let us look again at (10):

(10) That is my favorite sport.

We are to imagine that a speaker utters (10) while pointing at a photograph of Rafael Nadal. The speaker’s pointing gesture is naturally taken in this case to be indicating the speaker’s referential intention, and the natural interpretation of this intention is that its object is the photograph. Thus this photograph is the index of the speaker’s use of ‘that’. In this case, the speaker is relying on background knowledge of who Rafael Nadal is (and in particular, what sport he plays), and on cues in the immediate context (in particular, that the speaker intends to be talking about a sport), to make the relation __ is the sport played professionally by the person represented in __ maximally salient in the context. According to (TR), then, the content of the speaker’s use of ‘that’ has to be something that bears this relation to the index of the speaker’s use of ‘that’. This much, then, is encoded in the semantics. But it is not part of the semantics that the sport of tennis bears this relation to the index of the speaker’s use of ‘that’ in this context. Thus the semantics does not determine the content of the speaker’s use of ‘that’ in the context.

To repeat, the rules (TD), (TC), and (TR) govern referential uses of complex demonstratives. Non-referential uses have their own semantics, which can be stated very simply:

(ND) If $u$ is a non-referential use of that NP, then the content of that NP in $C_u$ is $<\text{THE}, N^*>$, where THE is the content of the definite article ‘the’, and $N^*$ is the content of NP in $C_u$.

According to (ND), non-referential uses of complex demonstratives are semantically equivalent to definite descriptions. This means that, according to (ND), King’s examples (2) and (3) semantically express the same propositions in a context as (14) and (15), respectively, relative to the same context:

(2) That hominid who discovered how to start fires was a genius.

(3) Most avid skiers remember that first black diamond run they skied.

(14) The hominid who discovered how to start fires was a genius.

(15) Most avid skiers remember the first black diamond run they skied.
This accords with the intuitions of several philosophers, who have noted that in many of King’s examples the complex demonstrative appears to be nothing more than a “stylistically altered definite description”.15 These intuitions strike me as quite reasonable. Non-referential uses of complex demonstratives seem to have all the hallmarks of definite descriptions: they either presuppose or entail both existence and uniqueness (in the singular), and they are non-rigid designators (at least in those cases where the extension of the noun phrase in the demonstrative varies from one world to another). (ND) explains all of this by treating all non-referential uses of complex demonstratives as definite descriptions.16

The theory presented here also avoids an important objection, due to King, against any such ambiguity theory of complex demonstratives. King objects to the treatment of the complex demonstratives in (2) and (3) as definite descriptions on the grounds that there are QI uses and NDNS uses in which a demonstrative phrase is felicitous, but a definite description is not. The response to King’s objection for NDNS uses is the more straightforward of the two, so I will present it first.17 King asks us to imagine the following scene (2001, pp. 71-74): Scott the scientist is hosting a great moments in hominid history science fair. As he walks around the fair, he comes to stand between two displays. On his left is a report on the discovery of fire; on his right a report on the invention of the wheel. Scott happens to think that the discovery of fire is the single most important event in early hominid history, but does not think very highly of the invention of the wheel. Gesturing first to his left and then to his right, Scott says to the students:

(16) That hominid was a lot smarter than that hominid.

According to King, Scott’s utterance of (16) involves two NDNS uses of ‘that hominid’. Assuming, for the moment, that King is correct, note that we cannot substitute definite descriptions for the demonstrative phrases in (17):

(17) *The hominid was a lot smarter than the hominid.

If Scott’s uses of ‘that hominid’ in his utterance of (16) are NDNS, or non-referential uses, then the contrast between (16) and (17) is a problem for (ND), because according (ND) (16) and (17) should express the same proposition relative to the context of Scott the scientist’s use.
Yet there is good reason to question the assumption that Scott’s uses of ‘that hominid’ are non-referential: they are accompanied by gestures, which look to be functioning a lot like demonstrations on the orthodox view. The difference, of course, is that the objects that Scott demonstrates are not part of the content of what Scott says. We have seen this before, in our earlier discussion of deferred reference. This suggests a natural response to King: if these are examples of deferred reference, then they are both referential uses, and so we would expect the definite article to be infelicitous. The argument against (ND) would fail because that rule is meant to apply only to non-referential uses.

On the assumption that Scott’s uses of ‘that hominid’ in King’s example are referential, the current theory would handle them as follows. In his utterance of (16), Scott’s two gestures reveal his referential intentions that establish the two science fair projects at which he points as the indices of his two uses of ‘that hominid’. The shared background knowledge in the situation (in particular, (i) knowledge of what the two science fair projects are about, and (ii) knowledge that no one knows which hominids actually discovered either fire or the wheel), plus Scott’s choice of the noun ‘hominid’, makes the relation \( \_ \text{"is about the hominid whose discovery is the subject of \_"} \) maximally salient in the context. This relation constrains the content of Scott’s uses of ‘that hominid’. As we have stated the relation, it includes the condition that the content denotes a hominid. This renders the rule (TC) redundant in this case. A natural suggestion, consistent with these constraints and with our intuitions about what Scott has said is that his uses of ‘that hominid’ have the same content as the following descriptions:

\[
\begin{align*}
&\text{[the } x: x \text{ is a hominid and } x\text{'s discovery is the subject of } i_1] \\
&\text{[the } x: x \text{ is a hominid and } x\text{'s discovery is the subject of } i_2] \\
&\text{[the } x: x \text{ is a hominid and } x \text{ discovered fire]}
\end{align*}
\]

where \( i_1 \) and \( i_2 \) are the indices of Scott’s two uses of ‘that hominid’. Another suggestion consistent with the above constraints and with our intuitions about what Scott has said is that Scott’s uses of ‘that hominid’ have the same content as the following descriptions:

\[
\begin{align*}
&\text{[the } x: x \text{ is a hominid and } x \text{ invented the wheel]}
\end{align*}
\]
Our semantic theory does not privilege one proposal above another. Yet both proposals show how the current theory can yield intuitively adequate predictions for a case like this.

King also introduces an example of a QI use for which the corresponding definite description is infelicitous (2001, p. 74): imagine that we are watching a film on television. In one scene, one of the characters, a college professor, is fondly looking over what is portrayed in the story as his finest publication. Gesturing toward the television, I say to you:

(18) Every college professor cherishes that publication of his.

My utterance of (18) looks like a QI use. The demonstrative phrase I use, ‘that publication of his’, contains a pronoun bound by the quantifier phrase ‘every college professor’. Yet if we substitute a definite description for the demonstrative phrase, the resulting sentence is quite awkward:

(19) *Every college professor cherishes the publication of his.

On King’s view, the contrast between (18) and (19) shows that the use of (18) is being supplemented by the speaker’s intentions, while (19) is not. But it also suggests that (ND) is not the appropriate rule for the use of the complex demonstrative in (18), since according to (ND), (18) and (19) should express the same proposition relative to a context in which the demonstrative is used non-referentially.¹⁸

Just as with Scott’s uses of ‘that hominid’ in the previous example, however, my gesture towards the television appears to function just like a demonstration on the orthodox view. This suggests that this example can also be understood as a case of deferred reference. Assuming that the index of my use of ‘that publication of his’ is the scene on the television, the current view could handle this example in the following way. Our shared knowledge of the scene in the movie makes the relation __ is about the kind of publication in __ salient in the context of my utterance. This relation constrains the content of ‘that publication of his’ in the context. On the natural reading of my use of (18), the content of ‘that publication of his’ is equivalent to the content of the description

[the x: x is the finest publication of y]

This proposal is intuitively correct: the natural reading of my utterance of (18) is that every college professor cherishes his or her finest publication.
This example is more complicated than the previous one, however, because the occurrence of ‘that publication of his’ in (18) is bound. This raises a question when we turn to the rule (TC) in the above semantics. As (TC) is stated, it applies to expressions relative to contexts of utterance, not to occurrences of expressions relative to contexts. According to (TC), it is a necessary condition on the content of a complex demonstrative _that NP_ relative to a context that either it or its denotation in the context satisfies the predicate _is a/n NP_. Yet on our proposal above, the content of the occurrence of ‘that publication of his’ in (18), relative to the context of my use of (18), is

\[ \lambda y [ \text{the content of ‘the } x: x \text{ is the finest publication of } y \text{’ relative to } f_y ] . \]

This is just an application of the distinction between expressions and occurrences that we have already encountered in our discussion of the debate between King and Salmon. The lesson here is the same as above: it is not a counterexample to (TC) that the content of this bound occurrence of ‘that publication of his’ does not denote a publication.

The above remarks show how the proposed view can handle King’s alleged counterexamples on the assumption that the demonstratives in the examples are being used referentially. We have seen some intuitive justification for this assumption already, but there is also an important theoretical reason to think that the speakers in both of these examples are using the complex demonstratives referentially. This reason is based on the role that the index of a referential use plays in the hearers’ ability to understand what the speaker has said. In each of King’s cases, a hearer who fails to identify the object that the speaker is gesturing at will struggle to understand what the speaker is saying. King acknowledges this when he protests that the only way in which Scott can make himself understood in the context is to gesture at the science fair reports, because the relevant hominids themselves are nowhere to be found in the context. But according to King, this just shows that speakers can use gestures to aid their audiences’ interpretation of non-referential uses of complex demonstratives (2001, p. 72).

I think that King is mistaken about this. It is no accident that both examples have this feature, because it is fundamental to using an expression referentially. For standard referential uses, in which the content of the use is identical to the index, it is clear that in order to understand what a speaker has said...
one must identify the index of the speaker’s use. Since understanding what a speaker has said requires grasping the proposition that they have expressed, and in a standard referential use of a complex demonstrative the proposition expressed is singular, containing the index of the use as a constituent, grasping what a speaker of a standard referential use of a complex demonstrative has said requires grasping, or being in some way acquainted with, the index of the speaker’s use. In the case of deferred reference, the role of the index of a use of a demonstrative or indexical is to constrain the content of the use. In some cases, such as our proposal for the content of Scott’s uses of ‘that hominid’, the index is a constituent of the content. The above reasoning for standard referential uses applies straightforwardly to these cases to show that identifying the index is necessary to understand what has been said. In other cases, it might be possible to understand what a speaker has said without identifying the index of the speaker’s use of a demonstrative, but such understanding would amount to a stroke of amazingly good luck. Without knowing what constraints there are on the content of a particular use, the likelihood of arriving at the correct interpretation of that use is quite low.

This argument does not prove that King’s examples (16) and (18) are examples of deferred reference, but it does show how plausible this claim is. Certainly the burden of proof has been shifted away from the defender of (ND). But this is sufficient to undermine the argument against (ND) from these examples. On the view I have defended here, it is false that (16) is an NDNS use, and while it is true that (18) is a QI use, it is a referential one. These examples, then, are governed by the rules (TD), (TC), and (TR), not by the rule (ND).

One consequence of this discussion is that judgments about when a use of a demonstrative is referential and when a use is not are more subtle than they appear. A good example of this is in Paul Elbourne’s discussion of another of King’s alleged NDNS uses. King asks us to imagine a student, Greg, who, upon hearing that only one of his classmates received a perfect score on a recent exam, utters (20):

(20) That student who scored 100 on the exam is a genius.

According to King, this is an NDNS use, because Greg does not have any particular student in mind, and so is not referring to any particular student, when he utters (20) (2001, pp. 2-4). According to Elbourne,
however, there is a suitable index in this example: the assertion from which Greg learned that exactly one student scored 100 on the exam. Elbourne compares (20) with (21):

(21) This student who scored 100 on the exam is a genius.

He argues that while (20) would be acceptable if the assertion from which Greg learned of the perfect score happened a while before Greg’s utterance, (21) is preferable if the assertion from which Greg learned of the perfect score happened just before Greg’s utterance (2008, p. 439). This is significant because the difference between ‘this’ and ‘that’ is in the restrictions each places on the relative distance of the index of a use of one of them from the speaker: ‘this’ restricts the index to something in relatively close proximity, while ‘that’ does not. This feature of ‘this’ and ‘that’, however, only comes out in referential uses, where there is an index. If Elbourne is right, then King’s classification of (20) as an NDNS use is mistaken as well.

Elbourne’s data are not conclusive, but they are suggestive. The examples we looked at above seem to pass Elbourne’s intuitive test. If we imagine that Scott the scientist is much closer to one of the science fair exhibits than the other, and he first gestures at the closer one, then an utterance of (22) is much more natural than an utterance of (23):

(22) This hominid is a lot smarter than that hominid.
(23) That hominid is a lot smarter than this hominid.

This is further evidence that Scott’s uses of the demonstratives are referential in the example of (16) above. Elbourne strays, however, in taking this observation to apply to all of King’s NDNS examples (2008, pp. 438-439). Some of King’s examples, like (2)

(2) That hominid who discovered how to start fires was a genius,

are straightforward cases of non-referential uses of complex demonstratives. It is simply a mistake to treat these as examples of deferred reference. To do so is to miss the significance of the distinction between referential and non-referential uses of demonstratives.
4. **Conclusion**

Our distinction between referential and non-referential uses of complex demonstratives is very reminiscent of Donnellan’s distinction between referential and attributive uses of definite descriptions (Donnellan, 1966). This is not an accident; Donnellan’s observations provide a good model for understanding the difference between referential and non-referential uses of complex demonstratives. It was, of course, Donnellan’s original investigations into this distinction for definite descriptions that inspired David Kaplan to develop ‘dthat’, his formal analogue of the demonstrative ‘that’ (Kaplan, 1978). Thus was the formal semantics of direct reference born (or reborn).

The semantics for referential uses of complex demonstratives proposed in this paper is an attempt to incorporate the insights of Kaplan and others who have developed the semantics of direct reference for demonstratives (the orthodox view) into a semantic theory grounded in a particular philosophical view of the relationship between semantics and assertion. Recognizing the difference between referential and non-referential uses of demonstratives is central to this project: not only does it clarify the nature of the challenge that different examples pose for the orthodox view, but it also helps understand why certain examples have been misclassified (in particular, King’s examples (16) and (18), and perhaps (20)). It is only when we see our way clearly through all this that a better picture of the real ambiguity in the demonstrative ‘that’ comes into view.
Works Cited


Notes

1 As David Braun (1996) has pointed out, this understanding of the character of demonstratives requires that we abandon the identification of character with context-independent meaning.

2 See (Soames 1994, pp. 149-151) for a discussion of the saying of construction.

3 Two other recent theories that treat complex demonstratives as structured denoting complexes bear mentioning here. These are Ernest Lepore and Kirk Ludwig’s (2000) proposal that a complex demonstrative that NP is semantically equivalent to the definite description the x: x=that and x is a/n NP, and Paul Elbourne’s (2008) situation semantics proposal that demonstratives are definite pronouns. Both of these theories, however, are strictly theories of referential uses of complex demonstratives (though Elbourne presents his theory as a theory of all uses). I return to this point briefly at the end of section 2.

4 For lack of space, I cannot offer a detailed comparison of my view to the various views mentioned in the preceding three paragraphs.


6 Both Jason Stanley (2002) and Paul Elbourne (2008) endorse this argument, though Elbourne does raise some questions about the examples that King uses.

7 The lambda notation λi[the n-fold bondage content of ϕ relative to the n-tuple of variables <v_n, v_{n-1}, …, v_1> and f_{v_{n+1}i}'] denotes a function mapping each object i to the denotation of the description ‘the n-fold bondage content of ϕ relative to the n-tuple of variables <v_n, v_{n-1}, …, v_1> and f_{v_{n+1}i}’.

8 This feature of Salmon’s semantics is a consequence of his rules, but it possible to construct an occurrence based semantics on which every free occurrence of a directly referential expression is directly referential. In my dissertation I show how to restate King’s semantics for complex demonstratives in a way such that every free occurrence of a referential use of a complex demonstrative is directly referential.

9 In several footnotes in his reply to Salmon, King notes that various attempts to treat the complex demonstrative in (5) in accordance with the orthodox view result in the wrong modal truth-conditions for (5) (2008, fns. 9 and 21). By relegating this observation to the footnotes, however, he seems to have underestimated the significance of this fact for his own argument against the orthodox view. A great deal of King’s book Complex Demonstratives is also devoted to the question of the rigidity of different uses.

10 The statement of the view in the paper is based most closely on Soames (2009). Other classic examples of this philosophical approach to semantics include Bach (1987; 1994), Carston (1988), Recanati (1993), and Sperber and Wilson (1986). There are many differences of detail between the views put forward by these latter theorists, and my adoption of this general philosophical picture of the relationship between semantics and assertion is not meant to convey endorsement of any particular one of these views in all its detail. For dissenting arguments, see Stanley (2000) and King and Stanley (2005).

11 A semantically relevant parameter of a context given a particular sentence S is a parameter of context that contributes to the proposition expressed by S in C. For example, the speaker of C is not relevant to the evaluation of “It is actually raining” in C, because the truth conditions for the proposition expressed by this sentence in C do not turn on the identity of the speaker of C.

12 Speakers may intend to assert more than one proposition in assertively uttering a particular sentence. For example, if Sara utters ‘Geoff is walking the dog’, she may intend to assert not only that I am walking the dog, but also that someone is walking the dog. A rough definition of the primary proposition that a speaker intends to assert is this: a proposition p is the primary proposition that a speaker S intends to assert if and only if (i) S intends to assert p, and (ii) for any other proposition q that S intends to assert, q is an obvious consequence of p together with salient shared background knowledge in the utterance context.

13 Discussion of the phenomenon was originally introduced into the philosophical literature by Quine, who called it deferred ostension (1968, pp. 194-195). I follow the contemporary literature in using deferred reference.
One question about (TC) is whether it should be a semantic requirement that the content of a referential use of \textit{that NP} satisfy the noun phrase NP in the context. This has the consequence that if I say ‘that jackass just cut me off’, when pointing to the driver of the car in front of me, the content of my use of ‘that jackass’ is not the driver, because the driver is not a jackass. The question is complicated by the role of the NP in deferred reference. One of the cues that we use to identify cases of deferred reference is that the object at which the speaker is gesturing clearly fails to satisfy the noun in the complex demonstrative. When I point at a photo of Rafael Nadal and say ‘I used to play that sport’, my use of ‘sport’ helps you understand what feature of the object of my gesture is significant for understanding me. It is consistent with these examples that the NP in a complex demonstrative serves to aid the audience in arriving at the right interpretation.

One piece of evidence in favor of a semantic rule like (TC) is that sentences like (β) are intuitively analytic:

(β) If every paper about demonstratives cites Kaplan’s \textit{Demonstratives}, then that paper about demonstratives cites Kaplan’s \textit{Demonstratives}.

The notion of analyticity at work here is something like a guarantee of truth in any context in which the demonstrative is used properly. The intuitive analyticity of (β) is not defeated if I use it while pointing at a car. Rather, my use of ‘that paper about demonstratives’ in such a context is defective in some manner. (The exact manner in which such a use is defective is not my immediate concern in this paper. I am more interested in our intuitive judgments about sentences like (β).) This suggests that a proper use of ‘that paper about demonstratives’ requires that the object referred to when one utters is be a paper about demonstratives. Positing a rule like (TC) offers a straightforward explanation of the intuitive analyticity of (β): a proper use of ‘that paper about demonstratives’ is just one in which the demonstrative is used in accord with its meaning.

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(β) If every paper about demonstratives cites Kaplan’s \textit{Demonstratives}, then that paper about demonstratives cites Kaplan’s \textit{Demonstratives}.

The notion of analyticity at work here is something like a guarantee of truth in any context in which the demonstrative is used properly. The intuitive analyticity of (β) is not defeated if I use it while pointing at a car. Rather, my use of ‘that paper about demonstratives’ in such a context is defective in some manner. (The exact manner in which such a use is defective is not my immediate concern in this paper. I am more interested in our intuitive judgments about sentences like (β).) This suggests that a proper use of ‘that paper about demonstratives’ requires that the object referred to when one utters is be a paper about demonstratives. Positing a rule like (TC) offers a straightforward explanation of the intuitive analyticity of (β): a proper use of ‘that paper about demonstratives’ is just one in which the demonstrative is used in accord with its meaning.

15 The phrase is Salmon’s (2002, fn. 47; 2006a, fn. 11; 2006b, 446). Similar intuitions are cited by Dever (2001, p. 286) and Corazza (2003, pp. 272-4), who both also note that the Oxford English Dictionary distinguishes this use in its entry on ‘that’. Corazza also introduces some cross-linguistic evidence to support the interpretation of ‘that’ in King’s non-referential QI uses as a definite article.

16 An alternative to this proposal is the view that for non-referential uses of complex demonstratives, what looks on the surface like a complex demonstrative that NP is represented as a definite description the NP at the level of syntactic representation that serves as input to semantics (in other words, the demonstrative ‘that’ is replaced by the definite article before the sentence is evaluated). The two proposals result in the same semantic value for non-referential uses, but the mechanism via which they do so is different. I thank one of the referees of this volume for emphasizing to me the difference.

17 King devotes a chapter of his book to what he calls ‘ambiguity approaches’, but a great deal of that chapter is devoted to setting up the dialectic in such a way that the examples I discuss in this paper, taken from an earlier chapter of King’s book, effectively refute the ambiguity approach as King presents it. Thus the keys to King’s argument against ambiguity are the examples themselves.

18 According to the judgments of some, the use of (18) in the situation in question is unacceptable—bordering on ungrammatical. For those who find the sentence unacceptable, King’s objection to ambiguity theories, and hence the argument against (ND), based on it can be set aside. To me, however, the sentence sounds perfectly acceptable. The intuitive reading I get, in the situation described above, is that every college professor cherishes his or her finest publication. For those like King and myself who find the sentence acceptable, King’s objection cannot be set aside.