

Complex demonstratives^{*}

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Abstract

Are complex demonstratives (expressions of the form ‘that F’) referring expressions or quantifiers? Their semantic behaviour seems to pattern sometimes with the former, sometimes with the latter. In this paper I examine both referential and quantificational accounts of complex demonstratives in order to show that neither side satisfactorily accounts for all the data. I then outline an alternative analysis on which, although lexically univocal, complex demonstratives can give rise to genuinely singular or genuinely quantificational truth conditions according to context.

1 Introduction

Over the last few years, the philosophical debate on the referring-denoting distinction has shifted its focus. Donnellan (1966) placed definite descriptions at the heart of the debate, and for three decades or so, they stayed there. Recently, however, definite descriptions have been usurped by what have variously been called *demonstrative descriptions*, *complex ‘that’-phrases* and *complex demonstratives* (I shall stick to this last throughout). Complex demonstratives, which at a first pass we can think of as any expression of the form ‘that F’, pose a particular problem for the truth-conditional semanticist toiling on the border between referring and denoting: on the one hand it would seem that they are semantically closely linked to simple demonstratives, standardly taken to be the prototypical referring expressions, but on the other they display the kind of syntactic complexity associated with definite descriptions and, more broadly, with the class of quantifiers. For the standard truth-conditionalist, who either overtly or tacitly accepts the hypothesis that all noun phrases must either be referential or quantificational¹, this is an alarming state of affairs, and much ink has been spilled in the effort to show that these apparently anomalous expressions do, after all, behave

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¹ For overt formulations of this assumption, see, for instance, Neale (1993) and Dever (2001).

in familiar ways. None of the stories currently on offer, however, embodies the truth, the whole truth and nothing but the truth: some, while offering nuggets of truth, are empirically inadequate; others offer much of the truth as far as they go, but seek to delimit their field of inquiry in ways that, under scrutiny, reveal themselves as unprincipled; and yet others offer what seem to me to be profound insights into the workings of complex demonstratives, but fall at least at the hurdle of theoretical parsimony.

In the first part of this paper, I shall examine a cross section of accounts from along the theoretical spectrum. My aim will be to unearth the nuggets hidden within these analyses at the same time as demonstrating the shortcomings of each. In the second part of the paper, I want to take the insights offered by these accounts and, with the help of a type of evidence used by none of them, approach complex demonstratives from a different perspective, the perspective offered by a general theory of communication. Approaching complex demonstratives from a communication-theoretic perspective offers insights that are at least obscured by a directly truth-theoretic approach. Towards the end of the paper, I shall, however, address the questions at the heart of the truth-conditional debate on complex demonstratives.

2 Referentialism

It is more or less a given of philosophical semantics that if any expressions are referential then simple demonstratives are. They seem to display more clearly than any other expression-type what have been taken to be the two key features of referentiality: they track individuals across possible worlds and their empty uses lead to propositional failure. If I utter (1):

(1) That is filthy

then the truth of my utterance will depend, in any possible world, on the object I have referred to in the actual world; if, say, I have pointed at a whiteboard while uttering (1), then my utterance will be true at a possible world iff that very whiteboard is filthy at that world². If, on the other hand, I utter (1) without intending to refer to anything

² I don't intend to suggest here that the demonstration is itself semantically significant, but rather that it gives the hearer a way in to the speaker's intentions, which are semantically significant.

by my use of ‘that’, then intuitively it seems that my utterance fails to express any proposition; what would have to be the case, after all, for my utterance to be true?

If we accept, then, that simple demonstratives are referential, there would seem to be at least a strong pull towards extending this story to complex demonstratives. Simple demonstratives, after all, form a syntactic part of their complex brethren and furthermore their uses seem semantically very closely allied. If I utter (1) while pointing at a particular whiteboard, then it would seem that what I have said is much the same as what I would have said by pointing at the same whiteboard while uttering (2):

(2) That whiteboard is filthy

It also seems that our use of a complex demonstrative in (2) passes the tests for referentiality mentioned above: the truth of the proposition expressed by an utterance of (2) will depend on the very same object across possible worlds and if, in uttering (2), I fail to pick out a particular object by my use of ‘that whiteboard’, then again it seems that my utterance fails to express any proposition. Given this evidence, an entirely straightforward account of complex demonstratives seems to present itself: they are referential, just as are simple demonstratives; their contribution to propositional content goes no further than their referent.

But what role will be played on such a story by the nominal element of the complex demonstrative (the ‘F’ in ‘that F’)? Maybe, on the model of simple demonstratives, they play no more role than the contextual cues that guide us toward the object a speaker intends to refer to as ‘that’; they may, in other words, merely play a pragmatic role in helping the hearer assign reference. This proposal, advocated by, for instance, Larson & Segal (1995), has at least one immediate implication that has seemed unpalatable to many: the nominal element of a complex demonstrative comprises a meaningful NP, so why should the meaning of this NP simply disappear from utterance content? For the compositional semanticist, and for some who are not so wedded to compositionality, disappearing meanings have been seen as very unwelcome theoretical artefacts. But there are other problems beyond this for the simple referential thesis. Utterances with complex demonstratives in subject position (henceforth *complex demonstrative utterances*) seem to give rise to entailments which are incompatible with simple referentiality. Consider (3) and (4):

(3) That green car is very old

(4) Some green car is very old

There does on the face of it seem to be an entailment from (3) to (4), yet the simple referentialist has no story to tell about this: for her, sentence (3) expresses the same proposition as would (5), uttered while pointing at the appropriate green car:

(5) That is very old

and there is surely no temptation to think that (5) entails (4) (there may, of course, be an entailment once we add the extra premise that that is a green car, but this is not what's at issue here). How might the referentialist try to rescue her story, which after all seems to be firmly rooted in intuition, from this challenge? One strategy, adopted in differing forms by Kaplan (1978, 1989a, 1989b), Braun (1994) and Borg (2000), is to locate the contribution of the nominal not in utterance content but in Kaplanian character. On this kind of story, the nominal 'green car' in (4) would constrain the reference of 'that green car' to something that is, in fact, a green car, and then drop out of the picture. How does this help with the difficulties faced by our initial story? Firstly, on this type of account the nominal does make a semantic contribution, albeit not a contribution to propositional content. Secondly, although it still sees no actual entailment between, for instance, the propositions expressed by utterances of (3) and (4), it does at least have a story to tell about why there should *appear* to be an entailment: since the complex demonstrative 'that green car' can only be used to refer to something that is, in fact, a green car, an utterance of (3) cannot express a true proposition unless some green car is very old. In other words, although the proposition expressed by (3) does not entail the proposition expressed by (4), (6) is valid in the sense of Kaplan (e.g. 1989b):

(6) If that green car is very old, then some green car is very old.

which is, for the character-theorist, close enough to explain the illusion of entailment.

For Dever (2001), however, these solutions fail to do the work we want of them: firstly, what we're trying to explain about (3) and (4) is not the illusion of an entailment but an actual entailment, and secondly, a story on which the nominal element of a complex demonstrative contributes merely to character and not to content violates semantic innocence, the principle that the same expression should display the same semantic behaviour regardless of the linguistic context in which it appears. Dever himself proposes a story which, although closely allied to Braun's character-theoretic analysis, can cope with these supposed problems. His story falls within what seems to

be a growing trend in philosophical semantics for multiple-proposition analyses, i.e. analyses on which single utterances standardly express more than one proposition. Abstracting away from the syntactic minutiae, Dever's story amounts to the proposal that 'that F is G' expresses a sequence of two propositions: the primary proposition that that is G, i.e. the referential proposition expressed on all the accounts we've looked at so far, and the secondary proposition that that is F.

I am unsure as to how impressed we should be by the purported problems with the character-theoretic account which motivate Dever's story. Firstly, as Dever himself points out, there's little evidence to support the view that there is an actual, rather than merely apparent, entailment between, for instance, (3) and (4); and secondly, as I have argued in Powell (2001), there are good reasons why we should not expect semantic innocence to hold at the level of propositional content, but rather should relegate it to the lower level of linguistic meaning. Whether or not you are inclined to agree with me on this, there is a rather more fundamental problem facing Dever's account, and indeed facing all of the referentialist accounts we have so far looked at: as King (1999, 2001) shows, complex demonstratives seem to have non-referential uses. In particular, King points to three different types of uses of complex demonstratives which, he argues, present the referentialist with difficulties. Firstly there are what he terms *no demonstration no speaker reference (NDNS)* uses. He asks us to consider Scott who, in the course of a lecture on hominid history, utters (7):

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

Here Scott has no *particular* individual in mind to whom he intends to refer by his use of 'that hominid' and equally, it seems, his hearer need not think of any *particular* individual as 'that hominid' in order to understand Scott's utterance.

Secondly King points to *quantifying in (QI)* uses, uses on which a quantifier outside the complex demonstrative binds an anaphoric element inside:

(8) Every father dreads that moment when his eldest child leaves home.

And finally there are narrow scope (NS) uses, on which complex demonstratives seem to occur within the scope of other quantifiers:

(9) That professor who brought in the biggest grant in each division will be honored

There seem to be two possible interpretations of (9), one on which one and the same professor brought in the biggest grant in each division and ‘that professor’ refers to her, and one on which ‘that professor’ occurs within the scope of ‘each division’ and thus picks out, for each division, the unique professor who brought in the biggest grant in that division. On the latter interpretation, the complex demonstrative has an NS occurrence.

On none of these types of use does the complex demonstrative appear to be functioning referentially: NDNS uses pattern with Donnellan (1966)’s attributive uses of definite descriptions in allowing ‘whoever he is/was’ to be inserted after the NP:

(10) That hominid who discovered how to start fires, whoever he was, was a genius.

which at least strongly suggests that they should receive a non-referential analysis. As for QI and NS uses, there seems little temptation to analyse them referentially: what could possibly count as the referent of ‘that moment when his eldest child leaves home’ in (8) or ‘that professor who brought in the biggest grant in each division’ in (9)?

On the face of it, the existence of such non-referential uses of complex demonstratives seems to rule out any straightforwardly referential account. Many referentialists, however, have recognised such uses (in particular QI uses) without apparently feeling the need to abandon their accounts and start again. The approach of Lepore & Ludwig (2000) is typical:

Sometimes, of course, “that” is pressed into service as a variant of “the”, and one could imagine someone uttering (21) [‘Every man loves that woman who is his mother’] with that in mind. We are not concerned with such uses of “that”, but rather with demonstrative uses.

Lepore & Ludwig (200, p.219 fn.28)

We can take this exclusion in two ways: either Lepore & Ludwig (and others who support this approach to non-referential uses) are not in the business of studying language itself, but are, rather, concerned with pinning down the truth-conditions of particular uses of language, or there is an implicit assumption in the passage above that there are two different ‘that’s in play, one referential and one non-referential. If we are to take the first reading, then Lepore & Ludwig are simply not engaged in the same enquiry as, for instance, King, Dever and myself. If, however, we are to take the second reading, explicitly advocated by Dever, then the referentialist may still have

a claim to provide a complete account of the expression-type he has in his sights, i.e. referential complex demonstratives.

The burden of proof is, here, on the referentialist. All things being equal, and with our lesson on parsimony learnt from Grice and Modified Occam's Razor, we should be ready to reject a story which posits an ambiguity in 'that' for one that posits none. Presuming we can tell a story about 'that' which doesn't require us to posit an ambiguity (and I aim to do just this in the latter part of this paper), the referentialist must therefore convince us that there really is an ambiguity if he is to overcome the methodological bias against his story. Dever attempts to give at least some evidence to show that 'that' is ambiguous (apart from his observation that the Oxford English Dictionary supports this view, which I don't intend to worry about too much). His key evidence is that, in examples such as (8), substituting 'this' for 'that' leads to infelicity: (11) *Every father dreads this moment when his eldest child leaves home.

Given that, for referential uses of 'that', this substitution is unproblematic, Dever concludes that the 'that' in, for instance, (8) is simply a different lexeme from the 'that' in, for instance, (2). Dever's argument, however, rests on an undefended assumption that seems to be at least questionable: that because 'this' and 'that' are substitutable in referential contexts, their semantics must be such that they are substitutable in all contexts. There is a clear and familiar difference between the semantics of 'this' and the semantics of 'that': 'this' is used to pick out objects which are by some standard near to the speaker, while 'that' is used to pick out objects which are not near the speaker. There is also some evidence to suggest that 'that' is, in some sense, a default, whereas 'this' is marked: consider, for instance, that, however close something is to the speaker, so long as there is not another further object which she might be taken to be referring to, she may refer to it as 'that'; whereas a speaker who refers to something distant as 'this', whether or not there is a candidate nearer object, is at least speaking infelicitously. It seems to me that it may be just this dimension of the semantics of 'this' and 'that' that is responsible for the infelicity of (11): on the one hand the speaker's use of the complex demonstrative is descriptive, thus picking out no particular individual, but on the other she is indicating, by her use of 'this' rather than 'that', that what she is talking about is relatively near to her. It may well be the incompatibility between these two that leads to infelicity.

Whether or not you accept this argument, the point I want to stress is that the infelicity of utterances like (11) may well be explicable in terms other than the ambiguity of 'that'. Until we have stronger empirical evidence to support the view that 'that' is ambiguous, therefore, we should, on methodological grounds, prefer a

univocal semantics for ‘that’. In the next section I shall look at some accounts of this type.

3 Quantificationalism

The point we seem to have reached is this: given the lack of evidence for an ambiguity, we are on the hunt for a univocal semantics for complex demonstratives, but one that allows for both referential and non-referential uses. Where might this hunt lead us? On the assumption that all NPs are either referential or quantificational, there seems only one direction open to us: complex demonstratives are quantificational. But what might a quantificational semantics for complex demonstratives look like? Neale (1993) outlines a story on which ‘that F is G’ is equivalent to ‘the actual F I am demonstrating is G’ and on which complex demonstratives take mandatory wide scope. The advantage of this account, for Neale, is that it gives the content of the nominal a role to play in utterance content, thus fitting with the intuition mentioned earlier that meanings shouldn’t simply vanish. It is, however, as Lepore & Ludwig (2000) point out, not only ad hoc in that there is no clear reason why the complex demonstrative should always take wide scope, but also empirically inadequate: it has no story to tell about why the failure of a complex demonstrative to designate should result in the failure of the utterance in which it appears to express a proposition (this is not, after all, a property of definite descriptions); and it predicts, wrongly, that an utterance by *s* of ‘that F is G’ entails that *s* exists. We thus need something rather more subtle if we are to place complex demonstratives within the class of quantifiers.

Two recent accounts, those of King (2001) and Lepore & Ludwig (2000), attempt to provide just that something. Lepore & Ludwig’s account is based on the premise that, contrary to superficial appearance, complex demonstratives are not syntactically formed by the concatenation of a quantifier ‘that’ and a nominal. Instead they are restricted quantifiers with the quantifier element suppressed and both ‘that’ and the nominal contributing to the restrictor. In essence, as Lepore & Ludwig make clear, their story treats ‘that F is G’ as equivalent to [The *x*: *x*=that and *x* is F](*x* is G)³. I suspect that, as far as it goes, this story may have much to recommend it. But, as mentioned earlier, Lepore & Ludwig are only in the business of accounting for referential uses of complex demonstratives. If, therefore, we accept, as I have argued

³ Lepore & Ludwig (2000, p.215)

we should, that there are truly non-referential uses of complex demonstratives, then our hunt for a satisfactory account continues.

King (2001) offers a story which is specifically tailored to account for both referential and non-referential uses of complex demonstratives. On his analysis, complex demonstratives are profoundly context-sensitive quantifiers, depending on context not just for which properties are to be taken as determining the intended referent, but also for whether that referent is to be tracked across possible worlds or not. For King, the lexical meaning of ‘that’ (as it appears in complex demonstrative constructions; he only tentatively suggests that the outline of his account might be extended to simple demonstratives) is a four-place relation:

_____ and _____ are uniquely _____ in an object x and x is _____
King (2000, p.43)

The first argument place, on this story, is to be filled by the property expressed by the nominal, the second by a property determined by speaker intention, the third either by *jointly instantiated* or *jointly instantiated in* $\langle w, t \rangle$ and the fourth by whatever property is expressed by the predicate. There are for King two fundamentally different kinds of intention that can determine the property to saturate the second argument place: either the speaker may have a perceptual intention, which may include both intentions towards objects of immediate perception and towards remembered objects of past perception, or she may have a descriptive intention, i.e. an intention towards whatever satisfies some descriptive condition. Which of these two kinds of intention she has will make a difference not only to the first-order property that saturates the second argument position but also to the second-order property that saturates the third argument position. If the speaker has a perceptual intention, towards the object a say, then the second argument position will be saturated by the property of being identical to a and the third by the property of being jointly instantiated in $\langle w, t \rangle$, where w and t are to be taken rigidly to designate the world and time of utterance. If, however, the speaker’s intention is descriptive, then the second argument position will be saturated by whatever property her intention determines, and the third by the property of being jointly instantiated.

Let me work through a couple of examples to illustrate how this story is supposed to go. Consider first a classic referential use of a complex demonstrative: Janet and John are at a party and, seeing a man across the room, Janet says:

(12) That man wearing a kipper tie has no dress sense

What proposition will Janet's utterance have expressed on King's story? The first parameter will be saturated with the property of being a man wearing a kipper tie, the second, since Janet has a perceptual intention concerning the man in the kipper tie, with the property of being (identical to) \underline{a} , where \underline{a} is the very individual in question, and the third, again because Janet's intention is perceptual, with *are uniquely jointly instantiated in* $\langle w, t \rangle$. Finally, the fourth parameter will be saturated with the property of having no dress sense. What, then, will this amount to? It amounts to the claim that Janet's utterance will be true in any circumstance of evaluation iff there is, in the context of Janet's utterance, one and only one thing which is both a man wearing a kipper tie and also \underline{a} , and that thing has no dress sense in the circumstance.

Next let's take a non-referential use, say an utterance of the sentence in (7). What truth conditions will King's account predict for this? Here the first parameter will be filled with the property of being a hominid who discovered fire, the second with the same property, since the speaker's intention is simply to talk about whoever satisfies the nominal, and the third, since the speaker's intention is descriptive, with *are uniquely jointly instantiated*. Finally again the fourth parameter will be filled by the property of being a genius. King's prediction here, then, is that an utterance of (7) will be true in a circumstance iff there is one and only one hominid who invented fire in that circumstance and he is a genius in that circumstance⁴.

What advantages does this complex semantics have over the simpler story told by Neale (1993)? One clear advantage is that it falls at neither of the two hurdles mentioned above: firstly, the proposition expressed by an utterance of 'that F is G' will not include any mode of presentation of the speaker, and thus will not entail that the speaker exists. Secondly, where there is nothing which the speaker refers to with a perceptual use of 'that F' (the use that referentialists are worried about), there is no property of being identical to the object of the speaker's perceptual intention to saturate the second argument position, and thus no complete proposition expressed. It also satisfies the referentialist's other intuition about referential uses: that in such uses the referent of the complex demonstrative is tracked across possible worlds. On King's story, the truth value of a complex demonstrative utterance backed by a perceptual intention will, in any possible world, depend on the object of the speaker's intention in the context of utterance.

That it can handle non-referential uses at the same time as accommodating the fundamental intuitions upon which the referentialist bases his story seems to be strong

⁴ I'm ignoring the past tense here simply for ease of presentation.

evidence in favour of King's account. Unfortunately, the account is empirically inadequate. Any story on which complex demonstratives are quantificational is going to have to show that they enter into scopal interactions with other quantifiers, modal operators etc. Views in the literature are radically divided on this, with the dividing line not surprisingly running between referentialists and quantificationalists. For Dever (2001), for instance, complex demonstratives cannot enter into scopal relations, whereas for King (2001) they can. Dever of course excludes King's QI and NS uses from the class of complex demonstratives, and with NS uses in particular, we've already seen what seems to be a scope ambiguity involving a complex demonstrative: (9) has two readings, one on which the complex demonstrative falls within the scope of the quantifier 'each division', and one on which the scopal relation is reversed. But what of those uses of complex demonstratives which are supported by perceptual intentions, i.e. those uses at the heart of the referentialist's story? As Dever points out, cases in which complex demonstratives occur in sentences with uncontroversial quantifiers are not going to be of much help here. To see why, consider (13):

(13) Every woman in the room likes that man over there

On King's story, this sentence should equate to two sets of truth conditions which will look roughly like (14) and (15):

(14) For all x such that x is a woman in the room the properties of being a man over there and being identical to \underline{a} are uniquely jointly instantiated in $\langle w, t \rangle$ by y and x likes y

(15) The properties of being a man over there and being identical to \underline{a} are uniquely jointly instantiated in $\langle w, t \rangle$ by y and for all x such that x is a woman in the room x likes y

But, although these sets of truth conditions may differ in their scope relations, their truth values will covary across contexts. There is thus no way to establish whether (12) really does equate to (14) and (15). Sentences in which complex demonstratives co-occur with verbs of propositional attitude, however, are a different matter. Dever asks us to consider the example in (16):

(16) Albert believes that upright citizen is a spy

For King there should be a reading of (16) on which Albert holds a contradictory belief, i.e. the belief that the property of being an upright citizen and being a are uniquely jointly instantiated in $\langle w, t \rangle$ by x and x is a spy. But there just doesn't seem to be any such reading.

For both King and Lepore & Ludwig it is important that such readings should be available, and both offer examples in which such narrow scope readings of referentially-used complex demonstratives relative to verbs of propositional attitude are supposedly available. Both, however, seem to me to be examples of something else. King asks us to imagine a party at which Alan has just been named CEO of Chanticleer. Sherry, a Chanticleer employee who believes Alan hates her, arrives at the party to hear the bad news. Two other party-goers are in conversation, when one looks over to Sherry and, seeing that she is looking very glum, asks why. The other, pointing at Alan, replies:

(17) Sherry believes that guy who was just named CEO of Chanticleer hates her.

King then mounts an argument that runs like this: the utterance of (17) is an explanation of Sherry's behaviour; if the complex demonstrative in (17) were interpreted referentially (or as taking wide scope) (17) would not be an explanation of Sherry's behaviour, since she has long believed that Alan hates her without wasting any time moping about it; it must therefore be the case that the complex demonstrative is interpreted as taking narrow scope with respect to the belief operator, thus placing the property of being just named CEO of Chanticleer within Sherry's belief.

But this cannot be the reason that (17) is taken as an explanation of Sherry's behaviour. Consider a slight variant on the context above: imagine that both speaker and hearer know that Alan has *not* been appointed CEO of Chanticleer, but that Sherry misguidedly believes he has. In this situation the reading that King takes to be our natural interpretation of (17) will be plainly and straightforwardly true, since Sherry does hold the belief that the properties of being just named CEO of Chanticleer and being Alan are uniquely instantiated in x and x hates her. Yet an utterance of (17) in such a context seems at best highly infelicitous, if not plain false. Given this, we would do well to look elsewhere for a story on why an utterance of (17) acts as an explanation of Sherry's behaviour, and we don't have far to look. Let's assume that, on the evidence above, the complex demonstrative 'that guy who was just named CEO of Chanticleer' contributes nothing but Alan himself to propositional content. Since it appears at a point in the conversation at which the hearer is expecting an answer to his question, he will interpret the utterance of (17) in that light; in other

words, he will ask himself why Sherry's belief that Alan hates her is making her glum. Now there is one property of Alan that the speaker has made contextually highly salient by his choice of referring expression: the property of being the newly-appointed CEO of Chanticleer. Putting together the premise that Sherry believes that Alan hates her and the premise that Alan is the newly-appointed CEO of Chanticleer, along with various other premises such as that Sherry works for Chanticleer, it shouldn't take the hearer long to reach a conclusion about the causes of Sherry's glumness. (17) can thus act as an explanation of Sherry's behaviour without any need for a narrow scope interpretation.

Lepore & Ludwig try another tack. They ask us to consider Tom, Mary and Mary's companion in a restaurant. Tom leans over to Mary and, pointing at a waiter in white sneakers, says 'that man wearing white sneakers is a good waiter'. Mary, who has failed to hear a part of Tom's utterance but who sees that the waiter Tom is talking about is wearing Nike sneakers, turns to her companion and says 'Tom believes that man wearing Nike sneakers is a good waiter', to which her companion, who has better hearing, replies:

(18) No, he thinks that man wearing *white* sneakers is a good waiter.

Lepore & Ludwig's argument then runs like this: if the complex demonstrative in (18) is analysed referentially (or as taking wide scope), Mary and her companion are both attributing the same belief to Tom, i.e. the belief of the man in question that he is a good waiter; since they are in disagreement, this cannot be the intended interpretation; the complex demonstrative in (18) must therefore be interpreted as taking narrow scope in relation to the belief operator, thus placing the property of being a man wearing white sneakers within Tom's belief. But this argument is based on a false assumption: that, if there is a disagreement between Mary and her companion, it must be a disagreement on the content of Tom's belief. Consider the following example, adapted from Carston & Noh (1995):

(19) A: We went to the zoo and saw the hippopotamuses
 B: No, we went to the zoo and saw the hippopotami

In (19) B is disagreeing with A, but her disagreement is not with the content of A's utterance, it is, rather, with the linguistic form A has used to express that content: the negation in (19) is metalinguistic. This type of analysis would seem to extend very naturally to (18): what Mary is taking issue with is not the content of her companion's

utterance, which is simply the attribution of a singular belief to Tom, but the linguistic form her companion has used to express that content, which inaccurately mirrors the linguistic form used by Tom to express his own belief. Given the availability of such an analysis, this example seems to offer no firm evidence of scope interaction between a complex demonstrative and a verb of propositional attitude.

Even clearer than propositional attitude contexts are sentences in which complex demonstratives, used perceptually, co-occur with negation. Consider (20):

(20) That policeman is not John's brother

uttered while pointing, say, at a particular policeman. On any quantificational account, (20) should admit of two interpretations. Sticking with King's story, those two interpretations will look something like:

(21) The properties of being a and being a policeman are uniquely jointly instantiated in $\langle w, t \rangle$ by x , and it is not the case that x is John's brother

(22) It is not the case that the properties of being a and being a policeman are uniquely jointly instantiated in $\langle w, t \rangle$ by x , and x is John's brother

In other words, there should be a reading of (20) on which it will be true just in case there is nothing which is a unique policeman who is a here and now and which is John's brother. But there doesn't seem to be any such reading: this is, after all, a reading which would be true in the circumstance that the individual who is the object of the speaker's intention *is* John's brother, just so long as he is not a policeman. King mounts a defence against this kind of argument by invoking pragmatic processes: in perception-based cases, speakers are interested in getting their hearers to pick out the objects of their perceptual intentions; to this end, they will pick, as the nominal, a predicate which they believe their intended referent to satisfy, and which will thus help their hearers towards identifying the intended referent; given this, they are not going to want their utterances to be interpreted in such a way that they are true merely by virtue of their referents not satisfying the nominal predicate. The key point of this argument is that, with perceptual uses, narrow scope readings of complex demonstratives relative to negation are pragmatically blocked. It seems to me, however, that such readings are not so much blocked as absent. Consider (23):

(23) There is a flag hanging out of every window.

The sentence in (23) clearly has two scopal readings, one of which, the reading on which ‘a flag’ takes scope over ‘every window’, is pragmatically blocked in most contexts. But there are two things to note about (23): firstly, although this reading is blocked, we can nevertheless make it out, and secondly, it is possible to manipulate the context so that this reading becomes the natural one: suppose we are discussing a factory across the road which prints huge flags and dries them after printing by hanging them out of the window; the flags are often so large that, when drying, they hang out of four of five windows, but this time they’ve excelled themselves; wanting you to come and have a look, I utter (23). In such a context, the wide-scope existential reading will be at least much less strongly suppressed than in a neutral context. These two properties, the properties of being make-outable and de-suppressible by contextual manipulation, are typical of pragmatically suppressed scopal readings. Yet the supposed suppressed reading of (20) has neither of these properties. Given this, the only reason to suppose that there is such a reading is if one’s theory requires it.

So where does our discussion of the referentialist and quantificationalist strategies leave us? The referentialist seems to have a lot that is right to say about referential uses of complex demonstratives; in particular, as the discussion of scope above demonstrates, she is right to claim that, on referential uses, complex demonstratives contribute nothing but their referents to propositional content. However, she has nothing to say on non-referential uses which, as I hope I have convinced you above, are genuine uses of complex demonstratives. The quantificationalist, on the other hand, has a lot that is right to say about non-referential uses (I shall expand on just how much of the quantificationalist’s story is right later in the paper), but, again, given the scopal data above, has serious difficulties when trying to account for referential uses.

4 Hybrid accounts

If referential uses are truth-conditionally singular, non-referential uses are truth-conditionally general, and complex demonstratives are not ambiguous, what kind of story is there left to tell? Maybe the way forward is an account on which complex demonstratives are hybrids of referring terms and quantifiers. Versions of this sort of account have been advocated by Richard (1993) and Neale (1999)⁵. For Richard,

⁵ Of course one could, as, for instance, Dever does, see Lepore & Ludwig’s account as hybrid, and even perhaps King’s, since they posit both quantificational and referential aspects to the semantics of

complex demonstratives are what he calls *articulated terms*: they introduce not only their referent to propositional content, but also some quasi-Fregean way of thinking of that referent, as expressed by the nominal. Quite what the truth conditions of a complex demonstrative utterance will be on this story is slightly obscure: Richard suggests that an utterance of ‘that F is G’ will be truth-conditionally equivalent to an appropriately related utterance of ‘that is F and that is G’, in which case his story is not really hybrid in the sense we are interested in, and will fall at the same hurdles as, for instance, Dever’s account (plus some others). The syntactic structures he assigns to articulated terms, however, suggest that maybe his intention is to claim that complex demonstrative utterances give rise to two parallel sets of truth conditions, one singular and one general.

Whether this is Richard’s view or not, it is clearly the view of Neale (1999). For Neale, the lexical semantics of a complex demonstrative consist in a series of instructions: initially, the hearer of ‘that F is G’ is instructed to build the descriptive proposition in (24):

(24) [the x: s is indicating x & Fx] Gx⁶

He is then instructed to find whichever object is the x such that s is indicating x and x is F in the context, and build a second, singular proposition containing that object:

(25) Gα⁷

The thrust of Neale’s story is thus that complex demonstratives are not referential *or* quantificational, they are referential *and* quantificational. In tandem with this two-proposition account, Neale tells a story about contextual weighting: in most contexts it will be the proposition in (25) which will carry what he calls the contextual weight, but in some ‘exceptional circumstances’⁸ it will be the proposition in (24).

This story will not, however, do the work we need. And, to be fair to Neale, it is not intended to do so, since, even in those contexts in which it is the descriptive

complex demonstratives. On both these stories, however, the referential aspects are embedded within a quantificational structure. They thus seem to be fundamentally quantificationalist.

⁶ Neale (1999, p.67)

⁷ Neale (1999, p.67)

⁸ Neale (1999, p.68)

proposition that carries the contextual weight, Neale is still envisaging that there should be a perceived object towards which the speaker has some referential intention; he is, in essence, giving an account on which the kinds of uses of demonstratives which lie at the heart of the referentialist story can be interpreted (predominantly) descriptively, rather than one that can account for the purely descriptive uses raised by King. On King's descriptive uses, there is no object towards which the speaker has any referential intention; when Scott uses the expression 'that hominid who discovered how to start fires' he has no individual in mind about whom he wishes to be understood to be talking, rather he wants to talk about whoever is the hominid who discovered how to start fires. In this kind of situation, Neale's first proposition will be false, and his second proposition will simply not get off the ground: since there is no x such that s is indicating x , it is, a fortiori, not the case that ((there is a unique x such that s is indicating x and x is F) and x is G); and, since nothing satisfies the descriptive material in the general proposition, there is no object for the singular proposition to be about.

We must therefore look for another kind of hybrid story, and it is the business of the rest of this paper to outline and defend an account of this sort.

5 Complex demonstratives and communication

As I suggested at the beginning of this paper, the question I want to address directly is what role complex demonstratives play in communication. Once we have a clear idea on this, we can then move on to look at the key concern of the philosophical semanticist, i.e. the truth conditions of the propositions expressed by complex demonstrative utterances. Hopefully an answer to the first question will point us in the direction of a principled answer to the second.

All the accounts we have looked at so far agree, either tacitly or overtly, on one underlying principle: that, whatever the meaning of complex demonstratives may be, it must be analysed along more than one dimension. For character-theorists like Braun (1994) and Borg (2000), a satisfactory account must recognise the different contributions complex demonstratives make to character and content; for quantificationalists like King (2001), complex demonstratives are semantically mandated to introduce into propositional content not just the property expressed by their nominal, but also a further property determined by context; and for hybridists like Richard (1993) and Neale (1999), complex demonstrative contribute both the property expressed by their nominal and their referent to propositional content, albeit, on

Neale's account at least, to the content of different propositions. All of these different versions of what we might call the *two-tier* story on complex demonstratives are expressions of the same underlying intuition: that understanding a complex demonstrative involves both the linguistically-given nominal and some extra non-linguistically-given (i.e. contextually determined) element; when we understand 'that F', we understand firstly that what is being talked about is an F, and secondly that it is a particular F being talked about, and, in order to establish *which* F, we need to make use of something other than the nominal. I have intentionally attempted to leave this intuition very vague: it can, as witnessed by the variety of accounts discussed above, be developed in widely differing ways. But it nonetheless expresses what is possibly the only common ground between all the accounts currently available. And, given this, I suggest we should take it pretty seriously.

I propose, then, that we start from the following working hypothesis: 'that F' is a tool that speakers use to talk about particular Fs. The tool works by indicating two things: (i) that the hearer is intending to talk about a particular F; and (ii) that being an F, in the context of utterance, is not the only way in which the speaker is thinking of her intended F. As things stand, this hypothesis is, obviously enough, extremely vague: in particular we are going to need to make much more explicit the notions of *thinking about* and *talking about* an F. To indicate roughly the way things are going to go on this, I intend to cash these notions out in terms of the disjunction of Russellian acquaintance and description; to think of an F in the way indicated by the use of a complex demonstrative, one must either be able to think of that thing by acquaintance or by description. It is not, therefore, on the account I am going to outline, necessary to be acquainted with the designata of one's uses of complex demonstratives and thus not necessary to be acquainted with those designata in order to understand complex demonstratives utterances.

On the face of it, this kind of view seems to have much in common with the quantificational account of King (2001). For King, uses of complex demonstratives can be backed by either acquaintance or description, in King's terms by *perceptual intentions* or *descriptive intentions*. And on King's account, too, understanding complex demonstratives involves grasping both that what is being talked about, in the appropriate sense of *talked about*, is an F and that there is some other way in which the F being talked about is to be thought of, the property that saturates King's second argument place. Although the account I shall advocate diverges from King's in at least one fundamental respect, there is a fair amount of common ground. Given this, I would like, before progressing to a more articulated formulation of my own account, to highlight a point, in addition to those already discussed above, at which King's story

seems to get things wrong. An examination of this shortcoming will, I hope, point us in the direction of a more complete analysis.

For King, it is typical of uses of complex demonstratives backed by descriptive intentions that the property which saturates the second argument position, the argument position reserved for first-order properties determined by speaker intention, is redundant. He asks us to imagine Danielle who knows, on purely general grounds, that there is currently one and only one person swimming across Lake Tahoe. Intending to talk about whoever it is that is currently swimming across Lake Tahoe, Danielle utters:

(26) That person swimming across Lake Tahoe now must be cold

On King's analysis, the first argument position is, as ever, saturated by the property expressed by the nominal, i.e. the property of being a person swimming across Lake Tahoe now. But, for King, that is also the content of the descriptive intention which backs up Danielle's use of the complex demonstrative: her intention is to talk about whoever has the property expressed by the nominal. It is therefore the case that the second argument position is saturated with just the same property as saturates the first argument position. The speaker's intention is thus redundant⁹.

On the rough sketch of the communicative role of complex demonstratives given above, this is at least an undesirable result: what I have suggested is that complex demonstratives are communicative tools designed for a particular purpose, that purpose being to guide the hearer's interpretive process in (at least) two ways. If the speaker only has one way of thinking of whatever she wants to talk about, then it would seem that, on the picture above, a complex demonstrative is the wrong tool for the job. I accept, however, that if this were the only reason to resist the redundancy in King's account, it would certainly not be reason enough. But there is some empirical evidence to suggest we might do well to think again. Consider an example that seems to be parallel to King's example in (26):

(27) That oldest man in the world must be worried about mortality

Here, as in King's example, the speaker can, self-evidently, believe on purely general grounds that there is one and only one oldest man in the world, given any story on the

⁹ That is not, of course, to say that the speaker's intention must always be redundant on such uses, just that this can be, and standardly is, the case.

semantics of superlatives¹⁰. And here, again, as in King's example, the speaker's intention seems redundant, since, *ex hypothesi*, she wants to talk about whoever is the oldest man in the world. And yet (27) seems infelicitous in a way that (26) isn't. Why might that be? What distinction can we draw between (26) and (27) that might explain why one is felicitous and the other not?

Another type of evidence seems to point in the direction of a plausible answer. Take the sentence in (28):

(28) That dog with three legs is called 'Lucky'

I want to outline two possible contexts in which (28) might be uttered: in the first context, Janet and John are standing in a room full of dogs, all but one of which have the standard canine allocation of legs. Janet turns to John and utters (28). In the second context Janet and John are again in a room full of dogs, but now all of the dogs are three-legged. Pointing at a particular dog across the room Janet utters (28). There seems to be an intuitive difference between the work done by the nominal 'dog with three legs' in these two contexts: in the first context, Janet is using the nominal not only to pick out which kind of thing she's talking about (she's talking about a dog), but also which individual within that kind she's talking about (the one with three legs). In the second context, by contrast, she is simply using the nominal to indicate which kind of thing she's talking about (she's talking about a dog with three legs), and John must turn to other, non-linguistic factors to establish which particular individual within this kind Janet is talking about (Janet's demonstration is going to give him a big clue).

What might the distinction between Janet and John's two contexts tell us about complex demonstratives? Let me suggest an answer: saturating King's second parameter doesn't always have to be a purely non-linguistic matter; sometimes the speaker can give the hearer information via her utterance that allows him either fully or partially to saturate this parameter¹¹. So, returning to (28), in the first context, the property expressed by 'dog', not 'dog with three legs', will saturate the first parameter (the parameter we've so far been thinking of as the nominal parameter), and the property of having three legs will go some way towards saturating the second

¹⁰ If you feel that the points I make about this example are in some way special to superlatives, consider 'that winner of the race...', 'that first day of next year ...' etc.

¹¹ My talk of saturating parameters is not intended to indicate that I am committed to any of the details of King's story; I am simply here using this terminology for ease of presentation. I shall make clear how these conclusions fit within my own account later in the paper.

parameter. In a context such as this, however, where speaker and hearer are in an immediate perceptual relation with the object the speaker is intending to talk about, perceptual/causal properties of the referent will no doubt also enter into the saturation of the second parameter. Compare an utterance of (28) in the first context to an utterance of (9), repeated as (29):

(29) That professor who brought in the biggest grant in each division will be honored

for which linguistically given material ('who brought in the biggest grant in each division') will entirely saturate the second argument position.

In the second context above, the nominal of (28), as we've already seen, only goes to identify the type of thing that Janet is intending to talk about; it is left to contextual indicators to determine which individual of that type Janet wants to talk about. Translating this into King's terms, the property expressed by 'dog with three legs' saturates just the first parameter, with the second parameter left entirely to context, albeit a context manipulated by Janet's demonstration.

How does this story help us with the data we started out with, the infelicity of (27) in comparison to (26)? If we reanalyse (26) along the lines just sketched, it would seem natural to say that the kind of thing Danielle is intending to talk about is a person. And which person? Well, the one swimming across Lake Tahoe now. In other words, the first parameter is saturated by the property of being a person, while the second is saturated by the property of being swimming across Lake Tahoe now. Both parameters are thus saturated. But what of (27)? In (27) there are no two properties that are separable in this way: the property of being the oldest man in the world is not the property of being both the oldest man and in the world. It is this, I suggest, that makes (27) infelicitous. Why? Because, contrary to King's account, the parameter which corresponds, on his story, to speaker intention, cannot be redundant: complex demonstratives are tools for picking things out via two or more distinct routes, and uses of complex demonstratives for which, as in (27), there is only one way of thinking of the speaker's intended referent, are thereby rendered infelicitous.

There are two extra pieces of evidence to suggest that this sort of story is along the right lines. Firstly, consider (30):

(30) That person who is the oldest man in the world must be worried about mortality

To my ear, (30) is less infelicitous than (27). On the accounts we have looked at so far in this paper, all of which treat the nominal as a whole unit, there is no obvious

explanation of this difference. On the kind of story I am sketching, however, this contrast is to be expected: in (30), unlike in (27), there are two separable properties (the property of being a person and the property of being the oldest man in the world) which can be prised apart to saturate both of King's first two parameters.

Secondly, imagine that on Tuesday Janet is reading the newspaper and sees an article about the oldest man in the world which she discusses with John. On Wednesday, having mulled things over in the last twenty-four hours, John utters (27) to Janet. Again this seems less infelicitous than does (27) uttered in a context without such a background. Why? Because in this context there is another 'route in' to the person John is intending to talk about: he's the person they were talking about yesterday. The second parameter thus doesn't go unfilled. There still does seem to me to be a certain oddness to an utterance of (27) even in this context, albeit less than before, and this too can be explained in the terms laid out above: complex demonstratives are designed in such a way that the hearer interpreting a complex demonstrative first goes to a class to which the thing talked about belongs, and then goes beyond that to discover which member of the class is being talked about. But of course for any utterance of (27), the nominal property will determine a unique individual, thus leaving the second parameter, although now filled, not doing any semantic work over and above the work already done by the nominal. Again this seems to go against the grain of complex demonstratives, although not as seriously as where there is no property to saturate the second parameter at all. Given this kind of data, it would seem helpful to introduce terminology to distinguish that part of the nominal which goes to saturate King's first parameter, the part of the nominal which makes a complex demonstrative a complex demonstrative, and that optional part of the nominal which can go towards saturating King's second parameter. I propose to call the former a *nominal sortal* and the latter a *nominal individuator*.

Let me then briefly summarise the kind of picture that the evidence above seems to point towards: complex demonstratives are communicative tools of a particular kind, they are tools for talking about individuals; given their meaning, they indicate that the individual in question is being thought of in at least two ways, firstly as a member of a particular class and then via some other route or routes that distinguish(es) them from all other members of that class. This is, of course, no more than the vaguest formulation of the outline of an analysis of complex demonstratives: we have, for instance, said nothing yet about how to cash out the two-routes notion, or about what the truth conditions of complex demonstrative utterances might be. It is the purpose of the next section of the paper to firm up the proposed analysis.

6 A semantics for complex demonstratives

Before tackling the semantics of complex demonstratives head on, I want to put in place one piece of preliminary groundwork. I take it as uncontroversial from a cognitive perspective that having a concept of an individual is a necessary prerequisite for entertaining thoughts about that individual¹². However, it has been a philosophical commonplace since Russell that there are two fundamentally different ways of thinking of individuals: in Russell's terms, one may think of an individual either as an object of acquaintance or via description. This distinction, and the discussion it has given rise to, are familiar and I don't intend to go into them in detail here. The lesson I wish to draw, however, is simple: there are ways of thinking of individuals which are truth conditionally singular, in the sense that all they contribute to the truth-conditions of propositional representations is their referents, while there are other ways of thinking of individuals that are general, in that they give rise to general, i.e. quantificational, truth conditions. I shall call the former *de re individual concepts*¹³ and the latter *descriptive individual concepts*¹⁴.

With that piece of groundwork in place, I can now spell out in greater detail the story on complex demonstratives which I have so far only sketched. I shall initially express the details of my analysis as a more explicit version of the communication-based account above, which will focus on the mapping from linguistic form to mental representation. Once I have done that, however, I shall spell out the truth-conditional implications. It is only by separating out the path from language to mind and that from mind to world that, so I shall claim, we can properly appreciate how complex demonstratives work. As far as the first of these paths is concerned, my proposal looks like this: as for all linguistic expressions, a complex demonstrative provides the hearer of an utterance in which it occurs with information about the thought which the

¹² I am not, at this stage, making any claims about truth conditions. It does not, for instance, follow from this that there can be no direct reference to individuals: it may well be (and, on the account I advocate, is) that some kinds of concept contribute nothing to the truth conditions of the propositional representations in which they occur but their referents.

¹³ This terminology may not be ideal, since it may lead some to think of, for instance, Montague's use of *individual concept*. So long, however, as it is borne in mind that I am talking here of cognitive entities, I hope that this potential confusion can be avoided.

¹⁴ This discussion of the distinction is of necessity brief. For more on *de re* and descriptive individual concepts, see, for instance, Powell (2000, forthcoming).

speaker is entertaining and intending to express. The information carried by a complex demonstrative ‘that F’, where F is a nominal sortal, comprises three aspects:

- i) The component of the speaker’s mental representation which corresponds to the complex demonstrative in her linguistic representation is an individual concept, be it *de re* or descriptive;
- ii) That individual concept is a concept of an F;
- iii) That individual concept is a concept of an O, where O is a further property or conjunction of properties over and above the property of being an F.

We know what sort of property is expressed by the nominal sortal, but what sorts of properties can do service as O-properties, what can they be properties of, and where can they come from? The possibilities are pretty well open ended. Take the following sentences, some of which we’ve seen before:

- (31) That man has no dress sense
- (32) That man wearing a kipper tie has no dress sense
- (33) That hominid who discovered how to start fires was a genius
- (34) That oldest man in the world must be worried about mortality
- (35) That painter was great at painting hands

Janet points to a man across the room and utters (31) to John. What is the O-property in this case? In what way or ways other than simply as an F is Janet thinking of the F she intends to talk about? She is presumably thinking of him in a way that is linguistically unrepresented¹⁵: she is thinking of him as the object with which she stands in a range of perceptual/causal relations. The same sorts of causal relations will also appear as an element of the O-property for (32), but in this case they will not be alone. Here an element of the O-property is linguistically indicated by the nominal individuator: Janet’s individual concept is a concept of something wearing a kipper tie. Linguistic and non-linguistic elements thus combine in cases such as (32) to give the O-property. In (33), depending of course on the context of utterance, all the work may be done linguistically: the O-property may simply be the property of having discovered how to start fires. For (34), I would like you to think back to the context in which Janet and John have previously been discussing the oldest man in the world. What will the O-property be here? As I suggested above, the O-property (and thus what allows

¹⁵ The property itself is unrepresented; the *fact* of the property, on the other hand, is part of what is encoded by the complex demonstrative.

John felicitously to use the complex demonstrative) is the property of being the subject of a particular previous conversation. In (35) something rather different is going on: imagine that Janet and John are in a gallery, and, seeing a portrait in which the hands are particularly well painted, Janet utters (35). What is the O-property here? What I would like to suggest is that it is the property of standing in a particular relation, the relation in which x stands to y iff x has painted y , to the painting which Janet has made salient. The moral of this discussion is that there is, as far as I can see, no antecedent restriction on the kind of property that can do work as an O-property: it can be descriptive or perceptual, it can derive from a relation that holds directly between the speaker and what she wants to talk about or from a relation between the speaker and something that stands in a relation to what she wants to talk about, and so on.

The picture painted so far, then, looks like this: complex demonstratives are tools used by speakers to indicate that the thought they intend to express contains an individual concept; beyond this they indicate that the individual concept in question is a concept of something that satisfies both the nominal sortal and another property which may or may not be partly or wholly determined by a nominal individuator. But what is the hearer supposed to do with this information? What, in other words, constitutes understanding a complex demonstrative utterance? Firstly the hearer must *grasp* the properties F and O, but what does it mean to grasp these properties? Firstly the hearer must assign a structure to the nominal, i.e. he must pragmatically infer whether the nominal is to be taken as a sortal or as both a sortal and an individuator. Once he has done this, the process of retrieving the F-property is straightforward: it is just the property expressed by the sortal. Next the hearer must retrieve an O-property. This may, as we have seen, be wholly or partly determined by a nominal individuator; if pragmatic inference leads the hearer to conclude that the O-property is wholly determined by the nominal individuator, then again all he need do is work out which property is expressed by the individuator in order to establish which is the O-property. If, however, the nominal individuator doesn't wholly determine the O-property, or if there is no nominal individuator, the hearer must look beyond the linguistic content of the utterance itself to discover such a property in the context, i.e. to discover, via contextual cues and pragmatic inference, the other way, apart from as an F, that the speaker is thinking of what she intends to talk about.

The first step of the interpretation process is, then, to establish which are the F and O properties. But, once the hearer has done this, what is he to do with the properties he is left with? Given the information carried by complex demonstratives as an expression type, he knows that the intended interpretation is an individual concept.

The next stage of the process must, therefore, be to find an individual concept of an F and an O. But which individual concept? Or rather, which kind of individual concept? In answering this question, the hearer's inference will be guided by the kind of property which is doing work as the O-property: if it is the kind of property, i.e. perceptual/causal, typical of *de re* individual concepts, then the hearer should infer that the individual concept entertained by the speaker is *de re* and thus that the intended interpretation is a *de re* individual concept; if, on the other hand, the O-property is the kind of property, i.e. satisfactoral, typical of descriptive individual concepts, then he should infer that the hearer's concept is descriptive. Although complex demonstratives are, therefore, neutral between *de re* and descriptive individual concepts as far as their lexical semantics are concerned, establishing which kind of concept constitutes the intended interpretation is a necessary part of understanding a complex demonstrative utterance. To summarise, the hearer's task, in interpreting a complex demonstrative, is to find an individual concept of the appropriate kind of an F and an O.

So far, however, I have not confronted the accounts outlined in the first half of this paper head on: I have not laid out the truth-conditional implications of the story I am advocating. I suspect that, from the truth-conditional perspective, my account comes close to being a hybrid of the stories of King (2001) and Braun (1994). With King I agree that the semantics of complex demonstratives involve two separate properties, although we part ways over the details of this; I also agree with King that which property is retrieved as that not expressed by the nominal (or the nominal sortal in my terms) will have a knock-on effect on the *kind* of truth-conditional content assigned to the utterance as a whole: for King, a perceptual intention leads to truth conditions anchored in the context of utterance while a descriptive intention does not, for me perceptual properties lead (at least standardly) to *de re* individual concepts, while satisfactoral properties lead to descriptive individual concepts. However, where my disagreement with King is the clearest is in the treatment of referential uses of complex demonstratives. And it is here that the predictions of my story have much in common with Braun's account: for Braun, the nominal acts as a dimension of character, i.e. acts to constrain reference, for me the individual concept which constitutes the interpretation of 'that F' must be a concept of an F (and, of course, an O). For both Braun and myself, therefore, 'that F' is a tool for talking about Fs, and cannot properly be used to talk about non-Fs.

Having mentioned the common ground between my account and those of King and Braun, let me then spell out how the truth conditions go on my story. The lexical semantics of complex demonstratives must be explicated in terms of the mapping from linguistic to mental representations: complex demonstratives may be construed as

functions from contexts to individual concepts. Thus, ‘that F is G’ will be true just in case $G^*_{IC(F^*, O)}$ is true, where $G^*_{IC(F^*, O)}$ is a mental representation formed by combining the property expressed by G with an individual concept of the appropriate type of an F and an O (F^* being the property expressed by F). This gives us one step towards a truth condition for complex demonstrative utterances, but what of the step from mental representation to world? When, in other words, will $G^*_{IC(F^*, O)}$ be true? This will of course depend on which kind of individual concept $IC(F^*, O)$ is: if it is a *de re* individual concept, $G^*_{IC(F^*, O)}$ will be true just in case G^* is a property of its referent; if it is a descriptive individual concept, then it will, no doubt, have something like a standard descriptive truth condition, i.e. it will be true iff [the x : $F^*x \ \& \ Ox$] (G^*x).

The key truth-conditional prediction of this account is, therefore, that, although they are lexically univocal, complex demonstratives can give rise to genuinely referential or genuinely quantificational truth conditions, according to speaker intention. And this is, given the evidence canvassed in the earlier part of the paper, just what we should want from an analysis of complex demonstratives.

7 Defending the analysis

The analysis I am advocating is consistent with the data, particularly the scopal data, laid out above. However, I would like, in the last part of this paper, to raise some potential objections to the account and to explain why I do not think these objections pose any genuine threat.

The first potential objection is that, having argued that we need a univocal story on complex demonstratives, what I have actually provided is an ambiguity account. On my analysis, one and the same complex demonstrative utterance can, in different contexts, have either genuinely singular or genuinely quantificational truth conditions; what, so the argument might go, could be more ambiguous than that?

There is certainly something right in this objection: I *am* proposing an account on which complex demonstratives can give rise to very different kinds of truth conditions, so, if all that is being claimed is that, on my account, complex demonstratives are *truth-conditionally* ambiguous, then I’m going to have to put up my hands to that. My claim, however, is that, on my story, complex demonstratives are not ambiguous in any way that we should worry about. Let me briefly rehearse the familiar methodological claims about ambiguity to demonstrate why. According to Grice’s Modified Occam’s Razor, ‘senses are not to be multiplied beyond necessity’ (Grice

(1967, p.47)). Given two competing theories about the interpretation of a linguistic expression, one of which posits an ambiguity and the other of which posits none, we should be ready to accept the latter theory. How might a theory without an ambiguity do the same work as one with an ambiguity? By handing everything beyond the univocal semantics over to pragmatics. The essence of Modified Occam's Razor, then, is that an expression should be viewed as ambiguous iff one cannot account for it via a univocal semantics plus pragmatics. But this is just what my account of complex demonstratives does: it takes a single semantics, a lexically encoded meaning which constrains the mapping from linguistic to conceptual representation for all complex demonstratives, and leaves the rest, i.e. which is the O-property, whether the intended individual concept is *de re* or descriptive etc., to pragmatics. In any theoretically significant sense, therefore, the account I have proposed is not an ambiguity account.

A second potential objection might be levelled at the predictions my account makes on referential uses of complex demonstratives¹⁶. There are, first of all, the kind of entailment data exemplified by (3) and (4), repeated here as (36) and (37):

- (36) That green car is very old
 (37) Some green car is very old

I shall say no more about these than to accept the sort of story told by Braun: although there is not an entailment, there's the next best thing, since the complex demonstrative 'that green car' can only be interpreted via an individual concept of a green car.

Secondly, Lepore & Ludwig ask us to consider various situations in which the nominals of referentially-used complex demonstratives appear to be playing some role in truth-conditional content (beyond constraining reference, that is). Consider, for instance, (38) uttered while indicating a particular individual:

- (38) Each woman in this room admires that man whom she sees at the podium¹⁷

Their claim concerning this example is that, since there is an element within the complex demonstrative that is anaphoric on an element outside, the content of the nominal cannot drop out of propositional content. This would certainly weigh heavily

¹⁶ The predictions I intend to discuss are also made by any other account on which referentially-used complex demonstratives contribute nothing but their referents to truth-conditional content.

¹⁷ Lepore & Ludwig (2000, p.204).

against accounts, such as mine, on which referentially-used complex demonstratives contribute nothing but their referents to propositional content. I do not believe, however, that there is any problem with examples such as these. Firstly, it seems to me that the referential reading that Lepore & Ludwig are after here, where a particular individual is being picked out as ‘that man who she sees at the podium’, is markedly less natural than a descriptive reading, and of course there is no problem, on my account, with anaphoric relations being set up between a quantifier outside a non-referentially used complex demonstrative and a pronominal element within, since non-referential uses of complex demonstratives have quantificational truth conditions. There is, however, one way that we can get the anaphoric relation with a referential use, but without having to posit a quantificational semantics. Compare (38) with (39):

(39) Each woman in this room admires John whom she sees at the podium

To my ear (39) is just as (in)felicitous as (38), yet I presume that it would not force us into a quantificational account of proper names. Rather, we should analyse ‘whom she sees at the podium’ as a non-restrictive relative. The same account seems to carry naturally over to (38); the proposition expressed by (38) looks not like (40), but like (41):

(40) $[\forall(x): \text{Woman-in-this-room}(x)][\exists(y): \text{That}(y) \ \& \ \text{Man}(y) \ \& \ \text{Sees-at-the-podium}(x, y)] (\text{Admires}(x, y))$

(41) $[\forall(x): \text{Woman-in-this-room}(x)](\text{Admires}(x, \underline{a}) \ \& \ \text{Sees-at-the-podium}(x, \underline{a}))^{18}$

Let me just mention, before closing, one final and related type of example that might seem to threaten my account. Again, Lepore & Ludwig ask us to consider:

(42) That shark that took a swimmer off Flager beach last summer attacked him inside the sandbar

Again there seems, *prima facie*, to be an LF interaction between an element within the complex demonstrative and an element without, once more suggesting that the properties expressed by the nominal appear at LF. Although there is not the space to

¹⁸ These logical forms are purely for illustrative purposes; I’m not intending to push any particular story on non-restrictive relatives.

work through the details of such examples, I see no reason to accept this conclusion¹⁹. Imagine that I'm right, that the interpretation of the complex demonstrative is simply the particular shark in question. The hearer of (42) is going to face a problem: how should he interpret 'him'? Of course there might be someone who is highly salient in the physical context (the speaker may, for instance be pointing at someone), in which case the swimmer the shark attacked last summer may simply fall out of the picture. But, in the absence of a physically salient individual, the utterance itself has made a particular individual contextually salient: the individual who the shark in question took off Flager beach last summer. It is entirely to be expected that the hearer should thus interpret 'him' as corresponding to this individual. The key point is that, just because the property of being a swimmer who this shark took off Flager beach last summer is contextually salient enough to provide an interpretation for 'him', does not entail that it appears anywhere else in propositional content.

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¹⁹ Of course there is a very natural descriptive interpretation available here, which Lepore & Ludwig are not interested in but which might well enter into an LF interaction.

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