

# Demonstratives without rigidity or ambiguity (penultimate draft)

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**Abstract** Most philosophers recognize that applying the standard semantics for complex demonstratives to non-deictic instances results in truth conditions that are anomalous, at best. This fact has generated little concern, however, since most philosophers treat non-deictic demonstratives as marginal cases, and believe that they should be analyzed using a distinct semantic mechanism. In this paper, I argue that non-deictic demonstratives cannot be written off; they are widespread in English and foreign languages, and must be treated using the same semantic machinery that is applied to deictic instances.

**Keywords** Demonstratives · Complex demonstratives · Semantics · Direct Reference · Rigidity · Pronouns

## 1 Introduction

Most semantics for complex demonstratives are designed to analyze what philosophers call ‘deictic’ uses. Although it is difficult to say exactly what makes a use of a demonstrative deictic without employing a theoretically-loaded vocabulary, the basic outline of paradigm cases is widely agreed upon. Consider an example:

(1) That river is frighteningly low.

Imagine a scientist who points at the South Fork of the American River while uttering sentence (1). Intuitively, what she says is true or false in virtue of how things are with the South Fork of the American River. If she had uttered the same sentence while pointing at Tamarack Creek, the truth of what she said would have depended on the water level

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of Tamarack Creek. The philosophical literature on complex demonstratives is, by and large, devoted to explaining this fact.

Despite their focus on deictic cases, philosophers have recognized for a long time that demonstratives are sometimes used in ways that do not conform to this paradigm. Contrast Example (1) with the following, which might be uttered by someone with a tenuous grasp of history:

(2) [Every king]<sub>*i*</sub> cherished that cleric who crowned him<sub>*i*</sub>.

The subscripts in Example (2) are meant to indicate binding; on the only natural interpretation, someone who utters this sentence makes a claim that is true just in case for every king *x*, *x* cherished the cleric who crowned *x*. Importantly, this person's claim does not depend on facts about the context of utterance in the way the claim expressed by the hydrologist does.<sup>1</sup>

From the beginning of the modern era of semantic work on demonstratives, philosophers have set aside complications raised by non-deictic uses in order to concentrate on their deictic analogues. Witness Kaplan (1977/1989, p. 489):

The group of words for which I propose a semantical theory includes the pronouns 'I,' 'my,' 'you,' 'he,' 'his,' 'she,' 'it,' the demonstrative pronouns, 'that,' 'this,' the adverbs 'here,' 'now,' 'tomorrow,' 'yesterday,' the adjectives 'actual,' 'present,' and others. These words have uses other than those in which I am interested (or, perhaps, depending on how you individuate words, we should say that they have homonyms in which I am not interested). For example, the pronouns 'he' and 'his' are used not as demonstratives but as bound variables in:

For what is a man profited, if he shall gain the whole world, and lose his own soul?

For someone in Kaplan's position, embarking on a new research project in a complex area, this kind of circumscription makes sense. As Braun (2008, p. 72) observes, when we first approach the semantics of what appears to be a single expression type that admits of significantly different uses, it may be more fruitful to pick one of those uses to focus on, rather than demanding from the beginning that prototype theories cover both.

Ordinarily, however, we expect the kinds of simplifications that help to get a project going to be revisited as it matures. Perhaps because of philosophers' interest in demonstratives as the candidate linguistic manifestations of singular thoughts, this process has been slow to take shape in the literature on the subject. Despite the benefit of nearly 40 years of progress on semantics, a striking majority continues to follow Kaplan in treating non-deictic uses of demonstratives as though they were someone else's problem.

King (1999, 2001, 2008) bucks this trend, arguing that if we take familiar semantic proposals that treat complex demonstratives as devices of direct reference and apply

<sup>1</sup> That is, no sensitivity to context is introduced by the demonstrative. Someone who takes aspect or tense to interact with the context, for example, or who takes predicates like *cherish* to involve sensitivity to a degree parameter might consider (2) context dependent.

them to sentences involving non-deictic uses, we end up with unacceptable predictions about their truth conditions.<sup>2</sup> His challenge, however, has not prompted many philosophers to abandon their reliance on the machinery of direct reference. Some, like Salmon (2008), think intuitions about non-deictic uses of demonstratives are simply too unstable to make anything of. Even those who appear to have accepted King's characterization of the gap between the predicted and the required truth conditions, however, typically respond by pointing out that their theories were never supposed to account for non-deictic uses in the first place.

On one way of looking at the state of play in the literature on demonstratives, then, the big open question is not whether direct reference provides a way to predict the right truth conditions for non-deictic uses, but whether it should be expected to. Although I will dedicate a significant portion of this paper to addressing the kind of skepticism about the data Salmon expresses—and to presenting new data that are problematic for direct reference, including attested data (Sect. 3)—my primary goal will be to show that hiving off problematic cases in the way friends of direct reference do is unacceptable (Sect. 4). I will proceed by arguing that any view that treats deictic and non-deictic uses of demonstratives using different semantic machinery is subject to a powerful objection based on evidence that both uses are widespread cross-linguistically (Sect. 4.3). Then, I will show how the specific proposals that philosophers have employed to protect the semantics of direct reference from non-deictic counterexamples—saying *that* has a homophone with the semantics of the definite article, and saying non-deictic interpretations are idiomatic—are not even minimally empirically adequate with regard to the data from English (Sect. 4.4).

In an Appendix, I show how the arguments I make against direct reference tell against a number of other proposals that have been advanced in the literature on demonstratives.

## 2 Direct reference and rigidity

### 2.1 Direct reference

The locus classicus for the idea that demonstratives are devices of direct reference is Kaplan (1977/1989). Although Kaplan does not address the semantics of complex demonstratives in great detail, it is not difficult to see how the theory he develops for simple demonstratives could be extended to handle them.

The heart of Kaplan's theory is the operator *dthat*, which “converts an arbitrary singular term into one which is directly referential” (p. 521). In the language of the metaphysically robust semantic framework Kaplan employs, this means that the propo-

<sup>2</sup> Other theorists have raised questions about the status quo. Roberts (2002) employs data from what she calls ‘discourse deixis’ to make the case for a dynamic treatment of demonstratives that is more broadly applicable than the classic view. Wolter (2006) develops a unified theory of deictic and non-deictic demonstratives in a situation-semantics framework. Elbourne (2005), although not explicitly concerned to explain data involving non-deictic demonstratives, suggests that his theory of definite descriptions could be extended to cover demonstratives (p. 125). On a plausible way of implementing the extension, his view would cover many of the non-deictic data that have been discussed in the literature.

sitional contribution of a felicitous and complete *dthat*-expression is an individual. If we apply *dthat* to a definite description, for example, the propositional contribution of the resulting complex, with regard to an appropriate context, will be the individual that satisfies the description in the context.

In the terms of the formal system Kaplan uses to model his theory (and ignoring parameters that are irrelevant for present purposes):

$$(3) \quad \llbracket \mathbf{dthat} (\mathbf{the} F) \rrbracket^{c,w} = \llbracket \mathbf{the} F \rrbracket^{c,w_c}$$

In his informal remarks, Kaplan draws a parallel between the semantic work done by a demonstration in a context, and the work done by definite descriptions. This is important because it allows him to treat demonstrations—taken with regard to contexts—as though they were singular terms, which makes them apt to serve as arguments for *dthat*. Although there is nothing in the formalism that corresponds to the idea of a demonstration, there is no deep theoretical reason for this; Kaplan notes that it would be trivial to add to his system a class of “nonlogical demonstration constants” (p. 527) that fill the same semantic role descriptions do, and whose character is determined (in a way that remains to be precisely specified) by association with a contextually-embedded gesture.

Imagine, for the sake of illustration, that we decide to treat  $\delta$  as one of these constants. Since  $\delta$  will have the description-like meaning a gesture would have, we can employ a formulation like the following to model Kaplan’s thinking about simple demonstratives:

$$(4) \quad \llbracket \mathbf{dthat} (\delta) \rrbracket^{c,w} = \llbracket \delta \rrbracket^{c,w_c}$$

If we slightly adjust the semantic type we assign to demonstrations (and the constants we use to represent them), so that their semantic contribution is equivalent to the contribution made by the matrix of a definite description (instead of the complex formed by the determiner and the matrix), we can combine (3) and (4) into a treatment of complex demonstratives:<sup>3</sup>

$$(5) \quad \llbracket \mathbf{dthat} [\mathbf{the} x: (Fx \wedge \Delta x)] \rrbracket^{c,w} = \llbracket \mathbf{the} x: (Fx \wedge \Delta x) \rrbracket^{c,w_c}$$

Unpacked à la Kaplan, (5) says that the content of a complex demonstrative of the form *that F*, used in an appropriate context, will be the unique object that satisfies both *F* and the demonstration associated with the demonstrative. If there is no such object in a certain context—say, because the object that satisfies the demonstration is not an *F*—instances of (5) will not contribute one to the proposition expressed, which is a result Kaplan favored.

Salmon (2002, p. 524), endorses a variation on Kaplan’s view that is similar to the one suggested by our (5):

With respect to any context *c*, the (English) content of an occurrence of the complex demonstrative ‘that’ $\wedge$ NP is the demonstratum of the demonstration

<sup>3</sup> The change from lower-case ‘ $\delta$ ’ (Example 4) to capital ‘ $\Delta$ ’ (Example 5) is meant to represent the requisite change in the semantic type of the demonstration constant.

assigned to that occurrence in  $c$ , provided: (i) there is such a demonstratum; and (ii) NP applies to it with respect to  $c$ . Otherwise ‘that’  $\wedge$  NP has no content.

Although philosophers, including Kaplan (1989) himself, have moved away from the idea that a demonstrative must occur together with a demonstration, semantic theories with this basic shape are still very common.

Borg (2000), for example, takes the propositional contribution of a complex demonstrative to be exhausted by its referent (pp. 243–244). This claim must be understood with regard to her view that “an object,  $\alpha$ , is the referent of an utterance of *that F* iff:  $\alpha$  is the object being demonstrated by the speaker and  $\alpha$  satisfies  $F$ ” (p. 242). Borg makes clear that she does not mean the locution “being demonstrated by the speaker” to be taken literally; she allows that referential intentions, the speaker’s attention, or a variety of other things might play the relevant role in determining which  $F$  should be treated as the referent of a given demonstrative.

Along similar lines, Braun (2008, p. 62) claims that:

We can take the semantic content of “that  $N$ ”, in a context  $c$ , to be the demonstratum of  $c$ , if that object satisfies (in the world of  $c$ ) the semantic content of  $N$  in  $c$ . If there is no demonstratum in  $c$ , or the demonstratum of  $c$  does not satisfy the semantic content of  $N$  in  $c$ , then “that  $N$ ” has no semantic content in  $c$ .

By “demonstratum,” Braun means that object which is “in focus in a context,” or is “available for demonstrative reference in a context.”

Georgi (2012), taking up a line from Nunberg (1993), develops a version of direct reference that is meant to explain cases of deferred ostension; i.e., cases in which the object referred to by means of a demonstrative is not the object demonstrated. Georgi claims that a speaker’s intentions, with regard to a context, determine something he calls the “index” of the demonstrative. When a deictic demonstrative is used felicitously, Georgi says, a certain relation will be salient. In standard deictic cases, the salient relation will be identity, but in cases of deferred ostension, more complicated alternatives play a role. On Georgi’s view, the content of a complex deictic demonstrative, with regard to a context, an index, and a relation, is the unique object that satisfies both the matrix of the demonstrative, and the result of applying the relation to the index.<sup>4</sup>

We can borrow an example from Elbourne (2008) to illustrate how this system works. Imagine a speaker who points at an empty stall in a barn and says:

(6) That horse must be out to pasture.

<sup>4</sup> The following three clauses provide the heart of Georgi’s semantic proposal (2012, p. 372):

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

(TC) If  $u$  is a referential use of ‘that NP’, then for any  $x$ ,  $x$  is the content of ‘that NP’ in  $C_u$  only if (i)  $x$  satisfies *is a/n NP* in  $C_u$ , or (ii) the denotation of  $x$  in  $C_u$  satisfies ‘is a/n NP’ in  $C_u$ .

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

Intuitively, such a speaker expresses the proposition that a certain (non-perceptually-available) horse must be out to pasture. Georgi's semantics has the resources to make good on that intuition. Suppose the horse in question is called Bucephalus. On Georgi's account, the stall that is demonstrated in the context will serve as the index of the demonstrative. In the context described, the relation of *typically-residing-in- $x$*  is salient. So, we calculate the content of the demonstrative, by asking which object satisfies both *horse* and *lives-in- $x$* , where the value of  $x$  is the demonstrated barn stall. As we set up the example, the object that satisfies both of those properties is Bucephalus himself, so we predict that he will be the content of the demonstrative.

## 2.2 Rigid designation

Although there are significant differences between the various views we have just surveyed, each one involves a commitment to the idea that the propositional contribution of a complex demonstrative, with regard to an appropriate context, will be a certain individual that satisfies the matrix of the demonstrative. That commitment entails a thesis about the extensions of complex demonstratives: once an appropriate context is fixed, the extension of a demonstrative will be the same at every world of evaluation. In other words, the thesis that complex demonstratives are directly referential entails the thesis that complex demonstratives are rigid designators.

This entailment is no secret. In fact, rigid designation is a designed-for feature of many directly referential semantics. The apparent truth conditions of sentences like the following constitute one of the key data used to argue for direct reference:

- (7) That man in the purple shirt might not have been that man in the purple shirt.

Most philosophers have the intuition that a speaker who points at a certain man in a purple shirt while uttering (7) says something that is unequivocally false. But if *that man in the purple shirt* could be interpreted non-rigidly, we would expect the sentence to admit of the same interpretive possibilities as analogous sentences that involve definite descriptions, like:

- (8) The man who invented bifocals might not have been the man who invented bifocals.

Unlike (7), (8) admits a reading on which it is straightforwardly true. On that reading, the sentence might be paraphrased:

- (9) The man who in fact invented bifocals might not have done so.

Directly referential semantics for demonstratives offer a simple explanation of the intuition that there is no such paraphrase available for (7). With regard to the context described, the direct reference theory entails that the extension of *that man in the purple shirt*—at any world of evaluation—will be the man who is wearing purple in the context of utterance. Instead of expressing an obvious truth like (9), then, (7), on the directly referential semantics, expresses something closer to the fraught:

- (10) Ibrahim might not have been Ibrahim.

### 3 Non-deictic demonstratives are not directly referential

#### 3.1 Some preliminaries

There is no question that direct reference treatments of demonstratives issue in plausible truth conditions for standard deictic examples like our hydrologist's (1) and our modal-involving (7); i.e., examples in which a demonstrative is used to pick out a certain object from the context of utterance. As we noted above, however, demonstratives are not always used this way; sentence (2, repeated), for instance, is most naturally interpreted as expressing a general claim about the nature of the relationship between kings and their clerical supporters, none of whom are required to be salient in the context:

- (2) [Every king]<sub>*i*</sub> loves that cleric who crowned him<sub>*i*</sub>.

The semantic theories canvassed so far do not naturally lend themselves to generating truth conditions for sentences that involve non-deictic demonstratives.<sup>5</sup> Consider, for example, the variation on Kaplan's semantics that we proposed above for deictic complex demonstratives:

- (5)  $\llbracket \text{dthat} [\text{the } x: (Fx \wedge \Delta x)] \rrbracket^{c,w} = \llbracket \text{the } x: (Fx \wedge \Delta x) \rrbracket^{c,w_c}$

We can plug the expression *that cleric who crowned him* into the *F* slot of this template, but unless we have a demonstration to fill the  $\Delta$  position—which would defeat the intended non-deictic interpretation—we end up with an incomplete representation. Variations on this problem crop up for each of the formulations of direct reference we surveyed; the whole point of Example (2) is that it can (and typically should) be interpreted with regard to a context that does not involve anything that corresponds to Borg's "demonstrated object," Salmon or Braun's "demonstratum," or Georgi's "index."

As Salmon (2006, 2008) has emphasized, however, there is a way in which Kaplan's semantic framework can be used to analyze data like (2). Instead of requiring there to be a demonstration constant in the representation we give, we could treat the complex demonstrative from (2) as a *dthat* term formed as follows:<sup>6</sup>

- (11) *dthat* [the cleric who crowned him<sub>*i*</sub>]

Although the precise shape of the implementation would vary across theories, something similar in spirit could be done with any of the versions of direct reference that

<sup>5</sup> King (1999, 2001) originally argued against direct reference on the grounds that directly referential semantics simply could not generate truth conditions for such sentences. As we will see, and as King (2008) recognizes, this claim turns out to be too strong.

<sup>6</sup> The subscripted *i* on the pronoun *him* from Example 11 indicates that the pronoun is to be analyzed as a variable that is potentially available for binding by a higher quantifier. Although Salmon (2002, pp. 523–525) requires demonstrations to accompany uses of the *zat* operator he relies on to analyze the English word *that* (*zat* applies to open formulas instead of the singular terms *dthat* worked on), the requirement might be relaxed to allow treatment of non-deictic demonstratives in the way suggested here and in Salmon's later work.

we considered earlier.<sup>7</sup> In general, instead of saying that the content of *that F* (with regard to a context, a time, a variable assignment, and so on) is the demonstrated *F*, we could say that the content of *that F* (with regard to the relevant parameters) is the demonstrated *F*, if there is one, and is simply the unique *F*, if there is not. With regard to contexts that feature neither a demonstrated *F* nor a unique *F*, we can simply say that the content of the expression *that F* is undefined.

### 3.2 QI demonstratives and their truth conditions

If we treat non-deictic demonstratives as devices of direct reference along the lines just mentioned, we predict that Example (2, repeated):

(2) [Every king]<sub>*i*</sub> loves **that** cleric who crowned him<sub>*i*</sub>.

will be true with regard to a context of utterance, *c*, and a world of evaluation, *w*, just in case every object that is a king-in-*w* stands in the relation of loving-in-*w* to the unique object that is both a cleric-in-*c* and that crowned him in *c*.

King (2001, 2008) claims that those truth conditions are wrong. On his view, (2) should have the same truth conditions as the following analogue, which is formed from a definite description instead of a demonstrative:

(12) [Every king]<sub>*i*</sub> loves **the** cleric who crowned him<sub>*i*</sub>.

Definite descriptions are not rigid designators, and on the most natural reading of (12), the sentence is true with regard to a world of evaluation, *w*, just in case every object that is a king-in-*w* stands in the relation of loving-in-*w* to the unique object that is both a cleric-in-*w* and that crowned him in *w*.

The standard way to resolve questions about the modal profile of a disputed type of construction is to embed an example under an expression that shifts the world of evaluation with regard to which its complement is evaluated. In order to determine whether King is right about (2), then, or whether the friend of direct reference is, it would seem like all we have to do is generate an example featuring an appropriate operator.

Salmon (2008), however, claims that in the case of sentences that involve binding into a complex demonstrative—what King calls “quantifying in” or “QI” demonstratives—this diagnostic issues in equivocal results. He uses the following example to support that claim:

(13) Every parent *x* is such that the following proposition is metaphysically possible:  
*x* did not parent **that** oldest offspring of *x*'s. (Salmon 2008, p. 272, ex. 2)

The phrasing of (13) is supposed to make it unambiguous with regard to scope, so that we can be sure that if the sentence is true, it shows that the non-deictic demonstrative

<sup>7</sup> It bears mentioning that none of the direct reference theorists we mentioned would likely agree to extend their theories in such a fashion, since they take non-deictic demonstratives to be explained by an entirely distinct semantic mechanism.



is interpreted rigidly—as we would expect if it were directly referential—and that if the sentence is false, it shows that the demonstrative is not.<sup>8</sup> Unfortunately, Salmon says, it is not clear whether the sentence is true or false, which means that it cannot be used to settle questions about the modal profile of demonstratives that are used non-deictically.

While I share Salmon's discomfort about the stability of the intuitions (13) elicits, I do not see any reason for taking that discomfort to be the result of a general difficulty brought on by QI sentences. As far as I can tell, the following string produces intuitions which are as unstable as those produced by Salmon's example:

- (14) Every parent  $x$  is such that the following proposition is metaphysically possible:  
 $x$  did not parent **the** oldest offspring of  $x$ 's.

But I doubt that anyone would take (14) to show that we cannot draw conclusions about the modal profile of definite descriptions on the basis of our intuitions about the truth conditions of sentences involving definite descriptions that occur under the scope of modals.<sup>9</sup> In fact, as long as we confine our attention to recognizable natural language data, the standard method of testing issues in clear results.

Imagine, for example, a context in which it is common knowledge that changing tastes and the availability of comedy videos on the internet have made it so that there are no court jesters left anywhere. In such a context, someone could use the following sentence to express a thesis about kings and the way they make decisions:<sup>10</sup>

- (15) If there were any court jesters around, [every king]<sub>*i*</sub> would hire that jester who made him<sub>*i*</sub> laugh the hardest.

Intuitively, (15) is true with regard to a context just in case at the nearest accessible world in which there are court jesters, every king hires the jester who makes him laugh the hardest. If we interpret the complex demonstrative as an obligatory rigid designator, however, as the direct reference theory requires, this reading becomes impossible. In fact, it is not even clear that the direct reference theory will generate any truth conditions for (15) at all; if there are no jesters at the world of the context, no one is a candidate for the extension of *that jester who made him laugh*.

The problem (15) poses can be set up in a number of ways. For a slightly different take, imagine a context in which two sociologists are discussing the relationships that

<sup>8</sup> I am not convinced that the unnatural formulation of (13) in fact helps to rule out any scope possibilities, but I agree that Salmon would need a way of ruling out a wide-scope reading of the demonstrative in order for intuitions about the sentence to be significant. Suppose we *did not* try and rule out the complex demonstrative's taking wide scope over the modal. In that case, the truth of (13) would show nothing, since wide-scope definite descriptions are interpreted rigidly.

<sup>9</sup> Both Salmon's (13) and my (14) involve a host of obstacles to computation that come from the tortured commingling of English and logic, along with the metaphysics of essentialism, and what in the terms of traditional binding theory appears to be a condition C violation (see [Carnie 2002](#) or [Adger 2003](#)). Although it is hard to know for sure what to make of the expression  $x$ , since the English lexicon does not really feature explicit variables, the way it is used with the Saxon genitive suggests a parallel with names. But names cannot be used the way  $x$  is used in these examples: *\*John<sub>*i*</sub> did not parent that oldest offspring of John<sub>*i*</sub>'s* is ungrammatical.

<sup>10</sup> Thanks to Seth Yalcin for this example, and for urging me to use it instead of a predecessor that raised unnecessary complications.

obtain between kings and the clerics who crowned them. They agree that all of the world's current kings love the clerics who crowned them, but they disagree about the source of that feeling. One sociologist thinks there is no general explanation of clerically-directed affection, while the other thinks it is the product of a structural feature of the king-cleric relationship. The structural theorist might say:

- (16) Look, regardless of who the kings are and who the clerics are, [every king]<sub>i</sub> is still going to end up loving that cleric who crowned him<sub>i</sub>.

(16) involves the colloquial expression of a modal claim. Intuitively, the sentence is true with regard to a context just in case in every world that is accessible from the context, every king loves the cleric who crowned him. If we treat *that cleric who crowned him* as a rigid designator whose extension is fixed at the world of the context, however, we have no way to make this intuitive prediction; that treatment would make only the actual clerics relevant to the evaluation of the sentence.

Intensional verbs can also be used to show how direct reference gets the truth conditions of QI sentences wrong:

- (17) [Every girl]<sub>i</sub> is looking for that boy who makes her<sub>i</sub> heart beat faster, her<sub>i</sub> stomach flutter, and her<sub>i</sub> mind wander.<sup>11</sup>

Regardless of how we eventually come down on the complicated—and here, orthogonal—question of how best exactly to analyze the semantics of ‘seeking’ verbs, it is very hard to see how a directly referential approach to the demonstrative from (17) could result in a successful representation. If we analyze the demonstrative *that boy who makes her heart beat faster, her stomach flutter, and her mind wander* using the semantics of direct reference, we predict that at every world of evaluation, the extension of the expression is whichever unique boy from the world of the context makes the girl-in-question’s heart beat faster, stomach flutter, and mind wander. This analysis, however, completely defeats the ‘seeking’ interpretation; on the only plausible reading, the sentence leaves open the question of whether there even *is* such a boy for every girl. Crucially, the sentence would still be a candidate truth, even if we knew *ex ante* that there were no such boy.

### 3.3 Addressing the ‘oddness’ of QI demonstratives

Before turning to look at how data involving other types of non-deictic demonstrative can be used to argue against direct reference, I would like to address a potential concern: one anonymous referee reports finding QI sentences in general so odd that s/he cannot say with any confidence what they should mean. In part, this concern can be met by noting that QI sentences are not the only data that can be used to motivate the kind of argument we have made so far (Sect. 3.4 is dedicated to alternative data). Still, it is worth pointing out that while QI sentences are in fact attested, many of the

<sup>11</sup> This example is an instance of a widely-attested class; it is ‘Love Quote #6748505’ from <http://www.wittyprofiles.com/q/6748505>, Accessed May 1, 2014. Nb: the remaining ‘love quotes’ do not all involve QI demonstratives.

examples that have been discussed in the literature on demonstratives are contrived in a way that might explain the referee's discomfort.<sup>12</sup>

According to a proposal from Gundel et al. (1993), the indefinite, definite, and demonstrative determiners form a hierarchy of familiarity; on their proposal, one of the characteristic pragmatic roles of the demonstrative determiner is to allow a speaker to signal to her audience that the object she wishes to talk about is one which is mutually familiar. Barbara Partee (p.c.) has suggested that something like this sort of assumption of familiarity is what explains the fact that (18), uttered as part of an NPR pledge drive, is annoying in a way that (19) is not:<sup>13</sup>

(18) So go ahead, pick up **that** phone, and give us a call now to donate.

(19) So go ahead, pick up **the** phone, and give us a call now to donate.

In the case of a typical deictic demonstrative, the assumption of familiarity appears to be justified by the fact that the referent of the demonstrative is perceptually accessible to both speaker and hearer. If I know you can see a certain post, (20) is a perfectly natural thing to say, while if I know that you cannot, the sentence sounds bizarre:

(20) Watch out for that post!

One reason QI demonstratives like our (2) might strike some people as odd is that they depart from this practice; it is not clear that the idea that some particular clerics are familiar to the speaker and hearer has any role to play in the interpretation of (2). Someone who expects every use of the demonstrative determiner to involve familiar referents, then, would probably find the sentence awkward.

If this explanation is on the right track, it might be helpful to look at examples in which a speaker exploits a violation of the expectation of familiarity to accomplish a communicative goal. Consider the following excerpt from a recent commencement ceremony at UC Berkeley, for example:

(21) There is so much debate among a selection committee that even if your film makes it out of oblivion onto the radar of programmers, there's no guarantee that it will make it into the festival—unless there's that one person who's willing to champion it, to say out loud and loudly that this film deserves to be seen. **At almost every film festival I attended, I met that one person who lobbied for my film.** (Betty M. Park, May 17, 2013)

The speaker of (21) is aware that her audience does not know which individuals supported her film. So why does she use the demonstrative determiner instead of the definite article? On my way of understanding, the choice is self-conscious; by asking her audience to accommodate the presupposition of familiarity, the speaker creates an emotional or evaluative bond with them.

<sup>12</sup> Example (17), from page 418 and (21), from page 419 are attested.

<sup>13</sup> As John Campbell aptly remarked (p.c.), (18) provokes the indignant response: "what do *you* know about my phone?" Note that the fact that the example involves a recorded advertisement is irrelevant; the same effect is produced when a sales associate in a jewelry store says *This would be a perfect gift for that special someone!*

Speakers can accomplish a similar goal by referring to an object they suppose listeners know well, but which they themselves are unfamiliar with. Consider a variation on King's sentence about skiers and black diamond ski runs, uttered by a seasoned ski patroller to a room full of hardcore experts:

- (22) I know [every one of you]<sub>i</sub> remembers that first time you<sub>i</sub> ducked under a boundary rope to slash some pow you<sub>i</sub> knew was off-limits...our job here is to make skiing that exciting for everybody, while keeping people safe.

The grizzled veteran does not know where each of her listeners had their first out-of-bounds experience. But she assumes they *had* such an experience, and underscores that fact by using the demonstrative determiner. The effect is the creation of a feeling of solidarity, which serves a useful communicative purpose.

### 3.4 Alternative non-deictic constructions

If the arguments from Sect. 3.2 are successful, *pace* Salmon (2008), QI demonstratives constitute a powerful class of counter-examples to direct reference. As noted earlier, however, the problems for direct reference do not depend on accepting QI data. Even if we set those data aside for the sake of argument, other varieties of non-deictic demonstrative can be used to motivate a similar objection.

King (2008), for example, points out that if we treat non-deictic demonstratives as devices of direct reference, we generate mistaken truth conditions for discourse fragments that mix modality and anaphora. He invites us to consider a situation in which it is common knowledge that it would be a disaster if two students, an iPod, and a logic book were all located in a certain library at the same time. We enter the library together, and find it empty. Nevertheless, after noticing that you took no precautions to preclude the doomsday scenario from obtaining, I reprimand you as follows:

- (23) This whole thing could have been a disaster! A student<sub>1</sub> could have been sitting in the library. Another student with an iPod<sub>2</sub> could have been sitting across from him<sub>1</sub>. And that student<sub>2</sub> could have had a logic book. (King 2008, p. 115, ex. 9)

(23) is true in the context described just in case there is an accessible world in which two students are seated across from one another in the library, one with an iPod, and one with a logic book. If we interpret the demonstrative as an obligatory rigid designator, however, we have no way of generating this truth condition. In the world of the context, there are no students in the library at all, so there is no object that satisfies the demonstrative matrix.

Although King's example wears its philosophical authorship on its sleeve, it is not difficult to construct similar sentences that show how natural it is to mix anaphoric demonstratives and modality:

- (24) If there were a left-handed puck-moving defenseman available at the draft, that player would be the one to pick.

- (25) Although it's clear that we need someone to dig us out of the hole we are in, I doubt Dany is that hero.<sup>14</sup>

Attested examples of this kind of construction are not uncommon, either. Here is one from the *New York Times*:

- (26) The real worry, I think, for men is that they will have to change their ways. They will have to monitor what they say to female students and colleagues. They will have to think twice before chatting up **that attractive graduate student they see at a conference**. (Anthony 2013, emphasis added)

These examples all tell against direct reference in the same way King's (23) does. In every case, an anaphoric demonstrative is 'anchored' in a non-actual possibility. (24) is felicitous even in contexts in which there is no appropriate player, (25) in contexts in which there is no one who could perform the required rescue, and (26) in contexts in which the men in question see no attractive graduate students.<sup>15</sup> If we require that complex demonstratives designate rigidly, we end up with no way of predicting the intuitive truth conditions for sentences like these.

Finally, note that the problem modal anchoring poses for direct reference can be brought out without using anaphora at all. Consider (27) for example, uttered in a context in which Simone did not win a certain election:

- (27) If Simone<sub>*i*</sub> had won the election, she<sub>*i*</sub> would definitely have embraced that elector who cast the deciding vote.

Suppose Simone is the liberal party candidate in some election, and that Antonin Scalia in fact cast the vote that decided the election in favor of the conservatives. If we claim that the content of the expression *that elector who cast the deciding vote* is the object from the context that satisfies *elector who cast the deciding vote*, we end up with the idea that (27) expresses the proposition that in the nearest accessible world in which Simone wins the election, she hugs Scalia.

While this *might* be a possible interpretation of (27)—in a context in which we think the nearest possible world is a world in which Scalia reconsiders his ideology before the election, for example—it is clearly not the only interpretation, and clearly not the most plausible one. In a normal context, (27) would be used to make a claim about how enthusiastic Simone is about politics: if she had won the election, she would have embraced whoever it was that delivered the victory. If we treat non-deictic demonstratives using direct reference, however, this interpretation becomes impossible.

<sup>14</sup> Thanks to Seth Yalcin for this example.

<sup>15</sup> When I say "(24) is felicitous even in contexts in which there is no appropriate player," I do not mean that the sentence is felicitous in contexts in which such a player is not visible, say, or otherwise salient. I mean that the sentence can be used at a world even if there are no such players in existence there; insofar as it makes sense to talk about the referent of this kind of anaphor, that referent is to be found in a counterfactual possibility, the possibility introduced by the modal antecedent.

## 4 Non-deictic demonstratives cannot be set aside

### 4.1 Setting up the debate

The considerations advanced in the previous section show that if we analyze non-deictic demonstratives using the machinery of direct reference, we end up with the wrong predictions about the truth conditions of sentences that involve them. The way philosophers have responded in the literature to data involving non-deictic demonstratives suggests that many accept this point. Instead of disputing the relevant intuitions in the way Salmon (2008) does, people who defend directly referential semantics for deictic demonstratives typically focus on insulating their views from counter-example; they claim that direct reference was never meant to address non-deictic cases in the first place, and they suggest that such cases should be dealt with by means of an alternative semantic mechanism.

Two justifications have been offered in print for this division, and philosophers have endorsed two ways of implementing it. Neither justification withstands scrutiny, and neither implementation is empirically successful. In fact, the considerations I will draw upon here suggest that any plausible semantics for demonstratives should cover both deictic and non-deictic instances straightforwardly, using the same basic resources.

### 4.2 Two arguments for separating deictic and non-deictic data

The first justification for treating non-deictic demonstratives differently from deictic instances is formulated most clearly in Braun (2008), but it is also suggested in the quote from Kaplan (1977/1989) with which we began this paper and is frequently offered in conversation on the topic. The justification involves an analogy with pronouns, which, as Braun notes, are interpreted in a striking variety of ways. Despite the fact that referential pronouns, bound-variable pronouns, and anaphoric pronouns are superficially indistinguishable, he says, most theorists do not advocate a unified semantics for them. Braun takes the case of pronouns to establish a sound methodological precedent, one that offers no grounds for expecting a unified semantics for demonstratives.

The second justification for offering a semantics that applies only to deictic uses of demonstratives rests on a putative fact about the cross-linguistic distribution of non-deictic demonstratives. Corrazza (2003) claims that QI demonstratives in particular are a quirk of English. Comorovski (2007, p. 64)—who, in fairness, is not primarily concerned with defending a semantics for demonstratives—assesses the cross-linguistic data in the same way. If this characterization were accurate, it would make maneuvers that might otherwise be called ad-hoc (like treating non-deictic demonstratives as idioms) seem less objectionable.

### 4.3 A cross-linguistic argument for unity

I agree with Braun (2008) that it is instructive to compare the cases of pronouns and demonstratives, expression types that both involve superficially similar instances that admit of sharply disparate interpretations. Unlike Braun, however, I take the

comparison to show that the only live semantic options are theories that treat both deictic and non-deictic demonstratives using the same basic resources.

Like demonstratives, pronouns admit both deictic and non-deictic readings. With regard to an appropriate context of utterance, for example, the extension of the pronoun from (28) will be a particular individual who is salient in the context. The extension of the pronoun from (29), on the other hand, depends on the value of its antecedent (the quantifier expression *every man here*), not on facts about the salience of any individual in the context of utterance:

(28) **He** appears to be in a hurry.

(29) [Every man here]<sub>*i*</sub> looks like **he**<sub>*i*</sub> is in a hurry.

Someone interested in pronouns—but focused only on data like (28)—might be tempted to give a directly referential analysis of *he*; she might claim, for example, that the propositional contribution of *he*, with regard to a context, *c*, is whichever male object is ostended by the speaker in *c*. That analysis would work perfectly well as long as it were applied only to deictic data. If we try to apply it to sentences like (29), however, the results are clearly unsuccessful.<sup>16</sup>

In the face of this difficulty, we might rethink the directly referential semantics we offered for cases like (28), in favor of a single semantics that can handle both deictic and non-deictic data. Or, we might preserve direct reference for deictic uses of pronouns, and propose an entirely separate treatment for non-deictic uses. Although his formulation is extremely compact, such an ambiguity theory seems to be what Braun (2008, p. 72) has in mind when he writes that “most theorists hold that ‘he’ on its demonstrative use is directly referential, and that ‘he’ on its bound variable use functions as a bound variable.” In the passage that follows the material just quoted, Braun speaks approvingly of theories that involve distinct but homophonous lexical items, *he*<sub>1</sub> and *he*<sub>2</sub>, and concludes that “we have no particular reason now to think that the correct comprehensive theory is a uniform theory rather than an ambiguity theory.”<sup>17</sup>

If an ambiguity treatment of pronouns were plausible, it would provide some prima facie support for an ambiguity treatment of demonstratives; at the very least, there would be a precedent for separating deictic and non-deictic instances of a superficially similar expression type.<sup>18</sup>

Pace Braun, however, the standard approach to the semantics of pronouns is *not* an ambiguity theory; on the textbook analysis, both referential and bound-variable inter-

<sup>16</sup> There is a reading of (29) on which the pronoun *he* is interpreted deictically; the direct reference treatment can generate this reading, but not the bound-variable reading which is indicated by the subscripts.

<sup>17</sup> An anonymous reviewer takes my characterization of Braun to be unfair. The reviewer points out that Braun does not unequivocally endorse an ambiguity treatment, either for pronouns or for demonstratives. Since the unified theory Braun leaves open, however, is one on which one pronoun is associated with three distinct semantic clauses, only one of which is parametrically triggered in any given context, I take it to be a notational variation on the ambiguity theory.

<sup>18</sup> It is important to be clear that the analogy between the cases should not be overstressed: there is a significant difference between claiming that the extension of a demonstrative can depend on the value of a bound variable that occurs within its matrix and claiming that the demonstrative *itself* is interpreted like a bound variable.

pretations for pronouns are derived from a single lexical entry.<sup>19</sup> The English pronoun *he*, in both manifestations, is treated like a variable over individuals (a variable that involves a gender presupposition). Deictic readings occur when the variable receives its assignment from the context. Bound-variable readings occur when the variable is bound by a linguistic antecedent; in such cases, the variable receives its assignment as per the rules governing the behavior of that antecedent. In summary, the difference between the referential reading and the bound-variable reading of a given pronoun is explained by differences in the way the pronoun's environment affects the assignment, not by differences in the semantics associated with two homophonous lexical items.

One of the major considerations that tell in favor of this unified treatment is that pronouns from a wide variety of languages give rise to the same diversity of interpretations that English pronouns do. The pronoun *on* from the Russian sentence (30), for example, which is used to refer to a salient individual from the context, is phonetically indiscernible from the one that requires a bound-variable interpretation in (31):<sup>20</sup>

- (30) Vidimo **on** ne vypsalsja.  
Evidently he not slept.enough  
“**He**, evidently, didn't get enough sleep.”
- (31) [Kazhdyj igrok]<sub>i</sub> prishël, dumaya čto **on**<sub>i</sub> možet stat' pobeditelem.  
Every player arrived thinking that he can become winner  
“[Every player]<sub>i</sub> arrived thinking that **he**<sub>i</sub> could become the winner.”

The same pattern of uses occurs in Spanish:

- (32) Por lo del partido, no escogieron a **él**.  
For it of.the party, not they.chose to him  
“Because of political affiliation, they didn't choose **him**.”
- (33) [Todo miembro de la academia]<sub>i</sub> sabe que **él**<sub>i</sub> puede ser el próximo delegado<sub>i</sub>.  
Every member of the academy knows that he can be the next delegate  
“[Every member of the academy]<sub>i</sub> knows that **he**<sub>i</sub> could be the next delegate.”

The availability of both referential and bound-variable readings for what appear to be the same pronouns is not a particularity of English, Russian, and Spanish. In fact, it appears to be an extremely common property of natural languages. The most straightforward explanation of this fact is that both the referential and the bound-variable readings derive from a single basic semantics for pronouns; if referential and bound-variable type pronouns were really different lexical items, the fact of their cross-linguistic homophony would be astonishing.

Exactly the same considerations tell against an ambiguity treatment of demonstratives. *Pace* Corrazza (2003) and Comorovski (2007), it is not a particular quirk of

<sup>19</sup> See, for example, Heim and Kratzer (1998) and Chierchia and McConnell-Ginet (2000).

<sup>20</sup> Instead of providing fully-detailed morphological glosses of foreign language data, I provide approximate English renderings that I assume will be more helpful for philosophically-oriented readers.



English that licenses QI readings of complex demonstratives. Consider some data from Russian:

- (34) [Kazhdyj]<sub>i</sub> poshël k **tomu** metro kotoroe k <sub>i</sub> nemu bylo bliže  
 Each went towards that metro which towards him was closer  
 vsego.  
 than.all  
 “[Each person]<sub>i</sub> went to **that** subway station which was closest to him<sub>i</sub>.”

Note that the very same determiner used in Russian QI demonstratives is used in deictic demonstratives, too:

- (35) Skaži **tomu** človeku, čto my xotim est’.  
 tell that guy that we want to.eat  
 “Tell **that** guy we want to eat.”

The same pattern of use obtains in Italian:

- (36) [Ogni padre]<sub>i</sub> ricorda con nostalgia **quel** periodo della sua<sub>i</sub> vita in  
 Every father remembers with nostalgia that period of his life in  
 cui non aveva ancora la responsabilità dei figli.  
 which not he.had yet the responsibility of.the children  
 “[Every father]<sub>i</sub> remembers with nostalgia **that** period of his<sub>i</sub> life in which he  
 was not yet responsible for his children.”
- (37) Mi piace **quello** ristorante.  
 Me pleases that restaurant  
 “I like **that** restaurant.”

Someone attracted to an ambiguity treatment of *that*, then, has to say that in a wide variety of languages, the bona fide demonstrative determiner happens to share a morphological form with a different determiner that is used to generate QI-type readings.<sup>21</sup> Since it is not inconsistent to say that the very same ambiguity is persistent across languages, this is not an outright refutation of the ambiguity theory. But that remarkable fact would surely deserve significant explanation, of a sort which has not been even hinted at so far in the literature.

The best explanation of the cross-linguistic data is a simpler one: complex demonstratives, like pronouns, have a single underlying semantics that gives rise to two distinct types of interpretation depending on the environment in which the demonstrative occurs. For the reasons given in Sect. 3, the semantics in question cannot involve a fundamental commitment to direct reference.

<sup>21</sup> In addition to Russian and Italian, Spanish, French, Polish, German, and Hindi allow the formation of QI-type demonstratives, according to native speakers of those languages. Preliminary investigation suggests many more languages do, as well.

#### 4.4 English-based arguments for unity

The arguments from the previous section (4.3) are meant to undermine any theory that does not treat deictic and non-deictic demonstratives as instances of a single basic semantic type. If those arguments are successful, they tell against the two most prominent moves philosophers who defend direct reference make when dealing with non-deictic data: saying there is a word pronounced like *that* but interpreted like *the*, and saying demonstratives are sometimes interpreted non-literally. In addition to the kind of general concern raised in the last section, though, these two strategies are vulnerable to specific difficulties that their proponents have not addressed. Before closing, I would like to draw attention to the seriousness of those difficulties.

##### 4.4.1 Problems for the ‘homophony thesis’

Aside from Dever (2001) and Georgi (2012), few philosophers have unequivocally endorsed the claim that the English lexicon features two distinct instances of *that*, one that is a bona fide demonstrative, and one that works like the familiar definite article. Intimations of the idea, however, recur throughout the literature, and many philosophers appear to rely on some version of it when they downplay the significance of data that involve non-deictic demonstratives. Recall, for example, the quote from Kaplan (1977/1989, p. 489) with which we began: “perhaps, depending on how you individuate words, we should say that [pronouns and demonstratives] have homonyms in which I am not interested.”

Braun (2008, p. 86) seems to support treating *that* as though it had two classes of homophonous instances when he claims that “complex demonstratives with uniquely identifying common noun phrases are emphatic pragmatic alternatives to their corresponding definite descriptions.” Corrazza (2003, p. 272), following Dever (2001), expresses a similar idea, pointing out that the Oxford English Dictionary says, of *that*, that it is “often interchangeable with *the* but usually more emphatic.”

If I understand correctly, Braun and Corrazza are claiming that there is a version of *that* that means what *the* means, but carries a different degree of emphatic force. That certainly appears to be what Dever (2001, p. 286) has in mind, at least, when he says of QI sentences that “[he] will...assume that such examples make use of another word, homophonous with the demonstrative *that*, and treat them as outside the scope of [his] investigation.”

Although the idea that there is a homonym of *that* which is interpreted like the ordinary definite article would allow us to explain some of the data involving non-deictic demonstratives, other data show that it cannot be right. Consider the following pair, for example:

(38) The guy in the brown shirt always wins.

(39) That guy in the brown shirt always wins.

Suppose (38) is uttered at a boxing match, where one boxer is dressed in brown and the other in some other color. (38) can mean one of two things in such a context: either that the guy who now happens to be in the brown shirt is such that he always wins,

or that whichever guy wears brown during a match, wins the match (imagine a case in which the fights have been fixed, and I am letting you know about this regularity so that you do not bet on the other color). The fact that (38) has these two readings is not surprising; this is a familiar feature of definite descriptions, even if the mechanism is controversial.<sup>22</sup> If *that* were ambiguous in the way the homophony theory says, however, we would expect there to be an instance of (39) that is formed from the version of *that* which means what *the* means. In this configuration, the sentence should admit the two readings (38) does. (39), however, cannot be interpreted as though it contained a definite description. In the context described, the sentence has univocal truth conditions; it is true only if the person wearing the brown shirt in the context is such that he always wins.

Examples like (38) and (39) illustrate just one of the many over-generation errors the homophony theory incurs. Consider the following pair:

(40) The author of *King Lear* also wrote *Romeo and Juliet*.

(41) #That author of *King Lear* also wrote *Romeo and Juliet*.

If *that* were ambiguous as between a bona fide demonstrative and a variation on *the*, we would expect there to be a reading of (41) on which it means what (40) does. But there is no such reading; while the sentence might be uttered felicitously in a context in which it were widely known that the writing of *Lear* was a collaborative effort, it cannot be used as a variation on (40). The obvious conclusion is that there is no *the*-homophone of *that*.

A friend of direct reference might object here that things are not so clear, since even in a context in which Shakespeare is ostended, (41) is marked. Since there should be no difficulty in interpreting (41) according to the classical semantics, she might say, it would be over-hasty to chalk the markedness of (41) up to the unavailability of a version of *that* which has *the*-type semantics.<sup>23</sup>

Part of this point deserves to be taken on board; there is clearly something about (41) that needs to be explained by anyone with a view about complex demonstratives. In fact, the sentence illustrates a general property of complex demonstratives: they do not mix well with superlatives and adjectives that connote uniqueness.<sup>24</sup> Compare:

(42) #I climbed that tallest mountain.

(43) #That fastest racer won the prize.

(44) #That author of *Waverly* was Scott.

(45) #That inventor of bifocals was a genius.

Although this putative feature of demonstratives deserves closer inspection, it provides no support for the homophony treatment of *that*. If the homophony theory is right,

<sup>22</sup> Compare Donellan (1966).

<sup>23</sup> In my mind, this objection in fact does more to undercut typical versions of direct reference than it does to support them. Since typical semantics for demonstratives do not explain the markedness of sentences like (41) when they are used deictically, such sentences provide another reason for thinking the typical semantics to be inadequate.

<sup>24</sup> Thanks to Seth Yalcin for pointing out this fact about superlatives; see Yalcin (2014) for discussion.

the fact that the genuine demonstrative version of *that* would be marked in (41) is not related in any clear way to the question of the availability of a definite description-type reading; if the ambiguity thesis were right, the definite description reading would be gotten from an entirely different homophonous lexical item. Whichever features of the demonstrative result in the failure of (41), there is no reason to expect they would be instantiated by its definite description-making homophone. Absent a compelling story about why we should expect to see those features repeated, then, we should expect (41) to mean what (40) does, and for (42)–(45) to be perfectly felicitous, and interpreted as though they involved definite descriptions. That expectation, however, is clearly not borne out by the data.<sup>25</sup>

Sentences involving generic and non-specific uses of the definite article might provide support for the same point. If those constructions are best analyzed using the ordinary definite article—a claim I do not intend to commit myself to—and if the homophony theory were true, we would expect non-deictic demonstratives to support generic readings. As the following examples show, however, no such readings are available:

- (46) (The/#that) blue whale is the largest mammal.
- (47) (The/#that) outcome of the election was never really in doubt.
- (48) Soledad is in the garden, reading (the/# that) newspaper.

#### 4.4.2 Problems for the ‘pragmatic thesis’

In Sect. 3, we saw how directly referential semantic proposals are unable to generate the intuitive truth conditions for sentences like (15, repeated)

- (15) If there were any court jesters around, [every king]<sub>i</sub> would hire that jester who made him<sub>i</sub> laugh the hardest.

An anonymous referee proposes a way of explaining how the right truth conditions might be derived, without rejecting direct reference, and without denying that *that*, as it appears in (15), is the same word as the word used to form deictic demonstratives. S/he recommends distinguishing the literal truth conditions of sentences like (15) from an alternative set listeners arrive at by means of some sort of pragmatic process. The referee takes this to be what Salmon has in mind when he claims that non-deictic demonstratives are stylistic variations on definite descriptions, and it seems like a plausible reading of Lepore and Ludwig’s (2000, p. 219) suggestion that non-deictic demonstratives involve a demonstrative’s being “pressed into service” as a definite description.<sup>26</sup>

<sup>25</sup> It deserves to be mentioned that examples like (41)–(45) are as much a problem for semantic theories like King’s (2001) and Elbourne’s (2005) as they are for directly referential theories. In my (in preparation), I defend a proposal that can handle those data straightforwardly. The key to that proposal is the idea that the demonstrative determiner takes two arguments, and introduces a presupposition to the effect that its second argument serve as a kind of restrictor on the first; infelicitous strings like (41–45) violate that presupposition, while felicitous non-deictic demonstratives like our QI sentence (2) meet its requirement.

<sup>26</sup> Some of what Corazza (2003) says about non-deictic demonstratives could reasonably be interpreted as providing support for a pragmatic explanation, too.

At first glance, however, it is not easy to see how the details would work, since there is no obvious Gricean relationship between the perceived truth conditions for (15) and the truth conditions predicted by the directly referential semantics. Perhaps to meet this point, instead of trying to explain the transition in terms of conversational implicature, the referee proposes an explanation rooted in a cognitive constraint: the literal truth conditions for (15) might be so difficult to compute that listeners are forced to reinterpret the demonstrative. Instead of taking the demonstrative determiner to contribute its normal semantic value, the suggestion goes, people simplify the required interpretive task by hearing it as though it were the definite article.

The problem with this strategy is that it is not at all clear why interpreting a definite description would involve any less cognitive work than interpreting a directly referential expression. This comes out particularly clearly if we take Salmon's variation on Kaplan's theory as our model for direct reference. As Salmon would have it, the non-deictic demonstrative from (15) is treated as though it were equivalent to:

(49) *d*that [the jester who made him<sub>*i*</sub> laugh the hardest]

Computing the extension of (49), however, does not seem like it would be any less difficult than computing the extension of the description *the jester who made him<sub>*i*</sub> laugh the hardest*. The only significant difference between the two expressions, insofar as the derivation of truth conditions for (15) is concerned, is the value of the world of evaluation parameter used to evaluate the description.

Although I doubt that there is a role here for the notion of computational tractability to play, the referee's explanation suggests another that deserves consideration. Instead of saying that hearers are forced into computing erroneous truth conditions for strings like (15), we might just say that they get the truth conditions wrong because of the way non-deictic demonstratives are most commonly used.

Most attested examples of non-deictic demonstratives involve no modal operators. Consider the following representative excerpt from an article in the New York Times:

(50) I was a federal agent for 27 years and worked undercover as a money launderer...for five of them. I worked on teams that put leaders of drug cartels behind bars. The largest and most sophisticated of these criminal enterprises don't trick banks into laundering their money—they partner with **that small segment of the international banking and business community that recirculates drug profits and cash from other illicit trades...**(Mazur 2013, emphasis added)

In order to understand what the author of this passage intends to communicate, readers are not required to calculate the intension of the expression *that small segment of the international banking and business community that recirculates drug profits...* This means that whether they elect to treat the expression as (say) a *d*that-term or a definite description has no practical effect; extensionally, the two treatments are equivalent.

A friend of direct reference might claim that we are so familiar with the extensional similarities between non-deictic demonstratives and definite descriptions that we fail to track the intensional differences at all. When we encounter the rare case which *does* require disambiguation, we make a mistake, assimilating what, strictly speaking, we should treat as a rigid designator to the more common model provided by definite descriptions.

The possibility of offering an error theory along these lines might at first appear to be more promising than the possibility of developing an ambiguity theory for *that*; assuming that people are broadly cognitively similar, the error theory, for example, would generalize more plausibly across languages. Like the ambiguity theory, however, there are reasons to doubt that the error theory will ultimately provide a satisfying account of the phenomenon it is meant to explain.

As noted in Sect. 4.4.1, data from English show that definite description-type interpretations are not available for every syntactically well-formed demonstrative. But the error theory is poorly positioned to explain that fact. If carelessness were the source of the description-type interpretation for *that cleric who crowned him*, we would expect similar readings to be available for demonstratives like the following:

- (51) #Sir Walter Scott was that author of *Waverly*.  
 (52) #Mt. Everest is that tallest mountain in the world.

The fact that these sentences are infelicitous suggests that the real story about non-deictic demonstratives is more complex than the error theory would make it; the fact that minor changes to the examples render them felicitous provides further support for that conclusion:<sup>27</sup>

- (53) Sir Walter Scott was that guy who wrote *Waverly*.  
 (54) Mt. Everest is that mountain which is taller than any other.

## 5 Conclusion

I began the argumentative portion of this paper by claiming that we can test the viability of a directly referential semantics for demonstratives by evaluating the modal profile of those expressions; if direct reference is true, then demonstratives are rigid designators. I rehearsed an argument from King (2001, 2008) that aims to undermine direct reference by showing that not all demonstratives can be successfully treated as rigid designators, and responded to a complaint Salmon (2008) raises about that argument. I provided new data (including attested examples) that I claim clearly favor King over Salmon.

Having established that direct reference gets the truth conditions of sentences involving non-deictic demonstratives wrong, I turned my attention to the ways in which philosophers have attempted to explain those sentences away. I argued that none of their deflationary strategies are successful, and gave reasons for thinking that any plausible semantics for demonstratives will have to address both deictic and non-deictic instances.

Although it might sound strange to say so, coming on the heels of that summary, I hope the real upshot of the paper will be positive; on my view, the data I discuss bring out features of the terrain that philosophers have not fully appreciated, and serve to roughly delineate the constraints that should shape an adequate semantics for demonstratives.

<sup>27</sup> For more on the differences between the pairs (51)/(53) and (52)/(54), see note (25), or my (in preparation).

The truth conditions we get when we embed non-deictic demonstratives under modals, for example, do more than just suggest that direct reference is wrong; they suggest that rigidity must not be built into the lexical specification of the demonstrative determiner. Once we recognize that demonstratives are sometimes interpreted rigidly, sometimes not, it becomes sensible to ask: what explains the difference between the two cases?

That question becomes even more interesting when we consider it in the light of the cross-linguistic data, which suggest that we should aim to give a single semantics that can handle both the classic referential interpretations and the non-referential readings of demonstratives. Instead of chalking the rigid/non-rigid distinction up to lexical choice, the cross-linguistic data invite us to search for an explanation rooted in something more basic. Actually giving that explanation will require asking (hopefully illuminating) questions about the nature of the objects of our discourse, about our relations to those objects, and maybe about the structure of discourse itself.<sup>28</sup>

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## Appendix: Extending the argument to other rigid semantics

To keep the discussion focused, I limited my attention in the body of the paper to the most familiar cluster of views about the semantics of complex demonstratives; i.e., views on which the propositional contribution of a demonstrative of the form *that F*, uttered in an appropriate context, is a certain object from the context that is *F*. It is important to be clear, however, that the arguments I make there apply to a wide variety of alternative views about the semantics of demonstratives.<sup>29</sup> In the sections below, I discuss particular issues raised by several prominent alternative semantic theories.

### Appositive views

[Corrazza \(2003\)](#) and [Dever \(2001\)](#) develop versions of a semantic theory that denies that complex demonstratives are really complex in the way more familiar theories hold. Instead of analyzing instances of the form *that F* as expressions that designate individuals, they treat them as though they express complete propositions, formed from a simple demonstrative and a predicate. In turn, they treat sentences of the form

<sup>28</sup> In my (in preparation), I defend a semantics for demonstratives that addresses some of these issues, building on work by [King \(2001\)](#), [Elbourne \(2005\)](#), and [Wolter \(2006\)](#). As far as present purposes are concerned, however, I will be content if I have convinced anyone that we need to take non-deictic demonstratives seriously.

<sup>29</sup> In general, any view that stipulates that demonstratives must be interpreted rigidly is undermined by the data from Sect. 3 that show how non-deictic demonstratives frequently require non-rigid interpretations.

that *F* is *G* as though they involved bifurcation of a sort that some theorists associate with apposition (compare: *that, which is F, is G*).

Imagine, for example, that someone points towards the building that houses the Russian Ministry of Foreign Affairs and says:

(55) That building is a fine example of Stalinist architecture.

Corrazza and Dever claim that instead of expressing the single proposition that the building in question is a fine example of Stalinist architecture, the speaker of (55) expresses the two discrete propositions that would be expressed if she were to utter (56) and (57) in sequence:

(56) That is a building.

(57) That is a fine example of Stalinist architecture.

Both theorists use the machinery of direct reference to analyze the demonstrative element, so—if we let ‘ $\alpha$ ’ be a meta-language name for the building that houses the Russian Ministry of Foreign Affairs—(56) and (57) express the following propositions:

(58)  $\alpha$  is a building.

(59)  $\alpha$  is a fine example of Stalinist architecture.

While the ‘appositive theory’ of complex demonstratives might handle data involving a narrow class of deictic demonstratives plausibly well,<sup>30</sup> examples like the ones we have considered so far show that the view cannot be sustained. Recall sentence (27, repeated), for example:

(27) If Simone<sub>*i*</sub> had won the election, she<sub>*i*</sub> would definitely have embraced that elector who cast the deciding vote.

Neither Corrazza nor Dever provides a detailed analysis of a case in which a complex demonstrative occurs in non-subject position, but the following is a likely candidate dual-proposition paraphrase of (27):

(60) \*If Simone<sub>*i*</sub> had won the election, she<sub>*i*</sub> would definitely have embraced that.

(61) If Simone<sub>*i*</sub> had won the election, that would be the elector who cast the deciding vote.

(60), however, is simply not an acceptable string of English when the demonstrative is understood to refer to a person. Although you can point at a certain man while uttering (62), you cannot express the same proposition using (63):

(62) He came to our party the other night.

(63) \*That came to our party the other night.

<sup>30</sup> Note that Corrazza (2003) describes a potential extension of the theory to what King (2001) called ‘no description, no speaker-reference’ demonstratives. There is no room here to consider this extension.



The simple demonstrative from (61), on the other hand, could in principle be used deictically to refer to a person. Compare the following ‘presentational’ use of a simple demonstrative, uttered while pointing at a certain famous motorcyclist:

(64) That is who won the 2012 WSBK race at Sears Point.

In the context in which (27) is uttered, however, no person is ostended, which makes a presentational analysis of the simple demonstrative from (61) implausible.

Even if we set that point aside for the sake of argument, it is clear that if the string *could* be felicitously used, its truth conditions would diverge from those we require for (27). If we take either the person who in fact cast the deciding vote, or some person ostended by the speaker to be the propositional contribution of *that*, we will have no way of generating the definite-description type reading (27) requires.

Parallel considerations apply to a wide variety of similar constructions. The fact that we cannot point at an inventor and say:

(65) \*That lived on a farm.

should make us wary of treating the demonstrative from (66):

(66) That guy who invented bifocals lived on a farm.

as though it involved the simultaneous expression of each of:

(67) \*That lived on a farm.

(68) That is a guy who invented bifocals.

Finally, it is important to note—as Dever does on p. 305 of his (2001)—that the apposition view simply rules out demonstratives that involve binding, like our (2):

(2) [Every king]<sub>*i*</sub> cherished that cleric who crowned him<sub>*i*</sub>.

Since, even if we set aside the inanimacy violations they involve, there is no way to recover a bound reading from the strings:

(69) \*Every king cherished that.

(70) That is who crowned him.

#### A hybrid view

Lepore and Ludwig (2000, p. 215), keen to do justice to intuitions that suggest both that complex demonstratives are singular terms and that they are quantifier expressions, develop a semantics that treats them as quantifier expressions that involve singular terms as constituents:

In effect, we treat English sentences of the form “That *F* is *G*” as sharing interpretive truth conditions with English\* sentences of the form “[The *x*: *x* = that and *x* is *F*](*x* is *G*)”. Our desiderata have led us to postulate that sentences of the form “That *F* is *G*” are semantically equivalent to *restricted existentially quantified sentences*, the restrictive clause of which contains a singular referring term, to wit, a demonstrative.

The semantics they give for the referential component of *that* depends on the following clause:

For all speakers  $s$ , times  $t$ , speech acts  $u$ , and objects  $x$ , if  $s$  demonstrates  $x$  at  $t$  using “that” in  $u$ , then  $\text{Ref}_{[s,t,u]}(\text{“that”}) = x$ . (2000, p. 232, ex. 62)

Lepore and Ludwig’s proposal is designed to allow quantification into complex demonstratives. Importantly, however, the proposal allows such quantification only in certain limited circumstances. Suppose, for example, that someone points to the presenter at a conference and says:

(71) Every man in this room admires that woman whom he sees standing at the podium.<sup>31</sup>

On Lepore and Ludwig’s semantics, the demonstrative from (71) is equivalent to:

(72) [the  $x$ : ( $x = \text{that}$ ) and ( $x$  is a woman he sees standing at the podium)]

In the situation described, the reference clause quoted earlier applies to *that*, and returns the woman who is ostended by the speaker. *He* is bound by the higher quantifier phrase *every man in this room* in the ordinary way, and the result is as we would expect, that the whole sentence will be true just in case every person in the relevant room admires the person at the podium.<sup>32</sup>

Because the Lepore and Ludwig semantics requires analyzing complex demonstratives as though they involved simple deictic demonstratives, however, it cannot be extended to cover most cases of quantification into a complex demonstrative, or to cover other varieties of non-deictic demonstratives. Our (2, repeated), for example, clearly does not mean that every king cherishes the unique individual that crowned all of the kings and who is demonstrated in the context of utterance:

(2) [Every king]<sub>*i*</sub> cherished that cleric who crowned him<sub>*i*</sub>.

If the arguments from Sect. 4 successfully establish that a single semantics must cover both deictic and non-deictic demonstratives, data like (2) make Lepore and Ludwig’s semantics untenable.

### Rigidified descriptions

Neale (1993, p. 108) describes a way in which truth conditions for sentences involving deictic complex demonstratives that are similar to the truth conditions predicted by direct reference can be derived without claiming that such demonstratives are themselves devices of direct reference. On that view, complex demonstratives are treated as a certain kind of rigidified definite description:

<sup>31</sup> Lepore and Ludwig (2000, ex. 6, p. 204).

<sup>32</sup> See Lepore and Ludwig (2000, pp. 218–221).

...on the assumption that ‘I’ is a rigid referring expression, we might consider analyzing a complex demonstrative ‘that *F*’ in terms of, or at least as equivalent to, a description such as ‘the actual *F* I am demonstrating’.

This proposal goes wrong in the same way as Lepore and Ludwig’s: it straightforwardly rules out non-deictic demonstratives.

Even if the proposal were amended, though, so that demonstrations were treated as optional, instead of required, the proposal would be undermined by the stipulation that all demonstratives be interpreted rigidly. Suppose we took the proposal to be that instances of *that F* should be interpreted as though they were equivalent to “the actual *F* I am demonstrating, if I am demonstrating such, and the actual *F*, if I am demonstrating nothing, or something that is not *F*”. This proposal could be applied to non-deictic demonstratives, like the one from our (27, repeated):

- (27) If Simone<sub>*i*</sub> had won the election, she<sub>*i*</sub> would definitely have embraced that elector who cast the deciding vote.

But, as we saw in Sect. 3, the demonstrative from (27) has to be interpreted non-rigidly. So the example, along with the others discussed in Sect. 3 and many more besides, undermines the ‘rigidified description’ semantics for complex demonstratives.

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