

before attempting to construct my alternative positive view, let me explain why direct reference accounts of ‘that’ phrases are problematic.

Those who espouse a directly referential semantics for ‘that’ phrases tend to focus on certain very particular uses of such phrases. They tend to consider only those uses in which a ‘that’ phrase is employed, along with a demonstration, to “talk about” something or someone in the (physical) context of utterance.<sup>2</sup> Though the direct reference account is plausible as applied to such uses, there are other uses of ‘that’ phrases for which the account seems problematic. In particular, I shall discuss three sorts of uses of ‘that’ phrases that direct reference accounts have problems with. I shall discuss two reasons for thinking that the first sort of use is problematic for direct reference theorists. A variety of strategies have been suggested to me that the direct reference theorist might employ to deal with the first reason for thinking that these uses are a problem for her. Thus, I shall describe the sort of use in question; explain the first reason I think it poses problems for the direct reference theorist; and consider strategies to which a direct reference theorist might appeal to get around the apparent problem and show why these strategies fail. I shall then discuss a further, perhaps more definitive reason for thinking direct reference theorists cannot handle the uses in question. Finally, I shall move on to two other uses that are more straightforwardly problematic for a direct reference account.

To begin with, then, there are uses of ‘that’ phrases in which they not accompanied by any demonstration, need not be used to talk about something present in the physical context of utterance, and in which the speaker has no particular individual in mind as “the thing she intends to talk about by means of the ‘that’ phrase.” Suppose, for example, that Greg has just gotten back a math test on which

he scored very poorly. Further, suppose that Greg knows on completely general grounds that exactly one student received a score of one hundred on the exam (e.g., suppose that Greg's evil but scrupulously honest teaching assistant told Greg this as he tossed Greg his failing effort). Reflecting on the difficulty of the exam, Greg says:

(1) That student who scored one hundred on the exam is a genius.

Let us call uses of this sort *no demonstration no speaker reference* uses, or *NDNS* uses for short. I take it that it is clear that the three conditions mentioned above are satisfied in the case as I have described it. Greg employs no demonstration, need not be talking about something present in the physical context of utterance (who knows where "the genius" is?), and has no one in mind as the individual he wants to talk about by means of the 'that' phrase.

Of course, nothing said to this point precludes holding that NDNS uses of 'that' phrases are directly referential. One could hold that the 'that' phrase in (1) contributes the individual satisfying the descriptive material attaching to 'that' to the proposition expressed by (1).<sup>3</sup> However, a further phenomenon involving NDNS uses is much harder for direct reference theorists to accommodate. Suppose that a classmate of Greg's hears Greg's teaching assistant tell Greg that exactly one student received one hundred on the exam, overhears Greg's (sincere) utterance of (1), and on that basis says to another of Greg's classmates:

(2) Greg believes that that student who scored one hundred on the exam is a genius

where the classmate's use of the 'that' phrase is itself an NDNS use.<sup>4</sup> The belief ascription seems clearly true in such a case. But how can the direct reference theorist explain this? According to the direct reference theorist, the

embedded sentence in (2) expresses a singular proposition that has as a constituent the person the ‘that’ phrase in it refers to. So on this view, (2) asserts that Greg stands in the belief relation to this singular proposition. But it seems clear that Greg does not stand in the belief relation to the singular proposition in question. Greg, after all, appears to have only *general* beliefs and has no idea who scored one hundred percent on the examination. Thus it is hard to see how the direct reference theorist can explain the intuition that (2) is true in the situation described.

There are a number of maneuvers a direct reference theorist might make at this point to attempt to show that the intuition that (2) is true in the situation as described is not a problem for her. First, there is a strategy that would allow the direct reference theorist to say that Greg *does* stand in the belief relation to the singular proposition that she thinks is expressed by (1) and so hold that the belief ascription in (2) is true.<sup>5</sup> The direct reference theorist would note that Greg does possess a uniquely identifying description picking someone out in this case. Now according to the direct reference theorist, the ‘that’ phrase in (1) is directly referring. What Greg has done in uttering (1) is to introduce a term that directly refers to “the genius” by using the uniquely identifying description to fix the reference of the directly referential term. Having done this, Greg *does* stand in the belief relation to the singular proposition in question, and so (2), which according to the direct reference theorist asserts that Greg stands in the belief relation to the singular proposition in question, is literally true.

The underlying idea here is that whenever one has a uniquely identifying description, one can come to stand in the belief relation to singular propositions containing the individual satisfying the description by introducing a directly referential term whose reference is fixed by the

description. I take it that the view is that to stand in the belief relation to a singular proposition in such a case, one must *actually introduce* a directly referential term whose reference is fixed by the description in question. It isn't enough merely to *possess* the uniquely identifying description. Otherwise, (assuming 'the *F*' has a denotation) there would never be a case in which a belief ascription containing a definite description 'the *F*' is true on the narrow scope reading of the description (where it ascribes a general belief to the effect that the *F* is *G*) and false on the wide scope reading (where it ascribes a belief in a singular proposition).

But then we can slightly alter our example so that the direct reference theorist cannot use this strategy to explain the intuition that (2) is true. Suppose that the situation regarding Greg is exactly as I described it previously except that instead of (1), Greg utters 'The student who scored one hundred percent on the exam is a genius'. Further suppose that Greg simply does not introduce a directly referential term (even in mentalese!) whose reference is fixed by his uniquely identifying description. Then even the direct reference theorist would have to hold that Greg believes only a general proposition in this case (the proposition expressed by the sentence 'The student who scored one hundred on the exam is a genius'). But if we imagine Greg's classmate uttering (2) in this situation (again, where the 'that' phrase has an NDNS use) we still have the intuition that (2) is true. And now the direct reference theorist has no explanation of this intuition! On the direct reference theorist's account, (2) asserts that Greg bears the belief relation to a singular proposition containing the student who received a score of one hundred on the exam. But in the case as described, Greg does *not* believe the singular proposition in question, and so (2) is false on the direct reference theorist's view. So the direct reference theorist

cannot explain the intuition that (2) is true in *this* case as described. For the strategy under discussion, which she used to explain the intuition that (2) is true in the previous, slightly different case, is inapplicable here *even by her lights* as a result of Greg's failure to introduce any directly referring term that refers to the student who received a score of one hundred on the exam, and his thereby having only general beliefs.

The next move a direct reference theorist might make to avoid the claim that (2) causes her problems is to claim not to have the intuition that (2) is true in the *altered* version of the case just described.<sup>6</sup> To this, I can only say that I have found that informants who are not philosophers of language find (2)'s utterance straightforwardly and unproblematically true in such a situation. Perhaps the following story helps. Again, suppose that Greg was overheard by his friends sincerely saying 'The student who scored one hundred on the exam is a genius', where, again, he does not introduce a directly referential term (even in mentalese) whose reference is fixed by the uniquely satisfied description he employs. Later, a bunch of these friends of Greg's (who are aware that someone scored one hundred on the math exam but don't know who) are talking about Greg and some are claiming he never thinks anyone is highly intelligent. One friend, forgetting Greg's remarks about the student who scored one hundred, says, 'Yeah, Greg doesn't think *anyone* is a genius.' Another friend speaks up in Greg's defense, saying: 'That's not true. Greg believes that student who scored one hundred on the exam is a genius.' Surely, this remark will be taken as straightforwardly true by normal speakers in the situation as described.

Let's consider a final strategy for showing that (2) doesn't create problems for the direct reference theorist. We begin by agreeing that intuitively (2) is true in the (altered) situation as described. Assume as before that Greg

was overheard by his friends sincerely saying ‘The student who scored one hundred on the exam is a genius’ (where he does not introduce a directly referential term, even in mentalese, whose reference is fixed by the uniquely satisfied description he employs). Suppose that, unbeknownst to Greg, Floyd is the student who scored one hundred on the exam (and that if asked specifically about *Floyd’s* genius, Greg would sincerely say that he had no view on the matter). Still, the response continues, we have the intuition that the following is true in the situation as described:

(2a) Greg believes Floyd is a genius.

But the fact that we are inclined to judge (2) *and* (2a) true in our situation shows that names and ‘that’ phrases behave in the same way here. Our “pattern of intuitions” is the same with proper names and ‘that’ phrases. Thus, assuming that names *are* directly referential, the intuition that (2) is true in the situation described cannot be evidence that the ‘that’ phrase in it does *not* directly refer. Of course, since the direct reference theorist (about names and ‘that’ phrases) must hold that (2) and (2a) are false in the situation described, she must give some explanation of our intuition that they are true. But one explanation will cover both cases; and she already needed and had an explanation of the intuitive truth of (2a) in the situation described.

The problem with this response on behalf of the direct reference theorist about ‘that’ phrases is that it overstates the extent to which names and ‘that’ phrases *do* behave the same way here. If we hold the facts about our altered situation constant (Floyd scored one hundred on the exam; Greg doesn’t know this but says ‘The student who scored one hundred on the exam is a genius’; Greg never introduces a directly referential term whose reference is fixed by the description ‘the student who scored one hundred on the exam’, etc.), perhaps in *some* contexts in which we

imagine (2a) uttered we would have the intuition that it is true in our situation. For example, suppose Floyd is applying for a job and a question arises about his intelligence. We don't have any evidence either way, but we think Greg is good at judging genius based on performances on exams. Someone apprised of the facts tells us 'Well, Greg believes Floyd is a genius'. Intuitively, we might judge this remark true in this context. But now suppose that we have just asked Greg whether Floyd is a genius and he has sincerely responded (as we said he would) that he has no view on the matter. Greg leaves and someone walks in and says: 'You know, Greg believes that Floyd is a genius'. In this context, it seems to me, we have *no* inclination to regard the remark as true. So whether we have the intuition that (2a) is true in the situation as described depends on the context in which it is uttered and the relevant interests, etc., in that context. *But there is no such variation in our intuition that (2) is true in the situation as described!* Thus, contrary to what was claimed, our "pattern of intuitions" in the case is not the same with proper names and 'that' phrases. But then whatever explanation is given of our (varying) intuitions with respect to (2a) in the situation as described will not explain our (unvarying) intuitions with respect to (2) in the situation. So, again, the direct reference theorist has no explanation of our (unvarying) intuition that (2) is true in the situation as described. I would add that the fact that our intuition that (2) is true in our situation does *not* vary between contexts of utterance surely is strong prima facie evidence that (2) *is true* in the situation.

Thus, notwithstanding the direct reference theorist's above responses the 'that' phrase in (2) does after all appear to be problematic for her. But if the direct reference theorist cannot provide a satisfactory account of the use of the 'that' phrase in (2), there are grounds for thinking that she cannot provide an account of the 'that' phrase in (1)

either. For the uses of ‘that’ phrases in both (1) and (2) are NDNS uses. It seems to me that we should expect a uniform semantic account of NDNS uses. Thus the failure of the direct reference account in the case of (2) militates in favor of rejecting such an account for the ‘that’ phrase in (1) as well. So in NDNS uses of ‘that’ phrases we have data that is problematic for the direct reference theorist.

As mentioned above, there is a second and even more definitive reason for thinking that NDNS uses are not directly referential. This can be seen more clearly by considering a slightly different example. Suppose that Scott the scientist is lecturing his class on great moments in hominid history. He is discussing various hominid discoveries and inventions, and the intelligence they required. He has just introduced the topic of the discovery of how to start fires. He says:

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

Scott’s use of the ‘that’ phrase here is clearly an NDNS use. He employs no demonstration, obviously has no particular individual “in mind” as the individual he intends to talk about, and certainly is not talking about any creature in the physical context of his utterance. Consider the proposition expressed by (3) as uttered by Scott in the actual world. Suppose that in the actual world, Homey the hominid discovered how to start fires and Homey was indeed a brilliant hominid (so presumably on all accounts of the semantics of ‘that’ phrases, the proposition expressed by (3) is true in the actual world). Now consider a possible world  $w'$  in which Homey was a genius but was not the hominid to discover how to start fires. In  $w'$ , this discovery was made by Shomey the hominid, who was a feeble-minded, bumbling hominid and simply got lucky. Now is the proposition Scott expressed by uttering (3) (in the



actual world) true or false in this circumstance? It seems clear that it is false. But if the ‘that’ phrase in (3) were rigid, it would denote Homey in  $w'$  and the proposition expressed by (3) would be true!<sup>7</sup> Hence the ‘that’ phrase is nonrigid. Of course, the fact that NDNS uses such as this are nonrigid precludes treating them as directly referential.

A second sort of use of ‘that’ phrases that causes serious problems for a direct reference treatment is illustrated by the following examples:

(4) Every father dreads that moment when his oldest child leaves home.

(5) Most avid snow skiers remember that first black diamond run they attempted to ski.

Both (4) and (5) have readings on which the ‘that’ phrases contain pronouns that function as variables bound by quantifiers in whose scope the ‘that’ phrases occur.<sup>8</sup> Let us call such uses *quantification in* uses, or *QI* uses for short. Clearly, QI uses of ‘that’ phrases such as those in (4) and (5) don’t refer, let alone directly refer, to particular individuals.

There is another use of ‘that’ phrases, closely related to QI uses, that poses problems for the direct reference theorist. Consider the following sentences:

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

(7) That senator with the most seniority on each committee is to be consulted.

Both (6) and (7) are ambiguous. The ambiguity of (6) can be brought out by different continuations. First, imagine it followed by: ‘Her name is Cini Brown and she is a fine researcher.’ On this reading, the ‘that’ phrase is being used to talk about a particular individual, and so the direct reference theorist can account for the reading. But now

imagine the following continuation: ‘In all ten professors will be honored’. Let us call this reading of (6) the *narrow scope (NS) reading*.<sup>9</sup> The existence of NS readings of (6) and (7) seems hard to reconcile with the claim that ‘that’ phrases are directly referential. For on these readings, the ‘that’ phrases are not referring to any particular individuals. Intuitively, in (6) the ‘that’ phrase is used to make a claim about the professors who brought in the most grant money in different divisions. So again here, the direct reference theorist is in trouble.

In summary, we have found three sorts of cases in which ‘that’ phrases do not seem to be functioning as directly referential terms. It is worth noting that all three cases suggest some sort of quantificational treatment. Without attempting to be specific about the exact nature of the quantification that might be involved and so thinking that the ‘that’ phrases in such cases may be functioning something like the way in which definite descriptions, understood as quantifier phrases, function, we can get some handle on the NDNS and QI uses, as well as the NS readings of (6) and (7). In the case of NDNS uses, if the ‘that’ phrase contributes to the proposition expressed some complex descriptive condition that must be (uniquely) satisfied for the proposition to be true, we can see that a speaker could express a proposition using a sentence containing such a phrase when no demonstration is involved and the speaker had no one in mind (as in (1) in the situation described). More important, one can see how a belief ascription like (2) could be true in the situation described. For the ascription would assert that Greg believes a proposition containing a descriptive condition instead of an individual, as the direct reference theorist would have it. And of course if the complex descriptive condition (at least in some cases) could “determine” different individuals in different circumstances of evaluation, this would allow the

‘that’ phrases in (1)–(3) to be nonrigid. As for the QI uses in (4) and (5), we would have one quantifier phrase binding variables in another, as happens in many other cases, for example:

(8a) Every man loves some woman he kissed.

(8b) Every woman loves the man she first kissed.

And finally, if ‘that’ phrases are quantifiers, we would expect scope interactions between ‘that’ phrases and other quantifiers. Thus the two readings of (6) and (7) are a result of a scope ambiguity, and we explain the NS readings as resulting from the ‘that’ phrases taking narrow scope relative to the quantifier phrases occurring in their relative clauses. Thus QI uses, NDNS uses, and the NS readings of (6) and (7) suggest *both* that a direct reference account is incorrect *and* that a quantificational account is to be sought.

There are a number of additional arguments for the claim that ‘that’ phrases are quantificational and not directly referential. First, consider Bach-Peters sentences such as the following:

(9) Every friend of yours who studied for it passed some math exam she was dreading,

where the pronoun in each noun phrase (‘it’ in ‘Every friend of yours who studied for it’ and ‘she’ in ‘some math exam she was dreading’) is interpreted as anaphoric on the other noun phrase. The most plausible explanations of the acceptability and semantics of such sentences assume that the phrases containing the anaphoric pronouns are both quantifier phrases. Note that sentences like (9), with pronouns understood anaphorically, can be formed using virtually any quantifier phrases:

(10a) Few friends of yours who studied for them passed several exams they were dreading.

(10b) Most friends of yours who studied for them passed many exams they were dreading.

(10c) No friends of yours who studied for them passed at least two exams they were dreading.

Acceptable sentences exactly like (9) and (10a)–(10c) can be formed using ‘that’ phrases:

(11) That friend of yours who studied for it passed that math exam she was dreading.

As with (9) and (10a)–(10c), this sentence is acceptable with the pronouns interpreted anaphorically. If we suppose that the ‘that’ phrases are quantifier phrases, the explanation of the acceptability and semantics of (9) and (10a)–(10c) can be carried straight over to (11). That the data comprising (9), (10a)–(10c), and (11) is to be subsumed under a single explanation is made even more plausible by the fact that we can get sentences of this sort in which ‘that’ phrases combine with other quantifier phrases:

(11a) Every friend of yours who studied for it passed that exam she was dreading.

(11b) That friend of yours who studied for it passed some math exam she was dreading.

To summarize, explanations of the acceptability and semantics of (9) and (10a)–(10c), where the pronouns are understood as anaphoric, are necessary and available. Such explanations assume that the noun phrases in those sentences are quantifiers. On the hypothesis that ‘that’ phrases are quantifier phrases, (11), (11a), and (11b) are automatically subsumed under these very explanations.

By contrast, (11) and (11a) are quite puzzling on the hypothesis that ‘that’ phrases are devices of direct reference. Taking (11) first, if we assume that the ‘that’ phrases are directly referential, the pronouns anaphoric on them

apparently must be taken to refer to the same thing as their antecedents. Thus, the anaphoric pronouns are referring expressions that inherit their referents from their antecedents. But this leads directly to problems. On a direct reference view, the predicative material that combines with 'that' to form a 'that' phrase partly determines the character, and hence the referent in the context of utterance, of the 'that' phrase.<sup>10</sup> But then, the character of the 'that' phrase will be partly determined by the referents of any referring expressions occurring in the predicative material that partly comprises the 'that' phrase. Thus, for example, the character, and hence the referent in a context, of 'that guy standing next to Mark' will be partly determined by the referent of 'Mark'. But now consider 'That friend of yours who studied for it' in (11). Its character, and hence referent in a context, depends in part on the referent of 'it'. And the referent of 'it' is determined by its antecedent 'that math exam she was dreading'. Thus the determination of a character, and hence a referent in a context, for 'That friend of yours who studied for it' requires having secured a referent for 'it', which in turn requires having secured a character, and hence referent in a context, for its antecedent 'that math exam she was dreading'. But the character of 'that math exam she was dreading' is partly determined by the referent of 'she'. And the referent of 'she' is inherited from 'That friend of your who studied for it'. Thus 'That friend of yours who studied for it' must be assigned a character, and hence a referent in a context, in order that 'she' be assigned a referent. But, as we have seen, this cannot be done until a referent is secured for 'it'! The upshot is that it is hard to see how the character of either 'that' phrase in (11) can be determined. The determination of the character of a given 'that' phrase in (11) requires securing a referent for the pronoun in it. This in turn requires

securing a referent and hence a character for the other 'that' phrase. But this requires securing a referent for the pronoun in *it*, which presupposes a referent and hence a character for the other 'that' phrase. The bottom line is that determining the character of either 'that' phrase presupposes having determined the character of the other. Thus neither can be assigned a character, nor, therefore, a referent. So it is hard to see how a direct reference theory can explain the acceptability, and, in the appropriate circumstances, the truth, of (11).<sup>11</sup>

(11a) only exacerbates the direct reference theorist's problem. For (11a) has a reading on which it asserts that every friend passed that exam she was dreading, possibly different exams for different friends (compare: 'Every employee who worked for it received that promotion she had hoped for'). But since on this reading the 'that' phrase is used to talk about the various exams passed by each friend, it can hardly be a referring term. Thus, even if the direct reference theorist were to figure out some way to handle (11) on the assumption that the 'that' phrases in it directly refer, it seems certain that the account would fail to handle (11a). So it appears unlikely in the extreme that the direct reference theorist can give a unified account of (11) and (11a).

In summary, each of (11) and (11a) taken separately is quite problematic for the direct reference theorist. And it appears that in any case she cannot give a unified account of them. By contrast, the view that 'that' phrases are quantifiers can appeal directly to already existing explanations for (9) and (10a)–(10c) in explaining both (11) and (11a) (and (11b)). Thus, not only does such a view give a unified account of (11)–(11b), but it places them among the broader array of similar data represented by (9) and (10a)–(10c). Surely, this is the much more theoretically satisfying account of (11)–(11b).

There are additional reasons for thinking that ‘that’ phrases are quantificational, which have to do with their syntactical behavior. On one widely held view of syntax, there is a level of syntactic representation whose representations are phrase structure representations (represented by trees or bracketings labeled with linguistic categories) derived from surface structure by means of transformations, and whose representations are interpreted by the semantic component.<sup>12</sup> This level of syntactic representation is called *LF* (for *logical form*). According to such views (or at least prominent versions of such views), one of the primary differences between LF representations and surface structure (or S-structure) representations is that in the mapping to LF, quantifier phrases get “moved” and end up binding variables (called *traces*) at the level of LF. To illustrate, consider the following S-structure:

(12) [<sub>s</sub>[<sub>np</sub>Every skier] [<sub>vp</sub>is happy]]

In the mapping of this S-structure representation to LF, the quantifier phrase gets adjoined to the (S) node leaving behind a trace ( $e_1$ ) that functions as a bound variable:

(13) [<sub>s</sub>[<sub>np</sub>Every skier]<sub>1</sub> [<sub>s</sub> $e_1$  [<sub>vp</sub>is happy]]]

For a sentence containing two or more quantifier phrases, this movement results in explicit representation of relative quantifier scope at the level of LF. Thus an S-structure such as

(14) [<sub>s</sub>[<sub>np</sub>Every philosopher] [<sub>vp</sub>hates [<sub>np</sub>some new age flake]]]

has two LF representations, resulting from the fact that the rules mapping S-structure to LF may apply in two different ways:

(15) [<sub>s</sub>[<sub>np</sub>every philosopher]<sub>1</sub> [<sub>s</sub>[<sub>np</sub>some new age flake]<sub>2</sub> [<sub>s</sub> $e_1$  hates  $e_2$ ]]]

(16) [<sub>s</sub>[<sub>np</sub>some new age flake]<sub>2</sub> [<sub>s</sub>[<sub>np</sub>every philosopher]<sub>1</sub>  
 [<sub>s</sub>e<sub>1</sub> hates e<sub>2</sub>]]]

The quantifier scope ambiguity of (14) is thus explained by the fact that (15) and (16) are interpreted differently by the semantic component.

For our purposes, the important point in all of this is that on such approaches to syntax, quantifier phrases and singular referring terms (such as names) are treated differently in the mapping from S-structure to LF. Quantifiers undergo “movement” of the sort just described, whereas referring expressions do not. This being so, whether an expression undergoes movement in the mapping to LF indicates whether it is a quantifier or not.<sup>13</sup>

There are certain constructions that can be used to detect this sort of movement. First, it appears to be a condition on verb phrase (VP) deletion that neither the missing verb nor its antecedent c-commands the other.<sup>14</sup> Yet a variety of examples appear to violate this condition. In examples like

(17) Tiger birdied every hole that Michael did

‘birdied’ c-commands ‘did’.<sup>15</sup> However, though this is so at S-structure, if it is assumed that quantifier phrases are moved, resulting in their being adjoined to the S node at LF (leaving behind traces), ‘birdied’ will not c-command ‘did’ at LF as a result of the movement of ‘every hole that Michael did’. Thus, if we assume that the constraint on VP deletion is a constraint that must be satisfied only at the level of LF and that quantifier phrases are moved in the way suggested in the mapping to LF, examples like (17) don’t constitute counterexamples to what appears to be an otherwise well-motivated constraint on VP deletion. If all of this is correct, then the acceptability of

(18) Tiger birdied that hole that Michael did



suggests that ‘that’ phrases are moved in the mapping to LF and so are quantifier phrases. Thus we have some syntactic evidence that ‘that’ phrase are quantificational.<sup>16</sup>

Further, so-called weak crossover phenomena also appear to support the view that ‘that’ phrases are quantificational, and so provide more syntactic evidence in favor of this view. The following sentence has no interpretation on which ‘his’ is anaphoric on ‘every man’ (i.e., no reading on which it means that every man is loved by his mother):

(19) His mother loves every man.

If we form sentences using quantifier phrases other than ‘every man’, again we never get sentences in which the pronoun can be interpreted as anaphoric on the quantifier:

(19a) His mother loves some man.

(19b) His mother loves the man with the goatee.

(19c) His mother loves no man.

(19d) Their mothers love few men.

(19e) Their mothers love several men.

By contrast, if we replace the quantifier phrase with a name, we are able to interpret the pronoun as anaphoric on the name. Thus the following sentence has a reading on which it means that John’s mother loves him:

(19’) His mother loves John.

To some extent, different theorists explain the weak crossover effects exhibited in (19)–(19e) differently. However, it is generally held that the explanation as to why one cannot get anaphoric readings in (19)–(19e) and sentences like them must make essential reference to the fact that a quantifier phrase occurs in object position and, unlike a name, undergoes movement in the mapping to LF.<sup>17</sup> After

all, when this is not so, as in (19'), we can get the anaphoric readings.

That quantifier phrases and referring expressions behave differently in such constructions is made even more plausible by noting that when we substitute a deictic referring expression for the name 'John' in (19'), we can read the sentence-initial pronoun as anaphoric on the deictic referring expression. Thus, imagine I am in a room with a number of people and the question comes up of who is loved by his mother. I utter the following, pointing only when I say 'him':

(19'a) Well, his mother loves [pointing] him.<sup>18</sup>

Thus whatever the precise mechanism, it appears that in such examples, quantifier phrases exhibit weak crossover effects ((19)–(19e)) and referring expressions do not ((19')–(19'a)). And as the following example illustrates, 'that' phrases, like (other) quantifier phrases, *do* exhibit weak crossover effects:

(19'') His mother loves that man with the goatee.

It seems clear to me that the pronoun 'his' cannot be interpreted as anaphoric on 'that man with the goatee'.<sup>19</sup> Surely it is striking and suggestive that 'that' phrases cluster with quantifier phrases and not with referring expressions with respect to weak crossover effects. So again here we have some syntactic evidence that 'that' phrases are quantificational and not directly referential.<sup>20</sup>

There is a final point, implicit in what has been argued so far, that I wish to emphasize. As I have indicated, it would appear that the direct reference theorist must hold that in NDNS uses, it is the descriptive material combined with 'that' in the 'that' phrase that *alone* determines the character of the 'that' phrase, demonstrations and the sorts of intentions that accompany them being absent in such

cases. On the other hand, it would appear that the best hope the direct reference theorist has of accounting for Bach-Peters sentences like (11), when used with accompanying demonstrations, is to hold that in such cases the predicative material combined with ‘that’ in the ‘that’ phrase plays *no* role in the determination of character. For if this were so, the determination of the character of the ‘that’ phrases would not require a prior determination of referents for the pronouns, and so the vicious circularity in the determination of character we noted would be avoided. Thus, to handle both NDNS and Bach-Peters cases, the direct reference theorist’s best move appears to be to claim that sometimes predicative material in ‘that’ phrases plays *no* role in character determination (Bach-Peters sentences) and sometimes it *alone* determines character (NDNS cases). Of course such an account sounds quite ad hoc. But there is a much worse problem. There are Bach-Peters sentences in which the ‘that’ phrases have NDNS uses, for example, (11) uttered in a situation in which the speaker knows on general grounds that her addressee has a unique friend who studied for, dreaded, and passed a unique math exam. It is utterly unclear what the direct reference theorist is to say here. It would appear that she *must* hold that the predicative material determines the character of the ‘that’ phrases in such cases. But this leads directly to our vicious circularity in the determination of character.

A similar problem arises with respect to QI uses of a sort that the direct reference theorist *might* have hoped to be able to handle. I wish to stress that QI uses such as (4) and (5) just seem hopeless on a direct reference account; but the direct reference theorist *might* have hoped to be able to handle *certain* examples. Suppose I and my audience have been told that some senator from New York (we don’t know who) had his unique mistress (we don’t know

whom) appointed ambassador to Rongovia. Reminding my friends of how corrupt government officials are, I say

(20) As we all clearly recall, some senator from New York had that mistress of his appointed ambassador to Rongovia.

Here again, no demonstrations or the sorts of intentions that accompany them are present. Thus, the direct reference theorist must hold that the predicative material ‘mistress of his’ alone determines the character of the ‘that’ phrase. But it is hard to see how this could be. For character determination is supposed to occur “prepositionally,” and is part of the explanation as to why a given sentence expresses a given proposition. However, because the pronoun ‘his’ is anaphoric on and apparently bound by ‘some senator’, it will not be assigned any value prepositionally. Presumably, the pronoun (or its propositional contribution) will come into play semantically only when the quantifier binding it (or its propositional contribution) is processed. But then how could ‘mistress of his’ *prepositionally* determine a character that suffices to uniquely determine a referent in the context in question?

Thus NDNS Bach-Peters examples and QI uses like (20) in the situation as described show that even a direct reference theory that tried to handle (at best) some of our data by allowing the roles of predicative material and demonstrations in character determination to vary from cases to case will fail.

Let us summarize our discussion to this point. First, we noted that certain uses of ‘that’ phrases, specifically QI uses, NDNS uses, and the NS readings of (6) and (7), are hard to account for on the hypothesis that ‘that’ phrases are directly referential. Second, we noted that an account of such uses according to which the ‘that’ phrases are quantifier phrases seemed promising. Third, we adduced a

number of additional reasons, involving Bach-Peters sentences, VP deletion, and weak crossover phenomena, for holding that ‘that’ phrases are quantifier phrases. Finally, we showed that even if the direct reference theorist allows predicative material and demonstrations to play different roles in character determination in different cases, she will still run into problems.

It is time to look for an account of ‘that’ phrases that can handle *all* the data we have discussed.

## *Three Quantificational Accounts of ‘That’ Phrases*

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In the previous chapter, we saw that there are good reasons for thinking that ‘that’ phrases are not directly referential but quantificational. We now face the task of constructing a quantificational account of ‘that’ phrases.

In fact, as discussed below, I shall construct three different quantificational accounts of ‘that’ phrases. However, before getting to this, it is important to discuss what *any* quantificational account of ‘that’ phrases would have to be like (i.e., what it is to *be* a quantificational account of ‘that’ phrases). Next, I shall discuss a common feature of all three quantificational accounts that we shall consider. Following this, I turn to the construction of the three quantificational accounts. The first is an account I defended in previous work.<sup>1</sup> Having sketched this account, I shall explain why I no longer favor it. I shall then describe two other quantificational accounts and compare their treatments of a variety of data. After providing reasons for favoring one of these two accounts, I shall go on to discuss how it treats additional data.

With these preliminary remarks out of the way, let us now turn to the task of saying what it is to be a quantificational account of ‘that’ phrases. Standard quantifier phrases such as ‘Most skiers’, ‘No Californian with any