

## Switches between Direct and Indirect Speech in Ancient Greek\*

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### Abstract

I propose a unified semantic analysis of two phenomena characteristic of ancient Greek speech reporting, (i) the unmarked switching between direct and indirect discourse, and (ii) the use of ὅτι ('that') as a quotation introduction. I accommodate these phenomena in a formal semantic framework, where both can be modeled uniformly as instances of mixed quotation.

### Keywords

reported speech; ancient Greek; mixed quotation; semantics

### 1. Introduction: Direct and Indirect Speech

Linguists typically distinguish two modes of reported speech, direct and indirect.

- (1) (direct) Mary said, "Ugh, I'm sooo tired!"  
(indirect) Mary said that she was very tired

In the direct report (*oratio recta*) we reproduce Mary's original speech act verbatim by putting quotation marks around it; in the indirect report (*oratio obliqua*) we use a subordinate clause to convey what Mary originally expressed. More abstractly, the fundamental difference is this: in direct speech we report Mary's *words*, while in indirect speech we report the *content* of Mary's words. In

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other words, when reporting directly, we take on the perspective of the reported speaker, and when reporting indirectly we present what was said from our own perspective.

These two report strategies seem to be universal. There is some debate over possible counterexamples, i.e. languages without a clearly distinct indirect reporting mode (Li 1986; Ludwig et al. 2009). Moreover, in certain literary genres, a third reporting mode, with a distinct syntax and semantics, seems to have emerged, the Free Indirect Style (Banfield 1982). In this paper I disregard such phenomena in favor of standard direct and indirect discourse.

My goal is to argue against an all too rigid conception of the direct-indirect distinction in speech reporting. In fact, a great deal of speech reporting cannot be straightforwardly classified as either fully direct or fully indirect. In this paper I show that in ancient Greek the two reporting modes occasionally blend into each other in ways we would not expect in, say, modern English. I propose a novel, uniform account of two seemingly distinct phenomena of ancient Greek speech reporting that have independently received quite some attention, viz. (i) the unmarked switching from indirect to direct speech, and (ii) the use of ὅτι ('that') in introducing direct speech.

## 2. Reported Speech in Ancient Greek

Like English, ancient Greek has distinct direct and indirect reporting modes. However, a number of factors conspire to occasionally obscure the difference.

First of all, we have only written sources, so the distinct intonational pattern associated with direct speech in modern languages cannot help us. Moreover, the texts we have do not even have quotation marks and accompanying punctuation, the written counterparts of the intonational clues of direct speech, as those were not systematically used until the late Middle Ages. In the remainder of this section I list a number of linguistic features of direct and indirect speech that help us nonetheless determine the mode of a given speech report in a Greek text rather reliably. I illustrate the grammatical mechanisms with minimal, made up examples here, and discuss more complex, real examples in the next section, where we apply all this to uncover interesting switches from one mode to the other.

To report a minimal utterance like (2) directly, we simply add a saying verb, as in (3).

- (2) γράψω  
*write.1SG.IND.FUT*  
 'I will write'



In this construction there is no complementizer, and the infinitival subject, if different from the matrix subject, receives accusative case. The construction is known as the *accusative and infinitive*, or *epexegetical infinitive*. This is the most common form of indirect speech reporting by far in Homer, but by the time of the New Testament writers, it has lost significant ground to the simple ὅτι construction.

There may be subtle differences in interpretation between the types of indirect report complements in Greek (indicative, optative, infinitival), and complex rules governing their applicability, but these will not concern us here. We focus on the differences between direct and indirect discourse.

In most cases the morphosyntax of indirect speech, as described above, will prevent ambiguity when interpreting a given report construction. If we see a verb of communication preceding a clause whose main verb is in the infinitive, or if the complement is introduced by ὅτι or ὡς ('that'), we are probably dealing with indirect speech; if not, it's probably direct speech. Note that this superficial heuristic is not always sufficient, because infinitives and ὅτι and ὡς have a number of main clause uses as well. In addition, there are a number of other linguistic phenomena that are restricted to main clauses, like, for example, imperative mood. These would naturally exclude the possibility of indirect discourse because that involves subordination.<sup>1</sup>

Still, to classify reports reliably we often have to take the broader context into account. This will leave little ambiguity because the difference between reporting a character's words verbatim, and reporting what was said from the narrator's perspective, has a profound impact on the (truth conditional) meaning of an utterance. The most useful clues come from the interpretations of so-called indexicals (*I, here, yesterday* etc.). In direct speech these depend for their reference on the reported context, while in indirect speech they depend on the global context of narration, i.e. in *John said, "I will write"*, *I* refers to John, but in

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<sup>1</sup>) For many *prima facie* plausible candidates of direct discourse indicators, there exist claims in the literature that said features are in fact compatible with the syntax and semantics of indirect speech, if only we adjust the semantics of indirect speech and the phenomenon in question. In this way, Schlenker (2003) argues that some languages shift pronouns and tenses in indirect discourse; Schwager (2005) claims that something similar happens with "embedded imperatives", and Bary & Maier (2003) even claim that (some) ancient Greek switches should be explained in terms of context shifting in indirect speech. A proper appreciation of the arguments pro and contra is beyond the scope of the current paper. The modest aim of this paper is to defend the null hypothesis regarding the Greek data: what has always been described by Greek scholars as switches from indirect to direct, *are* switches from indirect to direct. And well-known heuristics for determining directness/indirectness (vocatives, imperatives, shifted indexicals: → direct) will be regarded as such. In case compelling independent evidence of, say, embedded imperatives in Greek should be uncovered, it might be possible to reanalyze *some* specific examples of Greek switching as pure indirect speech.

*John said that I will write*, it refers to me. As part of a larger story, it should be easy to figure out who can be coherently said to have plans of writing here, the narrator (me) or the character (John). On the basis of this contextual information, we can then decide if we're dealing with direct or indirect speech, even in cases where local morphosyntax doesn't provide independent clues.

### 3. Data: Mixing Direct and Indirect Speech

Below I discuss two seemingly distinct phenomena that I propose to characterize uniformly as mixtures of direct and indirect discourse: (i) switches from indirect to direct discourse, and (ii) the apparent use of ὅτι ('that') as complementizer introducing direct discourse.

#### 3.1. Indirect-Direct Switches

The tendency to switch between direct and indirect discourse is relatively well studied phenomenon in ancient Greek philology. Typically, the switch goes from indirect to direct, in which case it has been aptly described as "fade in" (Huitink 2010) or "slipping" (Richman 1986). Classical authors often mark such switches with an interjected saying verb (Kieckers 1916). In (7), for instance, Herodotus reports a speech by Cyrus to the Persian army. Note: I'm underlining all the relevant clues that we use to determine whether something is a direct or an indirect speech report, including the main reporting verb, complementizers, accusatives and infinitives, and some indexicals and vocatives.

(7) Hdt. 1.125.2<sup>2</sup>

γράφας ἐς βυβλίον τὰ ἐβούλετο, ἀλίην τῶν Περσέων ἐποιήσατο, μετὰ δὲ ἀναπτύξας τὸ βυβλίον καὶ ἐπιλεγόμενος ἔφη Ἀστυάγέα μιν στρατηγὸν Περσέων ἀποδεικνύναι. νῦν τε, ἔφη λέγων, ὦ Πέρσαι, προαγορεύω ὑμῖν παρῆναι ἕκαστον ἔχοντα δρέπανον. Κύρος μὲν ταῦτα προηγόρευσε.

writing what he liked on a paper, he assembled the Persians, and then unfolded the paper and declared that in it Astyages appointed him leader of the Persian armies. "Now," he said in his speech, "I command you, men of Persia, to come, each provided with a sickle." This is what Cyrus said.

Herodotus starts his report in the indirect mode, more specifically with an accusative and infinitive construction ('declared that Astyages (*acc.*) appointed (*inf.*) him leader'). The next sentence, still reporting the same, long speech, uses the exact same matrix saying verb ἔφη ('he said'), but has a rather

<sup>2</sup>) Text and translation (based on) Herodotus, with an English translation by A.D. Godley. Cambridge. Harvard University Press. 1920. (For all texts and translations I have relied heavily on <http://www.perseus.tufts.edu>)

different structure. First of all, there are a number of indexicals ('Now I command you'), which make no sense if evaluated with respect to the narrator, Herodotus. Clearly they refer to the reported context, which can only mean direct speech. Second, the report contains a vocative interjection, ὦ Πέρσαι (lit. 'O Persians!'), meant to address the audience of the reported context. Third, the (pleonastic) saying frame ἔφη λέγων (lit. 'he said, saying') does not precede the reporting clause, but is interjected, a phenomenon characteristic of direct reporting, even in modern English (cf. the translation). Finally, the report is followed by a formula, "this is what he said" that tends to signal the end of a direct report.

We will not go into the stylistic effects of fading in or slipping. Nor will we discuss crosslinguistic and historical aspects, except to note that the phenomenon of unmarked slipping is attested in a number of other ancient languages like Aramaic (Richards 1939) and Old English (Richman 1986), cf. Kieckers (1916) for a thorough overview. Linguistically speaking, there is nothing particularly thrilling about this type of example. What we see in (7) is an illustration of the two standard types of reporting as characterized in section 2 above: first an indirect report marked by accusative and infinitive, and then a direct report marked by obvious vocative and indexical shifts.

What *is* quite remarkable from a linguistic perspective, is the fact that in ancient Greek such switches also occur within a single report complement. We find examples everywhere, from Homer (800 BC) to Xenophon (400 BC), to the New Testament (50 AD). Let's consider a few from classical Greek.

The comedies of Aristophanes provide a number of very clear illustrations. In (8) the protagonist, a sausage seller, is reporting how the Paphlagonian was pleading with the Senate to listen to the Spartan envoy.

- (8) Aristoph. Eq. 668–670<sup>3</sup>  
 ὁ δ' ἤντε βόλει γ' αὐτοὺς ὀλίγον μείναι χρόνον,  
 ἴν' ἄτθ' ὁ κήρυξ οὐκ Λακεδαιμόνος λέγει  
πύθησθ', ἀφίκται γὰρ περὶ σπονδῶν, λέγων.

He begged them to wait a little, "so you can hear what the Spartan messenger has to say—he's arrived here with a peace proposal", he said.

In this example, mentioned by Kieckers (1916), the plea again starts as indirect speech, marked with an accusative and infinitive construction ('he begged them to wait a little'), elaborated by a finite purpose clause ('so that you can

<sup>3</sup>) Aristophanes. *Aristophanes Comoediae*, ed. F.W. Hall and W.M. Geldart, vol. 1. F.W. Hall and W.M. Geldart. Oxford. Clarendon Press, Oxford. 1907. trans. Aristophanes. *Wasps. The Complete Greek Drama*, vol. 2. Eugene O'Neill, Jr. New York. Random House. 1938.

hear’). The direct nature of the second half is especially clear here because of the indexical second person: *you* refers not to the current addressees of the sausage seller (the chorus, Demos, the Paphlagonian, or even the play’s audience), but to the Senate.

Note that this indexical shift in (8) reveals a clear difference between ancient Greek and modern English writing; removing the quotation marks from the translation above makes the English sentence unacceptable (within the context of the narrative). It is important to keep in mind that, it’s not so much the abrupt change from indirect to direct, but the fluid, unmarked nature of the switch that distinguishes our modern writing from that of the Greeks.

Another example. In (9), the historiographer Xenophon recounts a meeting of Clearchus’ soldiers, in which they are discussing whether or not to defect from Cyrus.

(9) Xen. Anab. 1.3.16<sup>4</sup>

μετὰ τοῦτον ἄλλος ἀνέστη, ἐπιδεικνύς μὲν τὴν εὐήθειαν τοῦ τὰ πλοῖα αἰτεῖν κελεύοντος, ὥσπερ πάλιν τὸν στόλον Κύρου ποιουμένου, ἐπιδεικνύς δὲ ὡς εὐήθεις εἶη ἡγεμόνα αἰτεῖν παρὰ τούτου ὧ λυμαινόμεθα τὴν πράξιν.

another man arose to point out the foolishness of the speaker who had urged them to ask for vessels, just as if Cyrus were going home again, and to point out also how foolish it was to ask for a guide from this man “whose enterprise we are ruining”

The reporting verb is ἐπιδεικνύς (‘point out’), which embeds the subordinate clause introduced by ὡς, either construed as a regular indirect *that*-clause, ‘that it was foolish’, or as an indirect exclamative ‘how foolish it was’. The indirect status is confirmed by the optative form of the copula in ‘how foolish it was’, a case of *optativus obliquus* (cf. section 2, ex. (5)). The indirect speech turns direct toward the end, where we find a first person plural present indicative form (‘we are ruining’) that is intended to refer to the reported speaker and his fellow soldiers, rather than to the historiographer Xenophon, who tends to remain in the background.<sup>5</sup>

Returning to Aristophanes, let’s end with a more interesting mix in (10), where, arguably, the author lapses from indirect to direct and then back to indirect within a single (complex) sentence—a rarity according to Kieckers.

<sup>4</sup>) Xenophon. *Xenophontis opera omnia*, vol. 3. Oxford, Clarendon Press. 1904 (repr. 1961). trans. Xenophon. *Xenophon in Seven Volumes*, 3. Carleton L. Brownson. Harvard University Press, Cambridge, MA; William Heinemann, Ltd., London. 1922.

<sup>5</sup>) Note that Xenophon was a soldier in Clearchus’ army, so he may well have been present at that very meeting. Strictly speaking, an indirect interpretation is not excluded by the first person indexical, although on the basis of stylistic and further contextual considerations it is quite implausible.

- (10) Aristoph. Vesp. 571–574<sup>6</sup>  
 [...] κάπειθ' ὁ πατήρ ὑπέρ αὐτῶν  
 ὥσπερ θεὸν ἀντιβόλει με τρέμων τῆς εὐθύνης ἀπολύσαι,  
 εἰ μὲν χαίρεις ἀρνὸς φωνῆ, παιδὸς φωνὴν ἐλέησαις,  
 εἰ δ' αὖ τοῖς χοιριδίοις χαίρω, θυγατρὸς φωνῆ με πιθέσθαι.

and then the father, trembling as if before a god, beseeches me to not condemn him out of pity for them, “if you love the voice of the lamb, may you have pity on my sons”; and [beseeches] me to, if I love the little sows, yield to his daughter’s prayers.

The saying verb ἀντιβόλει (‘beseech/beg’) introduces a threefold speech report. Roughly, he begs me to (i) not condemn him, (ii) have pity, and (iii) yield to his daughter’s prayers. Parts (i) and (iii) are indeed infinitival, each with overt accusative subject με. The middle one (ii) however is a second person optative form ‘may you have pity’, modified moreover by a second person *if*-clause ‘if you love’. Apparently, Aristophanes has switched to direct speech only for the second part. In addition to the infinitive and accusative in (iii), the seemingly parallel (except for person) *if*-clause modifying this final clause, ‘if I love’, leaves no doubt that we have indeed slipped back into indirect mode. The translation mimics the hypothetical switches to direct discourse and back as closely as possible, resulting, perhaps, in somewhat awkward, but understandable, grammatical English.

I should add that there is some discussion about the crucial χαίρεις (‘you love’) and ἐλέησαις (‘may you have pity’), which indicate direct speech because of their second person inflection. Platnauer (1949) notes that most editors indeed read them as such, but goes on to propose an alternative construal involving a wrongly copied first person χαίρω with an infinitive ἐλέησαι. On his reading we would simply get a threefold infinitival indirect report dependent on “beseeches”. Interestingly, Platnauer’s main reason for this reading seems to be his dislike of the “very odd mixture of oratio recta and obliqua” it engenders. I would suggest that the oddness appears only to our modern eyes so used to written form that we require overt quotation marking. As pointed out before, modern readers of English would scarcely be able to properly interpret this fluid type of reporting without the aid of quotation marks.<sup>7</sup>

<sup>6</sup>) Text and translation, cf. footnote 4.

<sup>7</sup>) Why this was not a problem for the original readers of the ancient Greek literature is beyond the scope of this paper. I leave my hypothesis that this has to do with the differences between orality and literacy, and between public, prepared performance and silent reading for another occasion.



### 3.2. Recitative Complementizers

The second phenomenon that I want to discuss involves direct reports introduced by complementizers that we classified as indirect speech markers in section 2. Typically, this involves ὅτι ('that'), and it is usually analyzed as a separate usage of this complementizer or subordinating conjunction. The first known instance is in Herodotus:

(11) Hdt 2.115.4<sup>8</sup>

λόγον τόνδε ἐκφαίνει ὁ Πρωτεύς, λέγων ὅτι ἐγὼ εἰ μὴ περὶ πολλοῦ ἡγεύμην μηδένα ξείνων κτείνειν, ὅσοι ὑπ' ἀνέμων ἤδη ἀπολαμφθέντες ἦλθον ἐς χώραν τὴν ἐμήν, ἐγὼ ἂν σε ὑπὲρ τοῦ Ἑλλήνος ἐτίσάμην

Proteus declared the following judgment to them, saying (that) "If I did not make it a point never to kill a stranger who has been caught by the wind and driven to my coasts, I would have punished you on behalf of the Greek"

The report frame λέγων ὅτι ('saying that') is a very standard introduction for an indirect discourse, in ancient Greek as much as in modern Greek or English. But the very next word is the indexical ἐγὼ ('I') which clearly denotes not the actual narrator, Herodotus, but the protagonist, Proteus. The indexicals in the remainder of the report confirm that we are dealing with direct rather than indirect discourse.

This phenomenon appears less universal than the direct-indirect switches. We have no examples before Herodotus. As Spieker (1884) points out, this does not mean that the construction was not already widely used—it may be simply that it was a colloquial construction restricted to prose, and the older texts that we have are mainly poetic. Indeed, Spieker's list shows that the phenomenon was quite common with the orators, and historians soon after Herodotus.

(12) Dem. 19.40<sup>9</sup>

ὁ γὰρ εἰς τὴν προτέραν γράψας ἐπιστολήν, ἣν ἠνέγκαμεν ἡμεῖς, ὅτι ἔγραφον δ' ἂν καὶ διαρρήθην ἡλίχ' ὑμᾶς εὖ ποιήσω, εἰ εὖ ἦθδεν καὶ τὴν συμμαχίαν μοι γενησομένην

The man who, in the first letter, which we brought home, wrote (that) "I would write more explicitly of the benefits I intend to confer on you, if I were certain that the alliance will be made,"

<sup>8</sup>) Text and translation, cf. footnote 2.

<sup>9</sup>) Text: Demosthenis Orationes. Tomus II, M.R. Dilts, Oxford: Oxford University Press. 2005. Transl: Demosthenes with an English translation by C.A. Vince and J.H. Vince. London, William Heinemann Ltd. 1926.

A *wrote that* immediately followed by a verb that can only be taken as a quotation on account of the indexical first person obviously intended to refer to the lying bad guy, rather than the orator Demosthenes himself. The direct nature of the entire report is confirmed by the other first and second person indexicals.

The ὅτι in these examples is commonly treated as just another, distinct usage of the word. Take Liddell & Scott's (1940) dictionary entry, which has it as the second interpretation of ὅτι (which they illustrate with the Herodotus example in (11)):

II. ὅτι is freq. inserted pleon. in introducing a quotation (where we use no Conj. and put inverted commas)

Kühner & Gerth (1904: § 551.4) likewise describe this usage as ὅτι standing in for quotation marks. As Cadbury (1929) puts it:

This particle [ὅτι] not only introduces an indirect statement after verbs of speaking but has also an extensive recitative use equivalent to our quotation marks in direct statement

In short, ὅτι is assumed to be simply ambiguous, its primary uses are (i) to introduce an indirect speech complement, like English *that*, and (ii) to introduce a direct speech complement, like English quotation marks. Below I present three arguments against this ambiguity hypothesis.

First, if this were a true lexical ambiguity of ὅτι, then it would be but a 'lexical accident' that the two meanings have come together in the same word. But in fact, the phenomenon extends to other complementizers commonly taken to be indirectness markers, suggesting that a more general, semantic explanation is called for. Spieker mentions a few cases of recitative ὡς ('that'), a particle that otherwise behaves rather similar to ὅτι in speech reporting, although few grammarians have noted this use (Kühner and Gerth acknowledge its existence when discussing recitative ὅτι: "(seldom ὡς)"). In particular, he lists three from the orator Dinarchus, one from Demosthenes, and one from Plutarchus:

(13) Plut. Them. 2.2<sup>10</sup>

Ἰθὲν εἰώθει λέγειν πρὸς αὐτὸν ὁ διδάσκαλος ὡς οὐδὲν ἔσῃ, παί, σὺ μικρόν, ἀλλὰ μέγα πάντως ἀγαθὸν ἢ κακόν.

Therefore his teacher used to say to him (that) "Child, you, you will be nothing insignificant, but something great, for sure, either for good or evil."

<sup>10</sup>) Plutarch. Plutarch's Lives. with an English Translation by. Bernadotte Perrin. Cambridge, MA. Harvard University Press. London. William Heinemann Ltd. 1914. 2.

In this case the report clause after *ὡς* ('that') is marked with a vocative and a second person indexical. In the following an overt first person pronoun, evidently referring to the reported speaker, immediately follows *ὡς*.

(14) Din. 1.12<sup>11</sup>

καὶ πρὸς ὑμᾶς αὐτίκα χρήσεται λόγοις ἐξαπατῶν ὑμᾶς ὡς ἐγὼ Θηβαίους ὑμῖν ἐποίησα συμμάχους.  
and he will shortly use such words to you, lying to you (that) "I made the Thebans your allies."

The indirect interrogative *εἰ* ('whether') is also typically used as a complementizer for introducing indirect discourse—more specifically, for introducing indirect polar questions. Like assertions, questions can be reported directly and indirectly, and in the latter case Greek tends to replace the original interrogative with a corresponding indirect interrogative (e.g. τίς ἔρχεται; 'who.INTERROG-PRO is coming?' becomes ἐρωτᾷ ὅστις ἔρχεται. 'she is asking who.INDRCT-INTERROG-PRO is coming.'). which fills the complementizer position in place of a *that*. If the original question was a simple polar question, English uses *if* or *whether* as an indirect interrogative, and the Greeks use *εἰ*:

(15) (direct) He asked, "Is Simon lodging there?"  
(indirect) He asked whether Simon was lodging there

Interestingly, Cadbury discusses two cases from the New Testament *Acts* where *εἰ* ('whether') introduces a direct polar question.

(16) Acts 10.18<sup>12</sup>

καὶ φωνήσαντες ἐπέθοντο εἰ Σίμων ὁ ἐπικαλούμενος Πέτρος ἐνθάδε ξενίζεται.  
and they called and asked whether Simon, who was surnamed Peter, was lodging there.

The form of the verb is compatible with both direct and indirect, and there is no other grammatical construction that points to direct discourse. The most straightforward (and standard) translations therefore involve an indirect question. However, Cadbury draws attention to the somewhat elaborate description "Simon who was surnamed Peter":

This author quite strictly distinguishes certain terms for speeches and dialogue and others for narrative. Elsewhere in this scene Peter in narrative is called simply Peter, but in dialogue the same passage uses three times the unique and cumbersome expression.

<sup>11</sup>) *Dinarchus. Minor Attic Orators in two volumes*, 2, with an English translation by J.O. Burt, M.A. Cambridge, MA, Harvard University Press; London, William Heinemann Ltd. 1962.

<sup>12</sup>) *The New Testament in the original Greek*. The text revised by Brooke Foss Westcott, D.D. Fenton John Anthony Hort, D.D. New York. Harper & Brothers, Franklin Square. 1885.

This lends rather strong support to a direct discourse interpretation with recitative usage of  $\epsilon\iota$ . Along the way, Cadbury's subtle argument neatly illustrates that the distinction between direct and indirect goes deeper than simply shifting pronoun interpretation and vocatives. For now, I conclude that the phenomenon of recitative usage is not confined to, say, post 500 BC  $\delta\tau\iota$ , but seems to affect complementizers quite generally.

Second, the literature on the subject suggest that  $\delta\tau\iota$  direct reports are very close to indirect reports. Kühner & Gerth describe recitative  $\delta\tau\iota$  examples (admittedly somewhat confusingly) as cases of indirect discourse that “take on completely the character of a main clause” while retaining their status as subordinate clause on account of the use of  $\delta\tau\iota$  or  $\acute{\omega}\varsigma$  (§ 551.4). Spieker expresses a similar view about the double nature of recitative *that*-clauses:

the Greek language added another form of narration to its existing stock, one which is *neither direct nor indirect, but mediates between the two*, giving the actual words, but having the appearance of hypotaxis in being introduced by the conjunction  $\delta\tau\iota$  or  $\acute{\omega}\varsigma$  [...]

[...] it would seem that even when the [recitative complementizer] construction was quite well known, *the feeling must have been that of indirect quotation*, as the latter was very much more common and almost necessarily the one to come up in the mind first.

(Spieker 1884: pp. 222–223, emphasis added)

In short, reports with recitative complementizers are neither fully direct nor fully indirect but combine syntactic and semantic/pragmatic aspects of both.

Finally, using  $\delta\tau\iota$  as direct quotation marking seems highly inefficient. To facilitate pronoun interpretation it is surely useful to have a way to mark quotations in written language, which is, presumably, the reason why quotation marks were invented. The use of  $\delta\tau\iota$  or *that* in indirect speech likewise helps the disambiguation process, but using this very same mechanism to also introduce direct discourse would seem counterproductive.

The alternative that I want to pursue in this paper is that the phenomenon of recitativity is just a special case of subclausal indirect-to-direct switching as discussed in section 3.1. In other words the complementizer is not ambiguous, it simply introduces indirect discourse, but this indirect discourse slips almost immediately into the direct mode. Note that this is actually quite common in written English as well, though again, only with quotation marks.

(17) Papandreou said that “fear is not necessary, we have an exit and alternative solutions”<sup>13</sup>

As in the Greek examples, we have a subordinating *that*, indicating indirect speech, but followed by a direct report. Nobody would claim that there is

<sup>13</sup>) <http://www.greeknewsonline.com/?p=12280>

something special about the *that* in (18a), which mimics the structure of (11)–(13), but not in a change of construction like (18b), which mimics (8) and (9):

- (18) a. Gaddafi said that “I’m just playing a symbolic role here in the country because I was the leader of the revolution”<sup>14</sup>  
 b. Gaddafi said that he was playing a symbolic role in his country “because I was the leader of the revolution”

I therefore propose to analyze ὅτι uniformly as the regular indirect discourse *that*’s exemplified in (18). Consequently, I see no reason to leave out the *that*’s from the translations of the Greek examples of this section, as translators tend to do.<sup>15</sup>

My proposal readily explains the first and third observations: recitative interpretations are in principle as general as any slipping from indirect to direct, although there may well be stylistic preferences in different genres. Interestingly, recitative complementizers, like direct-indirect switches, are discussed for other ancient languages as well (Spieker, for instance, mentions Hebrew and Sanskrit). As for the absence of recitative ὅτι in Homer, note that this may be derived from the fact that ὅτι as a complementizer in reported speech is on the whole still a rarity, most speech reports are either direct or infinitival (Gildersleeve 1906; Spieker 1884). The third objection, about the puzzling inefficiency of recitative ὅτι, also disappears, because, again, on the current proposal these ὅτι’s are not direct speech markers but indirect speech markers.

<sup>14</sup> <http://www.telegraph.co.uk/news/worldnews/africaandindianocean/libya/8393285/Libyan-minister-claims-Gaddafi-is-powerless-and-the-ceasefire-is-solid.html>

<sup>15</sup> When quoting polar questions directly, English does not seem to allow recitative complementizers: ??*He asked whether “Is Simon lodging there?”* One reviewer suggests that this may be a matter of syntax: there are two consecutive items trying to fill the complementizer slot (*whether* and the moved *Is*), which, in English, is not allowed. However, the question CP, starting with *Is* is syntactically shielded by quotation, which rules out that this is a case of purely syntactic “CP recursion”. The question remains whether there may not still be some real semantic incompatibility. It seems we are led to assume that in indirect speech *ei/whether/if* composes not with a proposition but with the kind of semantic object associated with a question, because that is what the mixed quote delivers. In fact, this is an instance of a more general problem that we also find with, say, mixed quoted imperatives, or items that come with a conventional implicature. Since it is already highly controversial what the semantic type of such terms/phrases should be in the first place, it goes beyond the scope of this paper to investigate how exactly to represent the presuppositional contribution in these cases. In any case, I would resist positing any fundamental difference between English and Greek. As circumstantial evidence to support this stance, with regard to “recitative polar questions” in particular, note for instance that strings like “*asked if did you*” turn up many google hits, some of which involve complementizer *if* with direct discourse polar question (complete with quotation marks), e.g. *When I asked if “Did you watch the video?”, I was glad I got honest answers!*

This leaves the second objection, that ὄτι marked direct speech “feels like” a combination of simultaneous direct and indirect discourse. I will argue in the next section that this can be made sense of with the semantics of so-called mixed quotation, which, I claim, underlies all these switches.

#### 4. Combining Direct and Indirect Discourse with Mixed Quotation

In the previous section I proposed a reduction of recitative ὄτι to direct-indirect switching. But, then, what does switching from indirect to direct mid-sentence really mean? On a standard analysis of quotation, direct discourse involves mentioning, i.e. referring to a certain utterance or expression. In an indirect discourse on the other hand the complement clause is interpreted semantically just like any other, i.e. names refer to individuals, adjectives to sets of individuals etc. Combining these two reporting modes with their distinct modes of semantic interpretation in a single speech reporting sentence causes a tension that has intrigued philosophers, and more recently also linguists, since Davidson (1979) called attention to it. In this section I discuss the phenomenon of so-called mixed quotation from a semantic point of view. For concreteness I focus on the presuppositional account of mixed quotation (Geurts & Maier 2005), and extend that to capture the ancient Greek data.

Mixed quotation is a form of speech reporting that is best known from newspaper (and scientific) reporting. It looks like an overtly marked mix of direct and indirect speech. We have already seen many examples, like (18) or the translations of examples in the previous section. Davidson’s famous example is (19):

(19) Quine says that quotation “has a certain anomalous feature”

The first thing that is noted in the philosophical and linguistic literature about mixed quotation is that the quoted words are used and mentioned at the same time (Davidson 1979). To say that words are *mentioned* is to say that they refer to the words themselves, which is opposed to *use*, where words refer to entities (sets, properties, individuals) in the world. In (20a) the word *cat* is *mentioned*; it refers to a certain English word, which does indeed have three letters. In (20b) the same word is *used*, referring to the set of cats, of which John is said to own one.

- (20) a. *cat* has three letters  
 b. John has a cat

Arguably direct discourse can be analyzed as pure mention, the quotation simply refers to the actual words uttered. That mixed quotation also involves mention follows already from the fact that (19) allows us to infer something about

the actual words produced by Quine. Moreover, indexicals are shifted, as in direct quotation, and some amount of misspelling or lexical error is tolerated (Maier 2008):

- (21) Bush said that the enemy “misunderestimates me”

Examples like (21) strongly suggest that the quotation marks of mixed quotation do the same as those of direct discourse, i.e. they indicate that the phrase within them mentions a part of an earlier speech act verbatim.

But on the other hand, mixed quotation cannot be just pure mention. Both in form and in meaning it resembles indirect discourse. Note for instance that we also infer from (19) that Quine says that quotation has an anomalous feature. Moreover, simply referring to strings of words or even letters or phonemes, cannot explain the fact that the quoted part is integrated in the semantic composition of the sentence, i.e. in this case it plays the role of a *property* ascribed by Quine to the phenomenon of quotation. This means that forcing a mention interpretation by prefixing a reifying expression like “the words” will result in severe ungrammaticality for mixed quotation (22b), but is fine with quotation and mention, such as direct discourse (22a):

- (22) a. The word *cat* has three letters  
 b. \*Quine said that quotation the following words “has a certain anomalous feature”

In light of this second set of observations it has even been proposed that mixed quotation is semantically just indirect discourse. The quotation marks are semantically inert, but as “pragmatic indicators” they convey the additional information that the words within them were literally used by the original speaker. This gives the right result for (19) (roughly, Quine said that quotation has a certain anomalous feature and he literally used the words *has a certain anomalous feature*), but not for (21) (roughly, Bush said that the enemy misunderstands me and he literally used the words *misunderestimates me*).

I conclude that, in addition to overtly mixing some surface characteristics of direct and indirect discourse (quotation marks vs. *that*-complements), mixed quotation also truly combines the underlying semantic characteristics of both modes (indexical shift/error tolerance vs. grammatical incorporation). To unite both aspects, I follow the formal semantic analysis of Geurts & Maier (2005). Below I briefly sketch the ideas behind the formalization, but the take-home message will be that we analyze a mixed quotation like (21) as in (23), and that this adequately captures the main characteristics of mixed quotation listed above.

(23) Bush said that the enemy “misunderestimates me”

= Bush said that the enemy has the property that he refers to with the words *misunderestimates me*

More precisely, for the interested reader, in the Geurts & Maier framework, the use of (21) involves two things: (i) the speaker presupposes that someone, presumably Bush in this case, has used the quoted term *misunderestimates me* to refer to some property P, probably either the property of underestimating Bush, or the property of misunderstanding Bush; and (ii), the speaker asserts that Bush said that the enemy has property P. More compactly: (21) means that Bush said that the enemy has the property he refers to as *misunderestimates me*, on the understanding that the definite noun phrase *the property that x refers to as y* is a straightforward presupposition trigger. Note that this meaning definition leaves open what that property is exactly, we effectively defer the interpretation of the quoted phrase to Bush. In presupposition-theoretic terms, if the context makes Bush’s idiolect explicit, and thereby determines what P is exactly, the presupposition will be *satisfied* (or *bound*, depending on your choice of presupposition theory, cf. Appendix). If not, we are forced to *accommodate* the presupposition, i.e. we have to enrich the context by adding that there is some P that Bush refers to in this way (even if we don’t know exactly what it is) so that the presupposition is satisfied. This gives the right predictions with respect to quoted errors and indexicals: since we defer to Bush, it’s not the reporter who is the source for interpreting *misunderestimates* or *me*, but Bush. In a mixed report these quoted terms refer to whatever Bush meant them to refer to. Note also that, despite appearances, the definition is not circular, because the quotation marking (italics) in the definiens indicate pure mention, a relatively well understood phenomenon that requires an independent analysis anyway. Some more details of the formal system can be found in the appendix (or in Maier 2008, 2009). For now, suffice it to say that the presuppositional account treats mixed quotations of arbitrary constituents in a report as simultaneously involving use and mention.

Now back to the Greek. The idea is simple: ancient Greek, unlike English, allows seemingly unmarked mixed quotation within indirect discourse complements. In other words, both English and Greek can switch from indirect to direct discourse more or less at will, but written English requires quotation marks to achieve this, while written Greek does not. The main claim here is that the underlying semantico-pragmatic mechanism to achieve such a switch is the same in both languages, viz. mixed quotation.

More concretely, I propose that the underlying *logical form* of, say, (9), is (24):



- (24) [...] ἐπιδεικνύς δὲ ὡς εὐηθες εἶη ἡγεμόνα αἰτεῖν παρὰ τούτου ὃ λυμαινόμεθα τὴν πράξιν  
 [...] to point out also how foolish it was to ask for a guide from this man “whose enterprise we are ruining”

This logical form is just the original report but with mixed quotation marks added at the point where we inferred the switch to direct.<sup>16</sup> I should stress that these mixed quotation marks are not “mere” punctuation; they are logical operators that have the same genuinely semantic impact as the overt marking of mixed quotation in English, i.e. they create a presupposition that serves to *defer* the interpretation of the quoted phrase to the reported speaker, thereby effectively shifting the interpretation of indexicals, among other things. The difference between English and Greek can now be restated as follows: English obligatorily realizes the logical mixed quotational shift in the written surface form, while ancient Greek does not.<sup>17</sup>

With the logical mixed quotes in place the predicted meaning of the sentence according to the recipe in (23) (coupled with the standard semantic analysis of relative clauses as expressing properties) comes out as follows:

- (25) and to point out also how foolish it was to ask for a guide from this man with the property that he referred to with the words *whose enterprise we are ruining*

The context in which the report occurs is such that *he* in this paraphrase naturally refers to the reported speaker, the soldier who speaks out against the plan to defect from Cyrus. So according to (25) we are really interpreting the quoted part of (24) from this soldier’s perspective, which means that the indexical *we* is correctly predicted to refer to that soldier and his fellow mercenaries.

As a second illustration of my proposal for ancient Greek, and of the underlying theory of mixed quotation, consider the recitative ὅτι from Demosthenes in (12). I propose the following mixed quotation based logical form:

- (26) ὁ γὰρ [...] γράφας [...] ὅτι ἔγραφο δ’ ἂν καὶ διαροήθην ἡλίχ’  
ὑμᾶς ἐν ποιήσῳ, εἰ ἐν ᾗθδεν καὶ τὴν συμμαχίαν μοι γεννησομένην”

The man who [...] wrote that “I would write more explicitly of the benefits I intend to confer on you, if I were certain that the alliance will be made”

<sup>16</sup> This is just one of a number of possible logical forms compatible with the textual evidence. Strictly speaking, it is also possible that, for instance, only the inflected verb (‘we need’) is mixed quoted, although it is hard to imagine why the author would want to switch to a more vivid reporting mode for just that one word.

<sup>17</sup> It is quite possible—likely, I believe—that there is no such difference between spoken ancient Greek and English: both English and ancient Greek speakers can mark (mixed) quotations prosodically and/or paralinguistically, i.e. with different voices, gestures, intonation and pauses. This is related to the point made in footnote 10 above. It is an important one, but beyond the scope of this paper.

In this way, a recitative ὄτι example is merely a special, maximal case of mixed quotation, viz. with a mixed quoted full clause, again differing only from the English translation in not orthographically realizing the quotation marks. Applying our semantics we can verify that this represents the right reading. The mixed quote in (26) is of a normal assertive sentence, which expresses a proposition, rather than the relative clause of (24), which denoted a property. The semantics sketched in (23) still applies, though, yielding, in clumsy semi-natural language paraphrase:<sup>18</sup>

- (27) The man who wrote that *p*, *p* being the proposition that he expressed with the sentence *I would write more explicitly of the benefits I intend to confer on you, if I were certain that the alliance will be made*

Like with other mixed quotations, this is essentially an indirect report. In (25) we had someone saying that something has a certain property, and here we have someone “writing (that) a certain proposition”. Unfortunately, paraphrasing logical form in natural language doesn’t really work all that well anymore. Somewhat more technically then (for more details I refer to the Appendix): following common practice in formal semantics, *write* + *that*-clause expresses a relation between an individual and a proposition, just like saying and believing in their indirect discourse uses do. Applying the presuppositional analysis of mixed quotation we determine which proposition that is by taking the mentioned (italicized) phrase and asking what the reported speaker expressed with the very words contained therein. In other words, we interpret the quotation from the reported speaker’s original perspective, and plug the result into the propositional complement slot of the indirect writing report.

Note also that in cases like this (as with, for instance, factives) we actually learn something new from the mention-presupposition, rather than have it satisfied by the already alienly present information that the subject actually used those very words to express this particular proposition. In presupposition-theoretic terms, longish mixed quotes trigger *informative presuppositions*: the reporting speaker’s intention is that the hearer enriches her context with the presupposed information (that such-and-such words were used), through accommodation.

This informative presupposition now corresponds to (a component of) the meaning of a direct report, viz. that the reported speaker uses the quoted words. Hence the clear intuition, shared by translators and other scholars, that we are dealing with direct discourse here. On the other hand the presuppositional account of mixed quotation also does full justice to the additional use-

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<sup>18)</sup> I’m ignoring the independent issue of how to analyze mentioning a sentence in a different language.

component of the meaning, i.e. Davidson’s observation that a mixed quoted expression is fully grammatically incorporated, and hence behaves in a sense as a regular indirect discourse. Technically, we see this in the assertion component (i.e. the meaning paraphrase minus the presupposition), *said that p*. Assuming that the reported speaker is a competent language user, we can go one step further and determine that *p* is the proposition that he would write more explicitly of the benefits if etc. Then it follows from (27) that the corresponding indirect report holds, i.e. that he wrote that he would write more explicitly of the benefits etc. In this way we can make perfect sense of the rather vague remarks about the “in between” status of recitative complementizer reports that I quoted in section 3.2.<sup>19</sup>

## 5. Conclusion

I have presented two sets of data that involve some kind of mixing of direct and indirect discourse in ancient Greek: slipping from indirect discourse into direct (and occasionally also the other way around); and recitative ὅτι (‘that’). I argued that the latter should be thought of as merely a special case of the former. I then presented the presuppositional analysis of mixed quotation as a tool to cash out this reduction with formal semantic rigor.

As I announced in the introduction, my wider aim is to argue for a new semantics of reported speech in general, one where apparent mixes of direct and indirect discourse can be analyzed as such, rather than be forcibly assimilated to either direct or indirect (e.g. by positing “monstrous operators” and/or “bindable indexicals”, cf. Schlenker 2003). The analysis of the Greek examples that I have presented here illustrates this general idea:<sup>20</sup> rather than saying that recitative ὅτι is direct discourse, or reading apparent switches as indirect discourse with occasionally “shifted” indexicals (Bary & Maier 2003), my current proposal models them in terms of mixed quotation, i.e. as genuine mixes of direct and indirect speech, both at the level of syntax and at the level of semantics/pragmatics.

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<sup>19</sup>) However, it is not entirely clear how we should analyze true direct discourse. Clearly, it too exhibits some of the features of use in addition to mention. It would be tempting to analyze direct discourse as mixed quotation as well, but then we lose any chance of accounting for the subtle difference between *John said that “Papandreou is crazy”* and *John said, “Papandreou is crazy”*, along with the Greek analogue of this difference, viz. the noted difference between direct and recitative reporting. In support of keeping the two variants apart, note also that there are syntactic and lexical differences between them, owing to the direct and indirect syntactic frames. E.g. certain verbs are lexically restricted to real direct discourse, as are syntactic phenomena like quotative inversion, (cf. e.g. Banfield 1982, De Vries 2008). A more thorough investigation of direct speech falls beyond the scope of this paper.

<sup>20</sup>) (Maier 2009) illustrates the point with Japanese data.

## References

- Banfield, Ann. 1982. *Unspeakable sentences: Narration and representation in the language of fiction*, London: Routledge & Kegan Paul.
- Bary, Corien & Emar Maier. 2003. Ancient Greek monsters. Presentation at Workshop on the Roots of Pragmasemantics, Szklarska Poreba.
- Cadbury, Henry J. 1929. Lexical notes on Luke—Acts IV: On direct quotation, with some uses of ὅτι and εἰ. *Journal of Biblical Literature*, 48(3): 412–425.
- Davidson, Donald. 1979. Quotation. *Theory and Decision* 11:27–40.
- Geurts, Bart & Emar Maier. 2005. Quotation in Context. *Belgian Journal of Linguistics* 17(1): 109–128.
- Gildersleeve, Basil L. 1906. Notes on the evolution of oratio obliqua. *The American Journal of Philology* 27(2): 200–208.
- Huitink, L., 2010. Quotations without quotation marks. Presentation at Ancient Greek and Semantic Theory, Nijmegen
- Kieckers, Ernst. 1916. Zur oratio recta in den indogermanischen Sprachen II. *Indogermanische Forschungen* 36, 1–70.
- Kühner, Raphael & Gerth, Bernhard. 1904. *Ausführliche Grammatik der Griechischen Sprache: II. Teil: Satzlehre*, Hannover: Hahn.
- Li, Charles N. 1986. Direct speech and indirect speech: A functional study. In: Florian Coulmas (Ed.). *Direct and indirect speech*. Berlin: Walter de Gruyter, 29–46.
- Liddell, Henry George & Robert Scott. 1940. *A Greek-English Lexicon*, Oxford: Clarendon Press.
- Ludwig, Rainer A., Robert Munro, David W. Fleck and Uli Sauerland. 2009. Reported Speech in Matses: Obligatory Perspective Shift with Syntactic Transparency. In *Proceedings of SULA* 5.
- Maier, Emar. 2008. Breaking quotations. In: Satoh, Ken, Akihiro Inokuchi, Katashi Nagao and Takahiro Kawamura (Eds.). *New frontiers in artificial intelligence*. Berlin, Heidelberg: Springer, pp. 187–200.
- Maier, Emar. 2009. Japanese reported speech: Against a direct-indirect distinction. In: Hattori, Hiromitsu, Takahiro Kawamura, Tsuyoshi Idé, Makoto Yokoo and Yohei Murakami (Eds.). *New Frontiers in Artificial Intelligence*. Berlin, Heidelberg: Springer, pp. 133–145.
- Platnauer, Maurice. 1949. Three Notes on Aristophanes, Wasps. *The Classical Review* 63(1): 6–7.
- Richards, G.C., 1939. The Composition of Josephus' Antiquities. *The Classical Quarterly* 33(1): 36–40.
- Richman, Gerald. 1986. Artful slipping in Old English. *Neophilologus* 70(2): 279–291.
- van der Sandt, Roba. 1992. Presupposition projection as anaphora resolution. *Journal of Semantics* 9(4): 333–377.
- Schlenker, Philippe. 2003. A plea for monsters. *Linguistics and Philosophy* 26: 29–120.
- Schwager, Magdalena. 2005. *Interpreting Imperatives*. Ph.D. Thesis. Frankfurt/Main.
- Spieker, E.H., 1884. On Direct Speech Introduced by a Conjunction. *The American Journal of Philology* 5(2): 221–227.
- de Vries, Mark. 2008. The representation of language within language: a syntactico-pragmatic typology of direct speech. *Studia Linguistica* 62(1): 39–77.

## Appendix: Notes on Formalizing the Presuppositional Account of Mixed Quotation

In pure quotation we can quote arbitrary strings of letters/phonemes. In mixed quotation we can still use strictly meaningless phrases (like *misunderestimate*), as long as we know how to incorporate them into the grammatical structure of the clause containing the quote. A crude, but simple way to model this behavior is to have a syntax generate phrase structures based on lexical items that consist of a syntactic category label (NP, VP, S, ...) paired with a finite string of letters over an alphabet ( $\alpha, \beta, \gamma \dots$ ). Some notation:  $[_{NP} \text{Προτευς}]$  is an example of a (meaningful) lexical item; and  $\hat{\phantom{x}}$  denotes string concatenation.

The language  $\mathcal{L}$  is then defined recursively in the usual way, as the set of such pairs generated from primitive lexical items and composition rules, e.g.:

Lex<sub>1</sub>:  $[_{NP} \text{Προτευς}] \in \mathcal{L}$   
 Comp<sub>1</sub>: If  $[_{NP} X] \in \mathcal{L}$  and  $[_{VP} Y] \in \mathcal{L}$ , then  $[_S X \hat{\ } Y] \in \mathcal{L}$

Mixed quotation is a unary operator that preserves its argument's category:

Comp<sub>MQ</sub>: If  $[_Y X] \in \mathcal{L}$ , then  $[_Y \hat{\ } X] \in \mathcal{L}$

For each syntactic rule we have a corresponding rule in the semantics. Let's assume a Montagovian translation of categories into appropriate semantic types (say,  $\tau(\text{NP}) = e$ ;  $\tau(\text{VP}) = et$ ; ...), and a translation of terms in  $\mathcal{L}$  to terms in some higher-order logical language with types, further constrained by the following rules (one for each syntactic rule):

T<sub>Lex1</sub>:  $T([_{NP} \text{Προτευς}]) = p: e$   
 T<sub>Comp1</sub>:  $T([_S X \hat{\ } Y]) = T([_{VP} Y])(T([_{NP} X])): t$

In words, the string  $\text{Προτευς}$  of category NP is mapped to a singular term, an individual constant  $p$  of type  $e$ . A sentence created by concatenating an NP and a VP gets mapped to a complex (type  $t$ ) formula, consisting of the functional application of the (type  $et$ ) VP translation to the (type  $e$ ) NP translation.

Now we want to translate a mixed quote of an expression of category Y into a presuppositional expression of type  $\tau(Y)$ . As described in the main text, the idea is that when uttering a mixed quoted expression we are “deferring” its interpretation “via a mention-presupposition”. The mention-presupposition is that some  $x$  produced (i.e. spoke, wrote down, or signed) the quoted string of letters and thereby expressed some property of the appropriate type ( $\tau(Y)$ ). We can capture this existential presupposition with the help of a ternary predicate *Expr* as follows:  $\exists P \exists x [Expr(x, 'X', P)]$ , where 'X' denotes the quoted string of letters  $X$ , and  $P$  is a variable of type  $\tau(Y)$ . It is only the (presupposed) variable  $P$  that is passed on to the semantic composition (in the narrow, presupposition-excluding sense). Using subscripted angled bracketing to represent presuppo-

sition, we can now formulate a rough, relatively theory-neutral semantic translation rule for mixed quotation:

$$T_{\text{CompMQ}}: T[\widehat{Y} \text{ “} \widehat{X} \text{”}] = P_{(\exists P \exists x \{ \text{Expr}(x, X, P) \})}: \tau(Y)$$

What’s left is to choose a good theory of presupposition resolution, compatible with the rough, compositional representation above. Further desiderata: note that mixed quote presuppositions are usually accommodated globally (cf. the discussion of *informative presupposition* in section 4). However, they can be bound in specific configurations. In (28) the mixed quotation picks up the usage described in the previous utterance (28a) or clause (28b).

- (28) a. A: I’m going to start using the word *misunderestimate* as a new word to express a kind of underestimation based on a misunderstanding.  
 B: Well, then you truly “misunderestimate” the English language!  
 b. If you use *leg* to refer to tails as well, then a horse has five “legs”

Finally, mixed quote presuppositions can even be accommodated non-globally. In (29a) is Geurts & Maier’s (2005) example of local accommodation under the scope of negation. In (29b) the mention-presupposition can be understood as new information interpreted within the scope of *probably*, but outside *promise*.

- (29) a. He didn’t call the “POlice”, he called the “poLIce”!  
 b. If a Tea Party member will win the Republican nomination, she’ll probably promise not to “misunderrepresent” the 99%.

In light of this apparent flexibility it seems reasonable to adopt Van der Sandt’s (1992) anaphoric account. This means that the formal language is a typed language of preliminary DRS’s. After a sentence is fully translated into a preliminary DRS formula, we combine it with the context DRS, representing the common ground prior to the current utterance. A “resolution algorithm” then searches accessible parts of the augmented context DRS for suitable antecedents for presuppositions to bind to. In this way the sub-presupposition  $x$ , denoting the source of the quoted words, will get bound to a salient speaker, usually the matrix subject. The actual mention-presupposition on the other hand will usually be accommodated, i.e. enter the updated common ground representation as new information. When all presuppositions have been bound or accommodated, we have our output DRS, representing the new common ground, ready for interpreting the next utterance. Actual modeltheoretic interpretation applies only to such presupposition-free output DRSs, which, for this purpose can be seen as notational variants of familiar (static, classical, higher-order) formulas.