

The Punctuation Theory of Quotation¹

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1. Introduction

Quotation is a term which covers the phenomena exhibited in (0a–c) and possibly (0d):

- (0) a. “Dog” has three letters.
- b. “I love sandwiches,” said John.
- c. Ernestine said that she was going to “that concert with that guy in the band.”
- d. George is a “sanitation engineer.”

The use in (0a) is known as *pure quotation*; in (0b) *direct quotation*; in (0c) *mixed quotation*; and in (0d) *scare quotation* (if you will). Establishing an effective procedure for determining which of these three categories, if any, a particular word or phrase belongs to can be difficult; for instance, we can effect pure quotation without quotation marks, as with italics, intonation, or indentation; nor does every direct quotation follow or precede the words ‘say,’ ‘says,’ or ‘said’ – sometimes they follow ‘ask’ or ‘think’, and sometimes they appear bare, as in dialogue. I, like the literature, will assume that my reader has some intuitive grasp on what counts as what and continue from there.

In this paper I will argue that the effects of direct and mixed quotation² are a pragmatic phenomenon, rather than a semantic one. That is, two sentences that differ only in the presence or absence of direct or mixed quotation have the same literal semantic meaning, though they differ in what they convey. The first part of the paper will be concerned with arguing that a pragmatic treatment is

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2. The reader is cautioned that I neither wish nor intend my claims to extend to pure quotes, scare-quotes, greengrocer’s quotes, or any uses of quote marks that are not clearly direct or mixed uses.

to be preferred because no semantic treatment can adequately handle the data. In the second part of the paper, I shall consider the main obstacle to pragmatic accounts, indexicality, and suggest how the obstacle might be overcome. Then I shall turn to the specific form a pragmatic theory of direct and mixed quotation might take: in particular, I will argue that the entailments that arise from the use of quotation marks are *sui generis*, in that they are not presuppositions, conversational implicatures, or conventional implicatures. In the conclusion, I will speculate wildly on the nature of quotation.

2. Semantic theories of quotation

A semantic theory of direct/mixed quotation is a theory that claims that quotation marks have their effect in the semantics – that they alter the literal meaning of sentences without such punctuation. Such theories of quotation naturally divide themselves into three types: pure-mention theories, dual use-mention theories, and pure-use theories. Here it will be argued that no such theory is adequate.

2.1. Pure-mention theories

A pure-mention theory is a theory on which the quoted material in a direct/mixed context designates, denotes, refers to, names, or otherwise mentions words, expressions, shapes, sounds, symbols or the like and where furthermore this is the material's only contribution to the literal semantic meaning of the sentence (and indeed its only contribution at all). Such theories are defended by Tarski (1956), Washington (1992), and Cappelen and Lepore (2007). On Tarski's theory, the quotations are names for the word-types of the quoted material, on Washington's their meaning is identical to the quoted material itself. Cappelen and Lepore (1997) argue that mixed quotation provides a stark counterexample to views like Tarski's and Washington's. Consider the sentence in (1):

(1) Ernestine said she was going to the concert “with that guy in the band.”

If Tarski is right, for instance, and the quotation “with that guy in the band” is a name for the expression whose first constituent is ‘with’, followed by ‘that’, followed by ‘guy’, etc. then (1) should be uninterpretable. One way of seeing the point is by using a different name for the same expression. Let ‘Bill’ name the expression whose first constituent is ‘with’, followed by ‘that’, followed by ‘guy’, etc. Then (1) is equivalent in meaning, on Tarski's theory, with (2):

(2) #Ernestine said she was going to the concert Bill.

But (2) has no meaning – one can't *go to a concert Bill*. However, the initial example (1) clearly did have a meaning. Hence Tarski's account must be wrong. A similar objection applies to Washington's account, as one can't *go to a concert the words surrounded by quote marks in (1)*.

Cappelen and Lepore (2007) propose a more sophisticated pure-mention theory. The details aren't essential here, but the basic motivation is to avoid the obvious flaws of Tarski-and-Washington-style views. The claim is that 'say' and other *verba dicendi* have three arguments: the agent doing the saying, the semantic content of the non-quoted material, and the expression-type of the quoted material. A view in the style of Cappelen and Lepore has it that a speaker S bears the SAY relation to a content C (possibly an empty content) and expression type E (possibly an empty expression type) if and only if S expressed a proposition part of whose content was C and the rest of whose content is expressed by E, as used by the speaker. The insight behind the sophistication is this: in the original problem case (1) for Tarski-style views, the expression type named by the quotation couldn't "directly combine" with the meaning of the unquoted part of the mixed quotation. But on a Cappelen-and-Lepore-style view, the combination is *indirect*, via the lexical entry for 'say'. The meaning of 'Ernestine said C, E' is true of a content C and expression type E iff Ernestine said C-combined-with-the-meaning-of-E.³

Although the Cappelen and Lepore view is ingenious, in its own right, I think it nevertheless succumbs to a second kind of flaw. In most compositional treatments of quantifiers, something like the following is true: if a quantifier-expression syntactically binds a pronoun or a trace, then the (semantic) values that the pronoun or trace range over are the selfsame semantic values that are in the domain of the meaning of the quantifier expression. In fewer words: if an expression X syntactically binds an expression Y, then the meaning of X semantically binds the meaning of Y. Now consider the examples in (3ab), where syntactic binding relationships have been marked by italics:

- (3) a. George explained that *the regrettable collapse of the levees* was such that "no one knows who caused *it*"
 b. *Which houses* did the FBI say they could "search *t* without warrant"?

3. Due to space constraints, this is an enormous oversimplification of the Cappelen and Lepore view (it can't handle the quoting of non-constituents, or multiple mixed quotes, for example), but I don't think it difficult to extend my criticism here to the actual account proffered.

Suppose now that the expression “no one knows who caused it” in (3a) names an expression-type. As such, it has no internal semantic structure, and in particular, the pronoun ‘it’ cannot be semantically bound by the quantifier phrase ‘the regrettable collapse of the levees.’ A parallel observation holds for (3b). However, the constructions in (3ab) involving, as they do, ‘such that’ and wh-movement, respectively, *require* that ‘it’ and ‘t’, respectively, be syntactically bound by the italicized quantifier phrases (one can’t, for instance, say that Sam was *such that Mary was happy*). Thus Cappelen and Lepore’s (2007) view runs afoul of well and independently motivated compositional principles.

For completeness’ sake, it should be pointed out that sometimes quoted quantifier phrases syntactically bind pronouns and yet the pronouns do not refer to the expression type of the quoted phrase, but rather range over its domain. Consider (4a–c):

- (4) a. John said that “*the queen of each man’s heart*” loves only *herself*.
 b. George explained that “*the regrettable collapse of the levees*” is such that no-one knows what caused *it*.
 c. Phil wanted to know “*which bloomin’ idiot*” he had to vote for *t* in the next election.

Again, we have three cases, each where syntactic binding must be occurring (else ‘herself’ couldn’t occur in (4a), the ‘such that’ relative couldn’t occur in (4b) and the trace couldn’t occur in (4c)), yet the values ‘herself’, ‘it’, and ‘t’ in the three examples clearly don’t co-refer with the expression types “the queen of each man’s heart”, “the regrettable collapse of the levees” and “which bloomin’ idiot”, but rather range over the domains of the semantic values of those expressions. This indicates, via the principle of syntactic/semantic binding articulated above, that the semantic value of the quoted expressions is *not* the expression type of the quoted material, but rather its ordinary semantic value.

In conclusion, pure-mention theories must be false. Their common feature is that from the point of view of direct semantic composition, the *meaning* of the quoted material is irrelevant. But examples (1) and (2) demonstrated conclusively that the meaning of the quoted expression was indeed relevant to semantic composition, and examples (3) and (4) demonstrated that it was *directly* relevant – i.e. not merely relevant via the semantics of some lexical item like ‘say.’ Since, furthermore, the examples in (4) showed it necessary that the ordinary semantic values of the quoted expressions served to semantically bind the relevant pronouns, we reach our first conclusion:

Conclusion 2.1: in direct and mixed quotation, the quoted words are not merely mentioned, but rather are at least used, often with their normal semantic values.

2.2. Dual use-mention theories

A dual use-mention theory is a theory on which the quoted material in a direct/mixed context is used with its normal semantic value, but simultaneously it also designates, denotes, refers to, names, or otherwise mentions words, expressions, shapes, sounds, symbols or the like. Under this heading I include multidimensional accounts, which view sentences containing direct or mixed quotation as contributing two propositions, one linguistic and another metalinguistic (e.g. Potts 2007). But I also include paratactic accounts, where the quoted words are not a part of the speech report itself, and have their normal semantic values, yet due to a demonstrative in the speech report the symbols (or their shapes, sounds, etc.) in the quoted material are or can be mentioned (see e.g. Davidson 1984a, Cappelen and Lepore 1997).

In order to show that dual use-mention theories are false, I will argue that in direct and mixed quotation, the quoted material is not mentioned. The argument has to do with the licensing of various types of anaphora. Anaphors are devices that we use to “refer back” to objects, events, and propositions that have previously been introduced into the discourse. I assume that referring to an object, event, or proposition is (with the exception of well-known island constraints) sufficient to make that object, event, or proposition available for later anaphoric reference in the discourse (*ceteris paribus*, of course). Thus any theory that has it that the quoted words in direct and mixed quotation are referred to will make an empirical prediction, specifically that subsequent to an utterance of a direct or mixed quotation, the direct or mixed quoted words will be available for anaphoric reference later in the discourse.

Consider first the case of *pure* quotation (an account of which is outside the scope of the present paper). It is beyond doubt that in pure quotation, the quoted words are mentioned. This is because one can attribute to ‘Alice’, for instance, the property of having 5 letters, the property of being a name, the property of being pronounced in a certain way, etc. all of which are properties of words. Thus we should expect, and indeed we find, that in pure quotation, the quoted material is available for later reference. For example:

- (5) a. ‘*Life is difficult to understand*’ is a sentence. *It* contains an infinitival verb phrase.
- b. ‘*In quotation, words are used autonomously*’ makes very little sense. *It* could use some editing.
- c. Max said the word ‘*ain’t*’, *which* is on his teacher’s list of no-no words.

In both (5a–c), the italicized pronouns anaphorically refer to the italicized quoted material. (5a–c) thus represent perfectly coherent discourses.

The case of direct and mixed quotation, however, provides a stark contrast. While dual use-mention theories would have it that the quoted words are mentioned, these words are nevertheless not available for later anaphoric reference. Consider (6a–c):

- (6) a. Alice said life “*is difficult to understand.*” #*It* contains an infinitival verb phrase.
- b. The Davidson text tells me that “*in quotation, words are used autonomously.*” #*It* could use some editing.
- c. #John asserted that we might be going, but he “*ain’t*”, *which* is on his teacher’s list of no-no words.

This is strong evidence that the quoted words in (6a–c) are not mentioned.

It has been pointed out to me by many in conversation that perhaps in (6a–c) the *ceteris paribus* clause has been sprung, as it were, in: *ceteris paribus*, referring to an object, event, or proposition is sufficient to make that object, event, or proposition available for later anaphoric reference in the discourse. The argument goes that for instance, in (6a) there is a sharp subject matter change (from Alice and her ruminations to grammar) that “jars” the listener into finding the discourse incoherent. But I find this reasoning completely unpersuasive. According to the dual-use mention theorists, one of the propositions expressed by the first sentence in (6a) is something like: Alice uttered the phrase ‘*is difficult to understand.*’ Thus it is part of the dual use-mention account that there is no sudden change in topic: the first sentence of (6a) is just as much about words as it is about Alice’s ruminations. And yet while (7) is coherent, (6a) is not:

- (7) Alice uttered the phrase ‘*is difficult to understand.*’ *It* contains an infinitival verb phrase.

I have also heard philosophers express concerns about the use of anaphora in these tests. Discourse anaphora is a tricky and not well-understood phenomenon, they say, so we ought not to draw conclusions so quickly from discourse judgments involving anaphora. But much the same point can be made with more run-of-the-mill philosophical devices. Take for instance quantification. If in ‘John told me *x*’ the variable *x* can take on the same values as *x* in ‘*x* is a sentence’ (namely, word types or tokens), then we’d expect to be able to say:

- (8) #Everything John told me was a sentence.

But one can't. The reason is that one doesn't tell another a sentence; one doesn't assert sentences; one doesn't learn sentences; one doesn't ask sentences. But the verbs 'tell', 'assert', 'learn' and 'ask' all take direct and mixed quote complements. This is not evidence that really, after all, one does assert sentences. It is instead evidence that not all quotation involves reference to word types or tokens. Only this hypothesis explains why (8) is ungrammatical; only this hypothesis explains why (6a-c) are incoherent discourses⁴. And so we reach our second conclusion:

Conclusion 2.2a: In direct and mixed quotation, the quoted words are not mentioned.

In conjunction with Conclusion 2.1, we can thus derive:

Conclusion 2.2b: In direct and mixed quotation, the quoted words are not mentioned, but rather are used, often with their normal semantic values.

2.3. Pure-use semantic theories

There are other semantic accounts of quotation that do not hold that in direct/mixed quotation the quoted words are mentioned. The most natural such account, in light of my arguments in Section 1, takes the quote-marks themselves to express a monstrous operator that shifts the context of utterance (see Kaplan (1989) and Schlenker (2003) concerning the possibility of monsters in natural language). For example, suppose the indirect-discourse verb 'say' expresses a relation between a speaker *S*, a context *C*, and a proposition *P*: the relation that holds when *S* said in *C* that *P*. Taking *C** to be the actual context of utterance, the "logical form" of (9) a. is thus (9) b., where 'speaker-of(*C**)' is taken to be directly referential:

- (9) a. John said that I am happy.
b. $\exists C$ said(John, *C*, that speaker-of(*C**) is happy)

In indirect discourse, the introduction of the new context variable does nothing. The story is different, however, for quotation marks. The function of quotation marks is essentially to replace occurrences of *C** in *P* with *C*. The logical form of (10a) is thus (10b):

4. My use of anaphora and quantifier-binding in these arguments is inspired by Asher (1993), who uses them for similar effect (though on an unrelated topic). See particularly p33ff.

- (10) a. John said “I am happy”
 b. $\exists C$ said(John, C, that speaker-of(C) is happy)

(10b) is true iff there is a context C such that in C John said that he, John, was happy. This account gets the intuitively correct truth conditions and furthermore is compatible with all the arguments I considered in Section 1. (Much refined) versions of this account are defended in Bittner (2007) and Cumming (2005). Nevertheless, I think it is unworkable.

First, the monster-account has no resources to account for the original data that motivated so many word-mention views of quotation. It should be completely impossible on the monster-account to quote nonsense in direct or mixed quotation. Yet this is possible, as we see in (11) (from Cappelen and Lepore 1997: 445):

- (11) Nicola said that Alice is a “philtosopher.”

On the monster-account, the quotation marks in (11) should map the character of ‘philtosopher’ onto the intension of ‘philtosopher’ at the context of Nicola’s saying; but ‘philtosopher’ has no character, being nonsense. So (11) should be nonsense. But it seems to convey a proposition, and is a perfectly acceptable utterance.

Additionally, the monster account cannot explain the inferences from (12a) and (13a) to (12b) and (13b), respectively. For the semantic value of (12a) is just the semantic value of ‘Alice said that life was difficult to understand’ on the reading where the embedded verb is simultaneous with the matrix verb. But this sentence clearly doesn’t entail (12b).

- (12) a. Alice said “Life is difficult to understand”.
 b. A token of “Life is difficult to understand” was uttered.
 (13) a. Alice said that life “is difficult to understand”.
 b. A token of “is difficult to understand” was uttered.

[Cappelen and Lepore (1997)]

I’m inclined to think that something like the context-shifting operator posited by the monster account *is* responsible for the indexical shifting observed in cases like (10a). My doubt, however, is that this has anything essential to do with the presence of quotation marks in these examples. The quotation marks are doing something else – they *are* being used to pick out words, they are just not doing so via the compositional semantics of the languages that contain them. This view will be elaborated on and defended in the rest of the paper.

3. Toward a Pragmatic Theory of Quotation

A *pragmatic* theory of direct/ mixed quotation, as I'm using the term, will be a theory that says (a) the presence or absence of quotation marks in a direct or mixed quote is irrelevant to the literal semantic meaning of the sentence and (b) the contribution of quotation marks in a direct or mixed quote takes place at the level of what-is-conveyed by the sentence. For instance, a pragmatic theory might maintain that direct and mixed quotations engender the presupposition that the quoted material was uttered by someone, or it might maintain that direct and mixed quotations contain a conventional implicature to the effect that the quoted material was uttered by someone. Ultimately, I will argue that neither of these initially tempting views can handle the data, but first things first: indexicality.

3.1. Quotation and Indexicals

I have almost nothing to say on the topic of indexical shifting (the phenomenon exhibited in (9a) and (10a) above) in quotation. It is quite clearly a problem for a pragmatic account, since shifting the referents of the indexicals in a sentence changes the meaning of the sentence, and a pragmatic account denies that using quote marks in direct or mixed quotations changes the meaning of the sentence. If the indexical-shifting phenomenon is to be accepted, then, it must simply be denied by the pragmatic theorist that quotation is the culprit. Perhaps, she can say, it is a monstrous operator that does the work – an operator that is not essentially tied to the quotation marks themselves.

This is indeed a difficult story to swallow. For why does indexical shifting always co-occur with quotation, if they are essentially unrelated? And here is the kernel of my defense: the two do *not* always co-occur.

Suppose that I am writing a paper. My friends review the first draft and send me comments. Later, one of them runs across me in the department lounge, and I seem rather harried. She asks whether the others had thought poorly of the paper. I reply with (14):

- (14) No, quite the contrary. To quote Oscar Wilde, “Whenever people agree with me, I always feel I must be wrong.”

Here I am not saying that whenever people agree with Oscar Wilde, *he* always feels *he* must be wrong, though what I say entails that. Rather, I am saying that whenever people agree with *me*, *I* always feel *I* must be wrong. I am just using Oscar Wilde's words to do it. This is why I can't continue (14) with (15):

- (15) ...??But whenever people agree with *me*, I feel I must be spectacularly right, and that sends me into a frenzy.

In addition to constructions involving ‘to quote X’, constructions involving ‘in the words of X’ and ‘like/ as X said’ exhibit the same pattern of shiftless indexicals, ‘I’ again in (16a) and ‘you’ in (16b):

- (16) a. In the words of Gandhi, “if *I* had no sense of humor, *I* would long ago have committed suicide.” ??But of course, I have no sense of humor, and I would never commit suicide.
- b. As Abraham Lincoln said to the people of his time, “always bear in mind that *your own* resolution to succeed is more important than any other.” ??But your own resolution to succeed is not important at all.

What are we to make of these examples? If a pragmatic theory is right, their analysis is straightforward: the use of the quotation marks, say in (16a), entails that Gandhi uttered the quoted words; but the words themselves are used with their normal semantic values. If instead a semantic view were correct, it would be faced with what we may call The New Problem of Indexicality: if quotation marks have the semantic effect of shifting indexicals, why do they not do so in (14) and (16ab)? The New Problem is much more serious than the old problem (the problem for pragmatic theorists of why indexicals ever shift), for it is open to the pragmatic theorist to say that there is an indexical-shifting operator, essentially unrelated to quotation marks, that does the job; whereas it is patently absurd for the semantic theorist to say that quote-marks do the shifting, but in (14) and (16ab) there is an additional “unshifting” operator that undoes the effects of the quote marks. This is absurd because it fails to explain why anyone would go through the trouble of at once doing and un-doing the same thing.

A final observation is worth making. Just as quote-marks can occur without the shifting of indexicals, so too can indexical shifting occur without quote-marks. This is the well-known, but as yet ill-understood phenomenon of free indirect discourse. Consider ‘now’ as it occurs in the second sentence of (17):

- (17) Bruce turned around the corner. *Now* things were about to get real hot, real fast.

‘Now’ in (17) does not refer to the speaker’s utterance-time, but rather to the ‘now’ of Bruce’s perspective upon turning the corner. But the perspective-shift is not due to quotation.

The argument then is this: free indirect discourse shows us that we need some device other than quotation to shift indexicals. Constructions involving ‘to quote X’, ‘in the words of X’, and ‘like/as X said’ show us that quotation itself need not shift indexicals. So it is no longer clearly the best explanation of why there are shifted indexicals under quotation marks to attribute the shifting role to quotation itself. Indeed, considered in tandem with the argument of Section 1, that there could be no tenable semantic account of quotation, it looks very plausible that quotation is not the culprit. And this opens the door to a pragmatic theory of direct and mixed quotation.

3.2. Presupposition and Conventional Implicature

If the problem of indexicals can indeed be circumvented, it is reasonable to ask what the form of a pragmatic theory of quotation should look like. I want to start by considering, and rejecting, two possible accounts that seem to me to be gaining ground: on the one hand, taking the effects of direct and mixed quotation to be presuppositions, and on the other taking them to be conventional implicatures (see, for instance, Garcia-Carpintero (this volume) for a view along these lines).

Conventional implicatures, first discussed by Grice and considerably revived by Potts (2005), are non-cancelable implicatures. They are not “conversational implicatures,” because they arise not from speakers’ reasoning with the conversational maxims, but instead arise from the conventionalized aspects of the lexical items or constructions that engender them. Potts’s main examples come from what he calls *supplements* (to include appositives and parentheticals) and *expressives* (such as epithets). Examples (18a) and (19a) illustrate an appositive and an epithet, respectively; (18b) and (19b) indicate their conventional implicatures; while (18c) and (19c) illustrate their non-cancelability:

- (18) a. John, *who is Bill’s best friend*, ran a 100-meter dash in under 10 seconds.
 ⇒ b. John is Bill’s best friend.
 c. ...#although, I should tell you, he isn’t Bill’s best friend.
- (19) a. John won’t stop making that damn racket.
 ⇒ b. The speaker takes a negative attitude toward the noise John’s making.
 c. ...#although I enjoy the noise he’s making very much.

Several features of direct and mixed quotation make a treatment of those phenomena as issuing in conventional implicatures (CIs) seem plausible. First, as we have argued, quotation marks do not contribute to the literal semantic mean-

ing of a sentence. This is also a feature of CIs: Potts, who uses the term ‘at-issue meaning’ for what I’ve been calling ‘literal semantic meaning’, argues convincingly that “no lexical item contributes both an at-issue and a CI meaning” (p. 7). Similarly, just as CIs are non-cancelable, so too are the entailments of quotation marks: Alice said that life “is difficult to understand.” #But no-one ever uttered the words “life is difficult to understand.”

But, I think, the analogies between CIs and quotation-entailments run out fairly quickly. Perhaps the most interesting aspect of CIs is that they “always project to the highest possible point” (Potts 2005: 12). That is, they never take scope under other operators and free variables within them are never bound by higher quantifiers. For instance (20a), which contains the modal operator ‘should’, entails (20b) but not (20c), and (21a), which contains the quantifier ‘no-one’, is incoherent, rather than entailing (21b):

- (20) a. John should have eaten the sandwich, which was poisoned.
 ⇒ b. The sandwich was poisoned.
 ≠ c. The sandwich should have been poisoned.
 (21) a. #No-one, who was the king of France, met Bill.
 b. No-one was the king of France.⁵

The case of quotation stands in stark contrast. (22a), rather than entailing (22b), entails instead (22c); similarly, (23a) is coherent, does not entail (23b), but rather entails (23c):

- (22) a. Alice should have said “life is difficult to understand.”
 ≠ b. Someone uttered “life is difficult to understand.”
 ⇒ c. Someone should have uttered “life is difficult to understand.”
 (23) a. No-one said life “is difficult to understand.”
 ≠ b. Someone uttered “is difficult to understand.”
 ⇒ c. No-one uttered “is difficult to understand.”

I think this makes short work for any CI story of quotation entailments. But several participants at the conference (ICQM) showed me that the reasoning to this point was too quick. Consider the discourses in which one might utter (23a). The first that come to mind are discourses where some speaker has affirmed that someone uttered “is difficult to understand,” and the speaker of (23a) is denying this, as in (24ab):

5. It should be noted that there is a reading of the relative clause in (21a) that is not an appositive, and thus issues in no CI, which results in a coherent interpretation for (21a). That reading also does not entail (21b).

- (24) a. A: Alice said life “is difficult to understand.”
b. B: No-one said life “is difficult to understand.” Alice said life “is un-understandable” and Bill said it’s “a snap.”

If this were true for every context of utterance of (23a), it would follow that (23a) did in fact entail (23b), my assertion to the contrary notwithstanding.

But the facts go the other way. Often when someone wishes to illustrate our ability to understand novel utterances, he or she produces one. For example:

- (25) No-one has ever said “irate sloths dance in the miniscule jungles of Tucson,” but you nevertheless understand it.

Surely, if sentences like (25) entailed that the utterance in question was *not* novel, we’d be at a loss to make sense of how this could be an illustration of our ability to understand novel utterances. Similarly, the most likely contexts where someone would utter (22a) are those where neither Alice, nor anyone relevant in the context, has in fact said “life is difficult to understand.”

Of course, the fact that (23a) does entail (23c), whatever else it may entail, is itself sufficient to falsify the CI account of quotation-entailments. But how, one might ask, could (23a) entail (23c), if (23a), which is embedded in (24b), can be uttered after (24a), which contains an utterance of “is difficult to understand”? The answer is: quantifier domain restriction. B in (24b) clearly means not to include A’s utterance in his domain of discourse.

On much the same evidence, we can reject the idea that direct or mixed quotation of words *presupposes* that someone has used those words. Consider two standard tests for presupposition. First, presuppositions “project” out of negation, so that if Q presupposes that P, not-Q also presupposes that P. For example both (26a) and (26b) presuppose that John has a son:

- (26) a. John’s son is into sports.
b. John’s son is not into sports.

Second, presuppositions project out of the antecedents of conditionals. That is, if Q presupposes P, then if Q, then R also presupposes that P. For instance, both (27a) and (27) presuppose that Josh was training for the triathlon:

- (27) a. Josh stopped training for the triathlon.
b. If Josh stopped training for the triathlon, then he’ll be free to come to the reading group.

We see, again, a stark contrast with quotation. For while (28a) entails (28b), (28c) does not; and whereas (29a) entails (29b), (29c) does not:

- (28) a. George told me “the levees are fine.”
 b. Someone uttered “the levees are fine.”
 c. George didn’t tell me “the levees are fine.”
- (29) a. Josh said “I can’t run anymore.”
 b. Someone uttered “I can’t run anymore.”
 c. If Josh said “I can’t run anymore,” you should believe him.

In conclusion, the entailments that arise from direct and mixed quotation have been seen to be (a) not semantic entailments, (b) not conventional implicatures, and (c) not presuppositions. It’s worth adding that they’re not conversational implicatures either. For conversational implicatures are by their very nature cancelable, whereas the entailments that arise from the use of quotation marks are not. That is, (30a) is an incoherent discourse, because it denies the quotation-entailment, although (30b) is not – Alice might have told me snow was white by implying it, or by pointing:

- (30) a. Alice told me “snow is white.” #But she didn’t utter “snow is white” or any of its translations into foreign languages.
 b. Alice told me snow was white. But she didn’t utter “snow is white” or any of its translations into foreign languages.

Thus direct and mixed quotation are strange linguistic specimens indeed. A proper account of their behavior must posit a new kind of entailment, one unknown to most linguistic theories. So be it!

3.3. Calculating Quotation Entailments

Section 1.2 contains a single reference to Potts (2007). There, I include him in the camp of “dual use-mention theorists” and dismiss him, along with the rest, on the basis of data concerning anaphora and quantifiers. And though I think he insufficiently addresses such questions, my dismissal was far too quick. It’s time to take another look.

Potts has it that simple sentences containing direct and mixed quotations contribute a pair of propositions, one for each “dimension” of the sentence’s meaning: the assertive dimension and the utterance dimension (the proposition conveyed by the presence of the quote marks, what we are calling the *quotation entailment*). We can, for the purposes of this paper, ignore whether Potts ultimately believes or is committed to both dimensions being “on a par” – that is, being both part of the literal semantic content. Instead, I want to consider Potts’s treatment of the second dimension as a (partial) theory of how to calculate quotation entailments. This will in turn lead us to a fuller theory, and

in the conclusion I shall make some remarks as to the nature of these entailments.

Potts (2007: 417) observes that (31a) does not entail (31b), but rather (31c) and also that (32a) does not entail (32b) but rather (32c):

- (31) a. Ernie believes that Alice said “life is difficult to understand.”
 $\not\Rightarrow$ b. Alice uttered “life is difficult to understand.”
 \Rightarrow c. Ernie believes Alice uttered “life is difficult to understand.”
- (32) a. Everyone said “life is difficult to understand.”
 $\not\Rightarrow$ b. Someone said “life is difficult to understand.”
 \Rightarrow c. Everyone said “life is difficult to understand.”

The observation in (32) is analogous to that in (23) above. But this, combined with (22) and (31) suggests the following principle:

- (Q1) a. Any clause ‘x Vs that p’ where V is a *verbum dicendi* and p contains the quoted phrase q and does not contain any *verba dicendi* itself, has as its local quotation entailment that x uttered q
- (Q1) b. Any sentence ‘OP p’ where OP is a sentence operator and p has quotation entailment Q has as its local quotation entailment OP Q.

This principle is borne out, not only by the examples thus far considered, but also by (33):

- (33) a. Either it’s not raining or George said “the levees are fine.”
 $\not\Rightarrow$ b. George uttered “the levees are fine.”
 \Rightarrow c. Either it’s raining or George uttered “the levees are fine.”

However, this theory of quotation entailments faces two challenges. The first is advanced by Potts. He argues “negation can target one dimension of meaning, but not both of them” (Potts 2007: 425). That is, sentences of the form ‘NOT p,’ where p has a quotation entailment q, can have as their quotation entailment NOT q iff the literal semantic content of the sentence is p. This is in conflict with (Q1), because (Q1) calculates the quotation entailment of a sentence independently of the literal semantic content of the sentence.

Potts’ reasons for holding this view, however, are a little baffling. They involve the idea, which is common, that metalinguistic negation has to do with quotation. Consider the sentence (34):

- (34) Charlie didn’t call the POLice, he called the poLICE⁶.

6. Potts (2007: 424) quoted from Horn (1989: 371).

If the antecedent of (34) negated the literal semantic content of ‘Charlie called the POLice’ (namely, that Charlie called the police), then (34) as a whole would be an unassertable contradiction. Instead, Potts proposes, the negation in the antecedent targets the “assertion” dimension only: the speaker of (34) isn’t prone to utter “POLice.” But, of course, the speaker of (34) could be indifferent to the two pronunciations and as such be attempting to utter a contradiction. The point is that there is no reading of (34) where the negation operator applies both to the proposition that the speaker is prone to utter “POLice” *and* to the proposition that Charlie called the police.

To me, this is dangerous reasoning. It is dangerous because it proceeds in the absence of clear data about quotation itself. Consider (35):

(35) Jimi Hendrix did not say “excuse me while I kiss this guy.”

It is not clear at all that (35) doesn’t both entail that Jimi Hendrix did not say to excuse him while he kissed some guy *and* did not utter “excuse me while I kiss this guy.” Indeed, on Potts’s account, if (35) literally semantically asserts that Jimi Hendrix did not say to excuse him while he kissed some guy, then Hendrix *did* utter the words “excuse me while I kiss this guy.” That is at least counterintuitive.

But the point can be made much more sharply. Consider an operator that *does* modify both dimensions, say ‘should.’ On Potts’s account, the entailment of (36a) is either the two propositions in (36b) or those in (36c):

- (36) a. You should not say aloud that “this play is boring.”
 b. You should say aloud that this play is boring and you should not utter aloud the words “this play is boring.”
 c. You should not say aloud that this play is boring and you should utter aloud the words “this play is boring.”

But this is absurd! No-one who utters (36a) means to convey either (36b) or (36c).

Thus, (Q1) b. remains intact: quotation entailments embed under propositional attitude verbs (31), quantifiers (23, 32), modals (22), sentential connectives (29, 33), and negation (28, 35, 36). Nevertheless, I think (Q1) a.–b. are false. Consider the scenario in (37ab) [taken from Potts 2007: 420]:

- (37) a. Ellen: *The Godfather II* is a total snooze.
 b. Frank: Well, Pauline Kael said that this “total snooze” is a defining movement in American cinema.

(Q1) a. predicts that (37b) entails *Pauline Kael uttered “total snooze,”* which it clearly doesn’t. And amending (Q1) a. to (Q2) doesn’t help:

(Q2) Any sentence ‘x Vs that p’ where V is a *verbum dicendi* and p contains the quoted phrase q and does not contain any *verba dicendi* itself, has as its quotation entailment that y uttered q, where y is a salient individual in the discourse.

The amended (Q2), in conjunction with (Q1) b., also makes false predictions. For consider (38ab):

- (38) a. Ellen: The professor told me that quotation didn’t engender contentional implicatures.
 b. Frank [later]: Ellen said the professor told her that quotation didn’t engender “contentional implicatures.”

By (Q2), we can suppose that the clause ‘the professor told her that quotation didn’t engender “contentional implicatures”’ has as its quotation entailment: *Ellen uttered “contentional implicatures.”* But by (Q1) b., since quotation entailments embed under all higher operators, (38b) has as its quotation entailment: *Ellen said Ellen uttered “contentional implicatures.”* Yet (38b) clearly doesn’t entail this.

This is a problem, yes, but I think it points the way to the solution. Although quotation entailments scope only under some operators, it is predictable where they will scope. Consider (39):

- (39) Sue told me that the president should have said he would “fight for the people.”

Example (39) and its entailments are intuitively true in two scenarios: either Sue uttered “fight for the people” in saying what the president should have said, namely, that he would fight for the people, as in (40a); or Sue said that the president should say he would fight for the people and that he should do so by using the words “fight for the people,” as in (40b):

- (40) a. Sue: The president should have said he would fight for the people.
 b. Sue: The president should have said he would “fight for the people.”

The data then appear to be this. If x in a clause of the form ‘x V’s that p’, where p has some direct or mixed quoted element q (and p does not contain any *verba dicendi*), is taken to be the utterer of q, then the proposition *x uttered q*

scopes under all higher operators the clause is embedded in (e.g. (22, 23, 28, 32, 33, 35, 36)). However, if some higher subject y of a *verbum dicendi* is instead understood to be the utterer of q , then the proposition y uttered q scopes under *only those operators higher than the verbum dicendi y is the subject of* (e.g. (38, 39)). In the limiting case, as in (37b), there is no y identified in the utterance and so the proposition z uttered q , for salient z in the discourse, takes scope over all operators in the sentence.

We can turn these observations directly into a general theory for calculating quotation entailments. Suppose, for perspicacity's sake, that each noun-phrase and each quoted string of words is indexed. When the indices on a noun-phrase and a quoted string of words match (are identical), this corresponds to the intuitive case where the referent of the noun phrase uttered the quoted string (in the local context, i.e. under the scope of higher operators). This device allows us to characterize the (global) quotation entailments for any sentence containing a non-pure (i.e. direct or mixed) quotation.

In general, sentences containing direct or mixed quotations have the form 'OP₁ OP₂... OP _{n} p ' where at least one of the operators OP _{i} is a *verbum dicendi* and p is the smallest clause containing some quote q . We want our definition to capture the following general entailment:

- (41) a. OP₁...OP _{n} Sally₁₇ OP'₁...OP' _{m} ...q₁₇...
 ⇒ b. OP₁...OP _{n} Sally₁₇ uttered q₁₇

That is, all the operators between Sally and the quote she uttered disappear, and all the operators higher than Sally remain, in the global quotation entailment. This fact is brought out strikingly in the following two pairs of entailments:

- (42) a. Sally₁₇ said that Bill must not have said that if it was raining, then "we're all doomed"₁₇.
 ⇒ b. Sally uttered "we're all doomed."
 (43) a. Bill must not have said that if it was raining, then Sally₁₇ said "we're all doomed"₁₇.
 ⇒ b. Bill must not have said that if it was raining, then Sally uttered "we're all doomed."

Our definition will work as follows. A quote will introduce a property $\lambda x[x$ uttered $q]$. Until this property is saturated by the individual represented as having uttered q , it will simply get "passed up" through the higher operators. Once saturated, however, it will accumulate all operators above it. The introduction clause is:

- (Q3) a. If p is the smallest clause which contains some non-pure quotation q (possibly $= p$) indexed i , it contributes the property $\lambda x_i[x_i \text{ uttered } q]$ as its local entailment.

Next, we state the conditions under which an unsaturated local entailment gets “passed up”:

- (Q3) b. If ‘ $x_j V$ ’s that p ’ is a clause with *verbum dicendi* V and p has the property $\lambda x_i[x_i \text{ uttered } q]$ as its local entailment, the local entailment of the whole is the local entailment of p , if $i \neq j$.
- (Q3) c. If ‘OP p ’ is a clause with operator OP (not a *verbum dicendi*) and p has the property $\lambda x_i[x_i \text{ uttered } q]$ as its local entailment, the local entailment of the whole is the local entailment of p .

Third, we must state the conditions under which the property gets saturated. These are of two types: either it is saturated by a co-indexed subject of a *verbum dicendi* in the sentence, or by some salient individual in context.

- (Q3) d. If ‘ $x_j V$ ’s that p ’ is a clause with *verbum dicendi* V and p has the property $\lambda x_i[x_i \text{ uttered } q]$ as its local entailment, the local entailment of the whole is $x_j V$ ’s that p if $i = j$
- (Q3) e. If p is a non-embedded clause with the property $\lambda x_i[x_i \text{ uttered } q]$ as its local entailment, then the global entailment of the whole is $x_j V$ ’s that p if x_j is salient in the discourse, else undefined.

Fourth, we must state the conditions under which a saturated local entailment scopes under operators:

- (Q3) f. If ‘OP p ’ is a clause with operator OP (possibly a *verbum dicendi*) and p has a non-property local entailment e , the local entailment of the whole is $OP e$.

Finally, we identify the global entailment of the largest clause containing the quotation with its local entailment:

- (Q3) g. If p is a non-embedded clause with a non-property local entailment e , then its global entailment is e .

Unlike Potts’ scattered remarks on how quotations combine with higher operators, (Q3) a.–g. present a straightforward, general theory of the quotation entailments for each sentence. The use of quotation marks contributes an unsaturated property to the asserted dimension. From the bottom up, so long as the property remains unsaturated, it “projects” up over the higher operators in the

derivation. Once it is saturated by the argument of a *verbum dicendi*, the new proposition (saturated property) scopes under all remaining operators (if any). This is consistent with all the data thus far presented, and indeed all the data the present author is aware of.

4. Conclusion

Thus far, direct and mixed quotation remain fairly mysterious phenomena. We have seen that they do not contribute to the literal semantic content of utterances containing them; and though it is possible to devise a theory that effectively calculates the entailments that direct and mixed quotation give rise to, as in (Q3) a.–g., these entailments are nevertheless mysterious because they are unlike well-researched entailments (presuppositions, conversational implicatures, etc.). In this conclusion, I want to briefly gesture at what I believe to be the nature of quotation.

Let me first distinguish expressions from the signs that articulate them⁷. I will denote simple expressions with Roman-alphabet signs in uppercase letters, for example: CAT, and complex expressions with simple expressions and brackets, for example: [CATS [LIKE MICE]]. One and the same expression may be articulated by many distinct signs. For instance, a certain sound pattern /kæt/, a certain sequence of letters ‘cat’, and a certain gesture (as in ASL), may all articulate CAT. CAT itself has no sound, though it may be articulated by objects that do – and perhaps, at different times or places, by objects that differ in their acoustic properties (say, before and after the great vowel shift). Signs and the sign-systems they are a part of can have structure not present in the expressions they articulate (e.g. pitch contours); additionally, expressions can have structure that is not preserved in the signs that articulate them (e.g. the hierarchical structure of [CATS [LIKE MICE]] is absent in the string ‘cats like mice’).

To serve our purposes in communicating expressions, we may alter our sign systems to articulate more of the structure of those expressions. In writing, we have moved from the Roman-alphabet articulation ‘catslikemice’ of [CATS [LIKE MICE]] to the more transparent ‘cats like mice.’ We have introduced capitalization, to mark sentence boundaries, and commas, to preserve some (though clearly not all) of the structure of the expressions we articulate. These innovations have fallen under the head of ‘punctuation,’ though their articula-

7. My discussion here has been highly influenced by Ernie Lepore.

tory role in writing is not substantially different from the conventionalized use of ‘cat’ to articulate CAT.

And yet, there is so much more we could convey in writing systems than merely the features of the expressions we articulate. We could, for instance, “stamp” our written sentences with a day of the week: 1 through 7 for Sunday through Monday. So, for instance, I would write ‘Quotation is a mysterious phenomenon: 1.’ The ‘1’ would not articulate any expression whose content I was attempting to convey to you, but it instead would “directly” convey the information that what I wrote I wrote on Monday.

Consider another, perhaps more useful device. A written sign with multiple quantifiers can be ambiguous. ‘Every boy likes some girl’ has two readings. We could introduce a convention of indexing quantifier phrases in the order of highest to lowest scope. Thus ‘Every boy₂ likes some girl₁’ would mean that there is some particular girl whom every boy likes. The indices here would not articulate any aspect of the expression [[EVERY BOY][LIKES [SOME GIRL]]], though it might *indicate* some aspect of the latter’s logical form.

This convention would introduce rather intriguing entailments. Though it would in some sense be *about* the relative scope of quantifiers, it would not introduce a metalinguistic proposition into the discourse that would allow later anaphoric reference to those quantifiers. It would not *presuppose* that the audience already knew the relative scope of the quantifiers. It would not conversationally imply scoping relations (that is, it would not be cancelable). And what’s more, the entailment would take scope with respect to higher operators. Quite naturally, writing ‘John said every boy₂ likes some girl₁’ would entail that *John said* there is some particular girl whom every boy likes.

I think quotation is just such a device. It does not articulate any part of the literal semantic content of the expressions we communicate. Rather it is part of the sign system that *adds* new meaning where there was none before. It tells us that certain words were said before. It is not presuppositional, because its point is adding information. It subserves our interest in accurate reporting. It is not conversational implicature, because it is wholly conventional in nature. Its mysteriousness lies only in the fact that our current sign systems are vastly impoverished with respect to the information they could communicate; quotation is our only sign-system device of conveying that does not operate via articulation (for written language – intonation contours are such a device in speech).

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