the syntax and semantics of quotation'

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1. INTRODUCTION

The main concern here will be with sentences in which a verb of saying is in construction with the direct quotation of a whole sentence, as in (1):

(1) The other day Tom said to me, "My grandfather was killed with a knife by a bachelor"

Such constructions are not intuitively very problematical looking. The verb "say" raises none of the semantic puzzles of "know" or "believe," at least not when used with direct quotation; and the syntax of the embedding could hardly be simpler -a quoted sentence has exactly the form it would have as an independent sentence. But since such simplicity is exceptional among embedding constructions, it is perhaps not surprising to discover that it is far from simple to fit these sentences into a generative grammar.

First some delimitation of the data under consideration is in order. I am assuming that quotation is a natural part of natural language, although I am not completely confident of it. Quotation marks are an orthographic device with no exact analog in spoken language. The locution "quote... unquote" is clearly derivative from the written form and restricted mainly to reading aloud, and the same holds, I think, for "and I quote." The phrase "in so many words" is natural in spoken language but does not indicate strict quotation. For example, sentence (2) could be my report of Bill's utterance of (3):

¹ This is a revision of a paper read at the California May Day Linguistics Conference held at Berkeley in May 1971. I am indebted to Paul Durham, who led me to much of the relevant philosophical literature. Any misuse of it is my own.

(2) Bill said in so many words that I was a fool

(3) Barbara is a fool

Perhaps the nearest thing spoken language has to a natural quotation device is an intonational one, namely, a pause before and after the quoted sentence, plus (imitation of (?)) the intonation the sentence would have in isolation.2

Excluded from consideration here are two uses of quotation which, it is postulated, can best be treated separately. The first of these exclusions is word quotation,³ as in (4) and (5):

(4) Should "pickup" ever be hyphenated?

(5) I used to think that the word "ellipsis" was related to "elide"

The other exclusion is mixed direct and indirect quotation, as in (6):

(6) Captain Davis said that he did not intend to "go soft on those bomb-throwing hippies"

My only justification for this second exclusion (since intractability is not a justification) is the admittedly prejudiced belief that such sentences do not occur in ordinary spoken language.

Having narrowed down the relevant data somewhat, let us look at some of the interesting problems in the linguistic analysis of what remains. Sentence (1) is not synonymous with sentence (7) and certainly not with sentence (8), even if the quoted sentences are taken to be synonymous:

- (7) The other day Tom said to me, "A bachelor killed my grandfather with a knife"
- (8) The other day Tom said to me, "An unmarried man used a knife to cause the father of one of my parents to die"

The immediate semantic conclusion to be explicated is that it is not the meaning of the quoted sentence that is contributing to the meaning of the whole, but rather its surface form. If we want an underlying representation which will set up an appropriate structure for the semantics to apply to, we might then try something like (9); that is, we might include a phonological representation instead of a deep structure or semantic representation so that (1) and (7), and certainly (1) and (8), will be assigned different underlying structures:

- ² One peculiar discrepancy between spoken and written quotation is that spoken quotation most commonly follows the standard word order of (a), while written quotation most commonly follows the inverted word order of (b):
 - (a) Then John said, "Why don't you mind your own business for a change?"

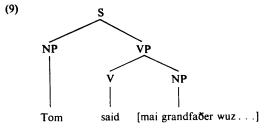
(b) "I'm sick of arguing," said John

It is commonly claimed that writing is purely derivative from speech, but cases like this, where the most common written form is rarely found in speech, suggest otherwise (at least for cultures with literary traditions).

I believe that a similar discrepancy, unrelated to quotation, exists between speech and writing in the case of pairs like (c) and (d), with the same word order difference:

- (c) The butcher rushed in
- (d) In rushed the butcher
- ³ There are some cases of quoted sentences which should perhaps be subsumed under this exclusion, but I have no sharp distinguishing criteria. I have in mind cases such as in (a) which can be paraphrased with the quotation in apposition to the words "the sentence":
 - (a) "I am speaking now" is always true when spoken

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This would in fact seem to be a reasonable treatment for a sentence like (10), where the verb is go rather than say:

(10) Morry aimed the toothbrush at David and went "[æʔæʔæʔæʔ]"

For my dialect, ⁴ go and say are distinguished by the complementary restrictions that what follows say must be a sentence and what follows go must not be. ⁵ Thus, what follows go may indeed be best represented as a string of sounds. But (9) would not account for ordinary quotation because of the evidence presented by sentences like those in (11):

- (11) (a) The sign says, "George Washington slept here," but I don't believe he really ever did [he, did]
 - (b) Whenever Fred sighs "Boy, do I need a drink," he expects you to fix him one [one]
 - (c) What he actually said was, "It's clear that you've given this problem a great deal of thought," but he meant quite the opposite [opposite]

Representing the quoted sentences as phonological material only would appear to make it impossible to describe the connection between the cited words of the matrix and the relevant parts of the quotation.

2. "THE MEANING OF A SENTENCE IS A FUNCTION OF THE MEANING OF ITS PARTS"

Let us now attempt to relate the data of the preceding section to the general principle enunciated in the title of this section, which will be referred to as the MSFMP principle. At its weakest, this principle is simply the semantic analog of the syntactic

⁴ What follows is not true of an up-and-coming dialect spoken at least by many college-age Californians in which go (usually in the historical present) is the standard verb for reporting speech.

- ⁵ The restriction appears not to be purely syntactic: in my dialect go can be used when talking of parrots and tape recorders, even if they happen to produce well-formed sentences, and also to report otherwise normal speech that mimics deviant intonation:
 - (a) The parrot went "Polly wants a cracker"
 - (b) John went "How are you today!"

Therefore it is (fortunately) not necessary actually to constrain the grammar so as to prevent the generation of well-formed sentences after go. It will be sufficient simply to generate unanalyzed strings of sounds in that position; some strings of sounds will be pronunciations of sentences in English or other languages. This should capture just the right difference between (c) and (d):

- (c) Whoever answered the phone said "¿Quien habla?"
- (d) Whoever answered the phone went "[kyen abla]"

principle that speaker-hearers must have a finite set of rules accounting for an infinite set of possible sentences. That is, we can also *understand* an infinite set of sentences using our finite mental equipment, and that would be impossible if there were not definite principles relating wholes to parts.

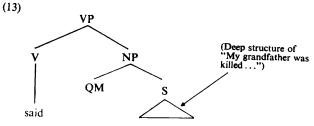
But there is a stronger form of the MSFMP principle, one which is by no means such a necessary principle but which is widely accepted as true or at least as the best working hypothesis, namely, what logicians call the principle of a "logically perfect language," relativized to phrase structure grammars:

The LPL Principle: Corresponding to each syntactic rule $A \to BC$ (or equivalently to any deep structure configuration $A \to BC$), there must be associated a unique semantic projection rule R which applies to the meanings of B and C as arguments to yield the meaning of A as value.

Starting from syntax, it would seem that the simplest description of a quoted sentence is that it consists of a quotation morpheme plus a sentence, as shown in (12):

(12)
$$NP \rightarrow QM + S$$
 (QM = quotation morpheme)

Then the relevant part of the deep structure for (1) would be something like (13):



The syntactic function of QM would be twofold: (a) to trigger "last-cyclic" transformations, such as interrogative word-order shifting on the cycle of the quoted sentence, and (b) to insulate the quoted sentence from further change on subsequent cycles.

But (13) does not supply a sufficient basis for semantic interpretation, since on the standard theory it leads to the prediction that (1) and (7) are synonymous; and a generative semantics version of it could do even worse, predicting (1) and (8) to be synonymous as well.

Therefore the LPL principle is violated by the analysis suggested here. There are various possible next steps. The strategy recommended by Katz and Postal (1964) and followed by most generative semanticists is the following:

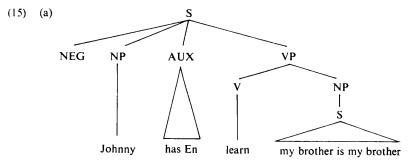
The "Look Deeper" Principle: When apparent violations of the LPL principle occur, we have erred in our syntactic analysis of the sentence; that is, we are mistaken about what the parts are or about how they are combined, or both.

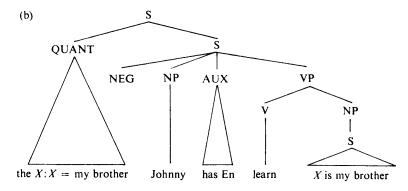
Before applying the "Look Deeper" principle to quotation, let us put the matter into perspective by recapitulating the history of the analysis of sentences like (14):

(14) Johnny hasn't yet learned that my brother is my brother

The classical syntactic analysis, (15a), provides an appropriate structure for only

one of the two possible semantic interpretations of the sentence, in fact for the less plausible one, namely, that on which Johnny hasn't yet learned a certain tautology. When these examples were noticed by such linguists as Bach and McCawley, the "Look Deeper" principle led to an additional analysis along the lines of (15b), with whatever additional syntax it takes to turn (15b) into (14):





The classical analysis, (15a), is appropriate for what Quine (1960) calls the *opaque* construction (with what philosophers refer to as the *de dicto* reading of "my brother"); the generative semanticists have added structures like (15b) to represent the *transparent* construction (with the *de re* reading of "my brother"). What is interesting here is that while the classical analysis has trouble with the *de re* reading of (14), the generative semantics approach, which handles that nicely, will have trouble with the opaque (that is, the normal) interpretation of (16a), on which (16a) and (16b) are not synonymous:

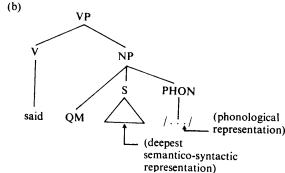
- (16) (a) Johnny hasn't learned that bachelors are unmarried men
 - (b) Johnny hasn't learned that unmarried men are unmarried men

The problem is that a generative semanticist is committed to deriving "bachelor" and "unmarried man" from the same source if their synonymy is part of the linguistic competence of the speaker of a sentence like (16a) and hence committed to deriving (16a) and (16b) from the same source. But the speaker of (16a) is describing someone who has not attained that particular bit of competence.

Thus, for (16a), the classical approach has an advantage by virtue of its very superficiality, at least on the normal (opaque-de dicto) reading. My general thesis is that the classical approach will always have an advantage in de dicto cases, where by definition linguistic form as well as (or instead of) content matters. And I see quotation as a paradigm example of a construction which is always opaque; the quoted sentence always has a de dicto interpretation (if that term can be used for whole sentences; it certainly can be used at least for each NP within a quoted sentence).

Returning now to the "Look Deeper" principle, the only way that comes to mind for applying it to quoted sentences is somehow to add the required surface information to the deepest structure, as, for example, in (17):

(17) (a) $NP \rightarrow QM S PHON$



(c) Surface rule:

X NP [QM S PHON] X

1 2 3

If
$$2 = 3$$
, delete 3

If $2 \neq 3$, abort

Since (17) has been set up as a straw man, it is not surprising that it looks ad hoc. I will mention some specific arguments against it in the course of offering some positive suggestions in the next section.

3. LANGUAGE AND METALANGUAGE

Logicians have long observed that one of the advantages of natural languages (which offsets and may even partially explain the rampant ambiguity and vagueness for which natural languages are notorious) is their universality; natural languages provide means for talking about virtually anything, including themselves.

- ⁶ Another aspect of the universality principle which might cause trouble for generative semantics is that one can talk about things one knows little or nothing about. Consider the interesting example in (a):
 - (a) Where is ambergris found?

Such a question can be used equally well by someone who knows what ambergris is but is missing some empirical facts about its occurrence and by someone who is trying to find out what ambergris is. I do not believe that this is an ambiguity, however, and I would consider inappropriate a deep structure which could not accommodate the second use.

The use of English as its own metalanguage is normally illustrated by examples of the sort that have been excluded from this study, that is, examples like (4) and (5). Other typical illustrations are (18) and (19). These are not excluded here by the earlier criteria, but I regard them as noncolloquial and hence slightly nonnatural because they do not involve verbs of saying:

- (18) "I am speaking now" is always true when spoken
- (19) "John didn't answer three of the questions" is ambiguous in my idiolect

There are, however, other examples which show the language/metalanguage distinction equally well and which do involve the kind of direct quotation viewed here as central—for example, (20) and (21):

- (20) "I talk better English than the both of youse!" shouted Charles, thereby convincing me that he didn't
- (21) When you said, "You won't be able to answer three of the questions," I guess I took it the wrong way

These sentences show most clearly the conflicting demand that quotation imposes on a theory. On the one hand, the ellipsis of (20) and the semantic content of the main clause of (21) show that the quoted sentence is syntactically and semantically a functional part of the whole sentence. On the other hand, the quoted sentence in (20) may be ungrammatical for the speaker of (20) and hence not generated at all by his "own" grammar; and any *single* semantic interpretation for the quoted sentence in (21) would be inappropriate in the light of the containing sentence. It is these facts that rule out an analysis like (17).

To resolve the apparent conflict, it may be helpful to consider (a) certain properties of demonstratives, and (b) certain properties of discourse.

Philosophers, especially Donald Davidson and David Kaplan, have made some relevant observations about how demonstratives work in natural language. The idea is that demonstratives (for example, this, that, here, there, now, I, yay in "yay big") do not contribute to the meaning of a sentence by virtue of having a meaning or a sense of their own. Rather, for each demonstrative there is some kind of associated algorithm which, given the linguistic context of the demonstrative in the sentence and the linguistic and extralinguistic context in which the sentence occurs, picks out certain objects in or properties of the whole context as referent of the demonstrative. (Demonstratives are always referential.) Consider the examples in (22), in which the utterance of a demonstrative is typically accompanied or followed by a gesture:

- (22) (a) A circular staircase looks like this: [gesture]
 - (b) He stuck out his tongue and went like this: [gesture]
 - (c) A good way to draw a five-pointed star is like this: [gesture]

The gesture is not a part of the sentence, but the demonstrative in the sentence refers to the gesture, not by virtue of a sense, but by way of the convention that the demonstrative always refers to whatever is being demonstrated in the appropriate way.

Sentence (23a) is clearly analogous to the sentences in (22); note especially its similarity to (22b). I would suggest, therefore, that (23b) is really an elliptical form of (23a):

- (23) (a) Morry went like this: [vocal noise]
 - (b) Morry went: [vocal noise]
 - ⁷ I am considering the colon a sentence-final punctuation mark.

In such a construction, the vocal noise is not a part of the sentence any more than the gestures of (22).

Syntactically, however, the sentences with say are different. Sentence (24) is not well-formed:

(24) *John said like this: "I have a new car"

Say takes direct objects rather than *like* phrases. But the same sort of analysis can still be proposed, and has been by Donald Davidson, who would derive (25b) from something like (25a):

- (25) (a) John said this: Alice swooned
 - (b) John said, "Alice swooned"

But it is clearly not enough to say that the quoted sentence is a separate sentence, with the quotation marks acting as a kind of demonstrative in the outer, or prior, sentence pointing at this separate sentence. We also must account for the syntactic and semantic integration of the quoted sentence into the containing sentence, as illustrated by (11a-c), (20), and (21).

It is at this point that we need to consider discourse: the syntactic and semantic integration just noted consists of three phenomena, all of which can also occur in discourse, even two-person discourse:

- (a) pronominalization, of NP's, N's, and other constituents
- (b) ellipsis
- (c) a phenomenon which, for want of a better name, I will call semantic anaphora

Let us repeat earlier examples here and add analogous discourse examples:

- (a) pronominalization
- (26) The sign says, "George Washington slept here," but I don't believe he really did
- (27) Whenever Fred sighs "Boy, do I need a drink," he expects you to fix him one
- (28) A: George Washington slept here
 - B: He did not
- (29) A: I need a drink
 - B: Shall I fix you one?
- (b) ellipsis (cf. also (11a) and (28))
- (30) "I talk better English than the both of youse!" shouted Charles, thereby convincing me that he didn't
- (31) A: I talk better English than the both of youse!
 B: You obviously don't
 - . . .
- (c) "semantic anaphora"
- (32) What he actually said was, "It's clear that you've given this problem a great deal of thought," but he meant quite the opposite
- (33) A: Did you know that northern magnolias are deciduous and southern ones are evergreen?
 - B: No, I thought it was just the opposite

Furthermore, the language/metalanguage distinction explicit in (21) (repeated here as (34)) is also paralleled in discourses, as in (35):

- (34) When you said, "You won't be able to answer three of the questions," I guess I took it the wrong way
- (35) A: Flying planes can be dangerous B: Which way do you mean that?

Not much has been said in the transformational literature about cross-discourse syntactic phenomena. The usual justification for limiting attention to sentences is that anything that can happen in discourse can happen within a single sentence; but the converse is clearly false, and limitations need to be explored. Sometimes people write as if all discourses were just conjunctions of sentences, and certainly some discourses could be analyzed that way (particularly, but not exclusively, some monologs). But clearly none of the discourses just presented can be analyzed as a conjunction. The central problem, then, is what basis the B speaker in each of those dialogs has for making his pronominalization, ellipsis, or semantic anaphora. It appears that the basic principle is that, in understanding A's sentence, B must impose enough structure on it to perceive structurally significant relations between A's sentence and his own. And apparently B can do this even if he cannot generate A's sentence himself (as could be the case in (31)). Although I do not know how to state these principles at all precisely, I think it must be significant that there is such a close match between the permissible dialog phenomena and the phenomena that occur in direct quotation.

The conclusion I would draw from this observation is that it lends further support to Davidson's claim that the quoted sentence is not syntactically or semantically a part of the sentence that contains it. Furthermore, we can now resurrect part of our earliest straw man and say that the (two-sentence) representation of a quotation needs to include only the surface structure of the quoted sentence; moreover, all the apparent evidence for deeper syntactic and semantic structure is a result of the main sentence speaker's understanding and analyzing the noises he is quoting as a sentence, just as he understands and analyzes a sentence, a string of noises, that comes to him from someone else. It is in this process that the language/metalanguage distinction is crucially involved.

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