

APPARENT COUNTEREXAMPLES TO THE COORDINATE STRUCTURE CONSTRAINT:
A CANONICAL CONSPIRACY*

by

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1. In his discussion of the Coordinate Structure Constraint, Ross (1967) noted several English sentences which appeared to provide counterexamples to this constraint:

1. I went to the store and bought some whisky. (Ross's 4-100a)
2. She's gone and ruined her dress now. (Ross's 4-107a)
3. I've got to try and find that screw. (Ross's 4-107b)
4. Aunt Hattie wants you to be nice and kiss your granny. (Ross's 4-107c)

That these are not subject to this constraint is shown by (5-8):

5. Here's the whisky which I went to the store and bought. (Ross's 4-101a)
6. Which dress has she gone and ruined now? (Ross's 4-108a)
7. The screw which I've got to try and find holds the frammis to the myolator. (Ross's 4-108b)
8. Which granny does Aunt Hattie want me to be nice and kiss? (Ross's 4-108c)

Ross pointed out several ways in which a sentence like (1) differed from a true conjoined structure, but as he was principally interested in showing that these were not true counterexamples (he suggested that they were not coordinate structures at the point where the rules in question applied, if ever), he did not discuss such sentences in their own right. Yet it is intriguing to investigate how many such "apparent counterexamples" there are in English. The purpose of this long squib is to point some of them out and to mention several interesting questions they pose for linguistic theory - questions which I am largely unable to answer.

2. The first type of example to be discussed is that exemplified by sentence (1): the first "conjunct" is a directional expression, and the second expresses some activity carried out at

the place to which the movement in the first is directed;

9. John went to Chicago and bought the books he couldn't get in Champaign-Urbana.

10. John came home and read his new books.

The second type is exemplified by sentence (2): the verb of the first "conjunct" is always go,¹ and the verb of the second is always non-stative (cf. (13) below); unlike the first type, however, no idea of motion is conveyed by this type:

11. Gulliver went and spilled cocoa all over his shirt.

12. We were going to have the picnic on Saturday, but then it went and rained.

13. *Charley went and loved Gertrude.

Sentence (4) is an example of the third type, in which the first "conjunct" contains a copula followed by a non-stative adjective, while the second contains a non-stative verb:

14. Henry was sneaky and told them he was spending a few days in the mountains to recuperate.

15. Ernest was finally being honest and saying he had lied to Oran.

The fourth type I want to discuss is not represented by Ross's examples. In this type the first "conjunct" might be considered an instrumental modifier of the second:

16. Lizzie Borden took an axe and gave her mother forty whacks.

17. Polly took some new curtains and brightened the room
immensely.

As with the other types, an NP may be moved out of the second "conjunct" in sentences such as these:

18. Who did Lizzie take an axe and whack to death?

19. ?Now here you see the room that Polly took some new curtains and brightened immensely.

While these four types agree in permitting movement of an NP out of the second "conjunct", they differ in that only Type I permits movement out of the first:

20. This is the restaurant where Jake goes every day and eats lunch.

21. *What did Gulliver do and spill cocoa all over his shirt?

22. *What did Dick tell Henry to be and tell them he was spending a few days in the mountains to recuperate?
23. *Over here you see the famous axe that Lizzie Borden took and gave her mother forty whacks.

Thus, even though the Coordinate Structure Constraint does not appear to be applicable in these cases, some other constraint(s) must be invoked to prevent NP movement out of the first "conjunct" in Types II-IV. A corollary to this observation is the suggestion that, even in cases which "look like" coordinate structures and where NP movement is blocked from either "conjunct", it may not be the Coordinate Structure Constraint which is responsible. I have in mind here a type which I shall refer to as Type IVa, which is similar to Type IV in that causation is expressed, but where the first conjunct expresses not instrument but means:

24. Spiro told a little joke and infuriated Paul.

It is impossible to move an NP out of the second "conjunct" in an example like this. However, for some reason an NP moved out of the first produces a sentence which is far more acceptable, although not fully so:

25. *Paul is the guy who Spiro told a little joke and infuriated.²

26. ??What was the joke that Spiro told and infuriated Paul?

3.0. It should surprise no linguist who takes semantics seriously that none of these apparent counterexamples involve logical conjunction. That is, since they are structurally different from cases of true conjunction, at least at some level of representation, we should not be surprised to find that a constraint involving coordinate structure does not apply to them. Nevertheless we have seen that NP movement is not freely permitted in these types, and therefore some other constraint(s) must be relevant. In order to determine what constraint(s) are relevant, however, we ought to have a better idea of how such sentences are to be analyzed. Unfortunately I cannot make any concrete proposals as to the proper analyses. Many problems are invol-

ved with each type.

3.1. Ross (1967) states that sentence (1) has a reading which is synonymous with (27)

27. I went to the store to buy some whisky.

suggesting that (1) be derived like other sentences with purpose clauses. However a more careful examination reveals a fundamental difference between a sentence like (1) and a sentence like (27). Compare (28) and (29):

28. I went to the store to buy some whisky, but the salesclerk persuaded me to buy Ripple instead.

29. *I went to the store and bought some whisky, but the salesclerk persuaded me to buy Ripple instead.

A sentence like (1) predicates two actions of the subject: in this case, going to the store and buying some whisky. A sentence like (27), on the other hand, asserts of the subject only that he went to the store. Thus (28) does not express a contradiction, while (29) does.³

Furthermore, while there is some kind of intimate connection between the two actions expressed in a sentence like (1), it is not clear that it is one of purpose. A sentence like (30) is impeccable

30. I came home and read the latest issue of Rolling Stone, even though I had intended to do the laundry.

and (31) shows that we are indeed dealing with the "reading" with which Ross is concerned:

31. The latest issue of Rolling Stone is what I came home and read, even though I had intended to do the laundry.

Yet (32), like (29), expresses a contradiction:

32. *I came home to read the latest issue of Rolling Stone, even though I had intended to do the laundry.

Having presented this evidence that sentences of Type I are not to be derived from sentences with purpose clauses, I defer to the reader the question of the correct analysis. I am totally baffled by these sentences.

3.2. The Type II sentences are particularly interesting since no assertion or entailment of motion is involved: this "con-

joined" structure is encoding something very remote indeed from logical conjunction. It seems to me that essentially such a sentence conveys an attitude of mild scorn on the part of the speaker with respect to the act asserted. Contrast the examples in (33):

33a. Clyde won first prize in the raffle.

b. Clyde went and won first prize in the raffle.

(33b) conveys a feeling of annoyance of some kind on the part of the speaker - or perhaps simply amazement because he would never have expected Clyde to enter a raffle in the first place. Note the incongruity in (34c) as opposed to (34a) or (34b):

34a. Clyde went and won first prize in the raffle, the old goat!

b. Clyde went and won first prize in the raffle, the lucky bastard!

c. ??Clyde went and won first prize in the raffle - he's quite an expert at odds.

A similar incongruity is seen in (35) and (36):

35. ??It looked as if the crops were going to dry up completely, but fortunately it finally went and rained.

36. ??She's gone and ruined her dress now, the poor thing.

(36) is certainly possible, but probably only if the speaker is being sarcastic.

It is hardly necessary to mention the problems involved with the sentences of Type II. What is a plausible semantic representation for such a sentence? How is the semantic representation related to such a "conjoined" structure?

3.3. Perhaps the most obvious problem involved with sentences of Type III is that of relating them properly to paraphrases like the following:

37a. Henry sneakily told them he was spending a few days in the mountains to recuperate.

b. Henry was sneaky in that he told them he was spending a few days in the mountains to recuperate.

c. Henry did the sneaky thing of telling them he was spending a few days in the mountains to recuperate.

38a. Ernest was finally honestly saying he had lied to Oren.

- b. Ernest was finally being honest in that he was saying he had lied to Oran.
- c. Ernest was finally doing the honest thing of saying he had lied to Oran.

Type III sentences and paraphrases such as the above are to be distinguished from the superficially similar (39) and (40):

39. Henry was sneaky to tell them he was spending a few days in the mountains to recuperate.

40. Ernest was being honest to say he had lied to Oran.

That is, Type III sentences, and those I have designated as paraphrases, make two assertions, while (39) and (40) make only one. (14) and its paraphrases, for example, assert both that Henry told them he was spending a few days in the mountains to recuperate, and that he was sneaky to do so. (39), on the other hand, presupposes that Henry told them he was spending a few days in the mountains to recuperate, and asserts only that he was sneaky to do so. Cf. (41):

41. Henry wasn't sneaky to tell them he was spending a few days in the mountains to recuperate - he was just following well-established diplomatic procedure.

Unlike (14) and its paraphrases, (39) could not be used to inform an interlocutor that Henry told them he was spending a few days in the mountains to recuperate. The fact that this proposition is presupposed is reflected in the necessity of pronouncing (39) and (41) with reduced stress on the to-phrase (cf. Schmerling 1971).

The problem now is, if Type III sentences are indeed making two assertions, how are they to be distinguished from ordinary conjoined sentences? What seems to characterize a sentence like this is that the adjective in the first "conjunct" is predicated of the act expressed in the second; it does not express an inherent property of the subject of the sentence. A sentence like (4)

4. Aunt Hattie wants you to be nice and kiss your granny. might thus be paraphrased as (42):

42. Aunt Hattie wants you to kiss your granny - it would be a nice thing to do.

Sentence (4) could perfectly well be addressed to a person who is not nice. It would not be interpreted as a request to the addressee to try to change his personality; it is simply a request to perform a particular act. Notice that if the addressee replied something like (43)

43. I'll be nice, but I won't kiss my granny.

he would probably get a spanking. On the other hand, a response like (45) to (44) might be taken as an indication that the speaker of (45) was obstinate, but not that he was a smart-aleck:

44. Make your bed, and put away your clothes.

45. I'll make my bed, but I won't put away my clothes.

The fact that the adjective in a sentence like this is predicated of the act expressed in the second "conjunct" explains why, in a Type III sentence, the adjective must be non-stative. Note the different properties of a superficially similar sentence like (46):

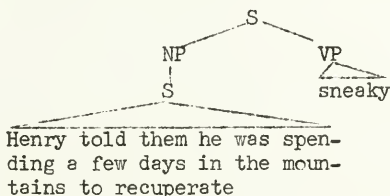
46. Betty is smart and speaks five languages.

A sentence like this is simply asserting two related things about Betty; it is not interpreted as saying that she is smart to the extent that she speaks five languages (but possibly stupid in other respects). Here the Coordinate Structure Constraint may not be violated:

47. *These are the languages that Betty_i is smart and speaks.

I have stated above that the adjectives in the first "conjuncts" of Type III sentences are predicated of acts expressed in the second, and such a statement might be taken as a suggestion that the underlying representation of, say, (14) be something like that schematized as (48):

48.



I do not believe this is correct, however, since Type III sentences and their paraphrases are possible only when the subject of what is here designated as the embedded S is human (or higher-animate). Cf. the examples in (49):

- 49a. *The train was sneaky and left five minutes early.
 b. *The train sneakily left five minutes early.
 c. *The train left five minutes early, and it was a sneaky thing to do.

(These are, of course, fine if the speaker is making a sarcastic, anthropomorphic reference to the train, which only proves my point.) That is, even though sentences like (50), which appear to have a sentential subject, are fully grammatical

50. Leaving five minutes early was a sneaky thing to do.
 they are possible only if the speaker assumes that the subject of this sentence is higher-animate. This would seem to suggest that even in the underlying representation of, say, (14), Henry is the subject of sneaky. At any rate, we are faced with the problem of accounting for the fact that the class of adjectives found in Type III sentences (including nice, sneaky, honest, clever, smart, stupid, and many more) - adjectives which seem to display a systematic stative/non-stative ambiguity - occur only in sentences in which the (superficial) subject is a higher-animate NP or a sentence whose own subject is a higher-animate NP.⁴

At this point I have nothing to say about Types IV and IVa, except to point out that any adequate analysis of causatives should be able to handle them.

4. I have been assuming in all the discussion in this paper that the various types of sentences presented here are not to be represented as conjoined sentences in semantic representation. It might be objected, however, that (with the possible exception of Type II) the interpretations I have indicated for these sentences are, in fact, not their literal interpretations but inferences which can be drawn from them. Such a position would probably be adopted by Grice, for example, who has objected, in important unpublished work, to claims that English has "different

and's".⁵ A Gricean approach to these sentences would claim that, for example, (16) asserts only Lizzie's actions of taking the axe and giving her mother forty whacks, and that the hearer of the sentence infers that Lizzie used the axe in doing the whacking. Grice would claim that (51) is evidence for this analysis:

51. Lizzie Borden took an axe and gave her mother forty whacks - although I don't necessarily mean to imply that she did the latter with the axe.

The Gricean approach, however, fails to account for the different syntactic properties such a sentence has with the instrumental interpretation, of the sort noted by Ross. Furthermore, it would claim that these sentences are vague between the "literal" interpretations and those suggested here. However, the so do-test indicates genuine ambiguity here. Thus, for example, sentence (24) would be possible

24. Spiro told a little joke and infuriated Paul.

both in a case where Spiro's joke-telling infuriated Paul and in a case where Spiro both told a joke and also infuriated Paul (by some unspecified means), and a sentence like (52) would be possible in four different situations

52. Spiro told a little joke and infuriated Paul, and so did Bob.

if these sentences were merely vague. This is not the case: (52) is possible only where the two comics infuriated Paul by telling a little joke or where they both told little jokes and infuriated Paul (by unspecified means).

This leads directly to my next objection to a Gricean analysis: the impossibility of using both in all these sentences with the interpretations under consideration. A Gricean analysis would have to explain this as being due to some ad hoc property of both. If these sentences are not derived from underlying conjoined sentences, on the other hand, the impossibility of both follows automatically from the Ross-Lakoff analysis of conjunction, since there is no AND preceding the first "conjunct" to be phonologically realized as both.⁶

Still another difference between sentences of the types

discussed here and true conjoined sentences is the form of the connective under negation: in the latter or appears, while in the former we still find and. The (a) sentences in each of the pairs below can only be interpreted as encoding true conjunction, whereas the (b) sentences have the interpretations we have been discussing:

- 53a. I didn't go to the store or buy the whisky.
 b. I didn't go to the store and buy the whisky.
- 54a. For once she didn't go or ruin her dress.
 b. For once she didn't go and ruin her dress.
- 55a. Don't be mean or tease Aunt Hattie.
 b. Don't be mean and tease Aunt Hattie.
- 56a. Lizzie Borden didn't take an axe or give her mother forty whacks.
 b. Lizzie Borden didn't take an axe and give her mother forty whacks.
- 57a. The occasion was remarkable in that Spiro didn't tell a little joke or infuriate Paul.
 b. The occasion was remarkable in that Spiro didn't tell a little joke and infuriate Paul.

Thus, at the very least one is forced to recognize a "special" and for negative contexts.

Finally, a Gricean account of these sentences cannot explain the different characteristic intonation these sentences have from that in true conjoined sentences. More on this below.

5. Even though I have been unable to give anything approaching a satisfactory analysis of the sentences treated here, I have chosen to discuss them anyway because of a fascinating - to me the most intriguing - question they pose: why should there be so many sentences which "look like" coordinate structures but aren't? Surely something more is going on here than a perverse intent on the part of the language to baffle the poor linguist and make him think the Coordinate Structure Constraint won't work.

There has been much discussion in recent linguistic literature about conspiracies, most of them in phonology. A parti-

cularly striking example of a syntactic conspiracy is discussed in (Green 1970), but many others appear (albeit not discussed in such terms) throughout transformational work on syntax - cases where several underlying-structure types converge on one surface-structure type, or target structure. Is this what is happening here? The answer to this question would seem to depend on whether all these sentences have surface structures indistinguishable from those of true conjoined sentences.

The only evidence I can find which bears on this issue is that provided by intonation, which might be interpreted as indicating that the surface structures are distinct. Cases of true conjoined sentences are distinguished by a shift in pitch on the last word of the first conjunct, followed by a brief pause. The pitch may shift up or down, but it does not remain level. Many of the examples given in this paper, as written, could be pronounced with such an intonation, but then they could only be interpreted as true conjoined sentences. If the grammatical-as-written examples of NP movement are pronounced in this way, they are ungrammatical. The sentences of the types discussed here all show a level pitch on the last word of the first "conjunct", with no pause. (The pitch level may, of course, change before or after this word; the important thing is that the word itself is pronounced on a level pitch.)

The above observation is evidence for distinct surface structures, however, only if it is assumed that intonation contour is uniquely determined by surface structure - and there is considerable evidence against this position. The first sort of evidence against it to be noted by generative grammarians, to my knowledge, involved cases where intonation contours could not be assigned on the basis of the surface structures independently motivated syntactic rules led linguists to posit: such cases led Bierwisch (1966) and Chomsky and Halle (1968) to propose ad hoc readjustment rules which would have the effect of altering surface structure. Other cases have been adduced where it appears to be impossible to assign the correct intonation contour on the

basis of surface structure; a well-known example is the "comma intonation" of non-restrictive relative clauses, an intonation not shared by restrictive relatives. Presuppositions provide another problem for this position. In sentence (58)

58. I didn't know John was here.

if the speaker assumes that the addressee knows that John was here he will pronounce John was here on a low monotone, and the falling intonation characteristic of declarative sentences will come after know; if he assumes that the addressee does not know this, he will not pronounce the complement S on a monotone, and the falling intonation is after John (see Schmerling 1971). Once again, there seems to be no way of assigning the correct intonation contour on the basis of surface structure alone.

The obvious conclusion to be drawn from these observations is that intonation contours cannot necessarily provide evidence for surface structure. Perhaps some types of intonation information can - but this remains to be demonstrated, to the best of my knowledge.

What, then, of our conspiracy? What I want to claim is that the rules applying in the derivations of these sentences "conspire" in a more fundamental way than by producing identical surface structures. What these rules produce might be considered canonical surface structures, or canonical strings. By canonical strings I mean strings (such as the "conjuncts" in the various examples here) which "look like" strings involving a minimal amount of derivation (i.e. involving a minimal number of rules relating surface form and semantic representation).⁷

If we look at the various examples in this paper, we note that the different "conjuncts" are strings of quite simple form: NP-V, NP-V-NP, NP-be-Adj. "Derived" categories such as prepositions and adverbs in -ly are notable for their absence. Special "grammatical morphemes" are eschewed in favor of independently-occurring lexical items. Type II is an especially striking example of this: instead of a special morpheme to indicate scorn we find the independently-occurring go (clearly the same lexeme -

note the same suppletive variants) even though no motion is necessarily involved in these cases.

The various sentence types discussed in this paper share an important feature: they are typical of colloquial speech. Paraphrases with surface strings deviating from the canonical types are invariably felt to be more complex somehow. The Type III cases, for example, can be paraphrased using adverbial forms, and the Type IV cases can be paraphrased with with-phrases, yet speakers agree that these paraphrases are more "complicated". The "complication" is obviously not one of length: in most cases the less "complicated" variant is actually longer. Rather, the "complication" seems to involve greater use of derived categories. It would appear then that the sentences discussed here illustrate a preference for canonical surface forms: the rules applying in the derivation of these sentences seem to "conspire" not so much to achieve a certain target structure but to avoid the creation of derived categories.

FOOTNOTES

* This is a greatly expanded version of part of a paper written for a course taught by Herbert Stahlke, whom I wish to thank for much helpful discussion. I am also grateful to Georgia Green for suggesting several stylistic improvements. All absurdities are of course my own.

¹ Similar sentences exist with take and and up and. I have limited my discussion to go and-examples, however, since only these are well-established in my idiolect.

² This is, of course, grammatical if Paul is understood as the indirect object of told but not with the interpretation under consideration here.

³ There are, of course, sentences with to-phrases which make two assertions, such as I came home (only) to find the apartment ransacked - obviously not involving purpose.

⁴ More specifically, the subject must be an agent. Thus the problem of the correct semantic representations for sentences such as these is intimately connected with the problem of the correct representation of the notion "agent".

⁵I do not wish to be unfair to Grice, and it may be that I am in fact setting up a straw man here. Nevertheless I feel that the sort of analysis I am arguing against is initially quite attractive and therefore worthy of discussion.

⁶This analysis is discussed in (Ross 1967, Chapter IV).

⁷I am using the term derivation in a rather loose sense to refer to the relating of semantic and surface representations, and by derived categories I mean categories needed in the latter and not in the former. The claims I am making here are independent of claims concerning the existence of an intermediate level of deep structure.

I am doubtless using the term canonical in a fairly original sense, but I haven't been able to come up with something better.

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