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## Assignment 9

### One

Consider sentence with coordinate structures such as:

(2a) They fired Sally and Georgia

Where *Sally* and *Georgia* are both DP members of the coordinate structure (notice that these two elements can switch places easily with each other—but may not switch with other elements). Also notice that wh-movement occurs easily in a sentence without this coordinate structure:

(11a) They fired Sally

(11b) Did they fire Sally?

(11c) Did they fire who?

(11d) Who did they fire?

However, attempting to do the same to one element in a coordinate structure returns erroneous results:

(12a) They fired Sally and Georgia

(12b) Did they fire Sally and Georgia?

(12c) Did they fire Who and Georgia?

(12d) \*Who did they fire and Georgia?

(12d') \*And who did they fire Georgia?

This occurrence can be seen in contrastive topicalization as well:

(13a) I like U2, but I can't stand Metallica

(13a') U2 I like, but I can't stand Metallica

(13b) I like U2 and Coldplay, but I can't stand Metallica

(13b') \*U2 I like and Coldplay, but I can't stand Metallica

(13b'') \*And U2 I like Coldplay, but I can't stand Metallica

### Two

Similarly, it can be seen that this behavior occurs even in proper subparts of coordinate pairs:

(2b) I depend on sugar and on caffeine

Where *on* is the preposition to the greater prepositional phrases *on sugar* and *on caffeine*.

*Depend* requires these prepositions as a complement:

(2b') \*I depend

(2b'') I depend on his funds

Compare sentence set (21) to sentence set (22):

(21a) I depend on sugar

(21b) Do I depend on sugar?

(21c) Do I depend on what?

(21d) On what do I depend?

(21d') What do I depend on?

(22a) I depend on sugar and on caffeine

(22b) Do I depend on sugar and on caffeine?

(22c) Do I depend on what and on caffeine?

(22d) \*On what do I depend and on caffeine?

(22d') \*And on what do I depend on caffeine?

(22d'') \*What do I depend on and on caffeine?

Where (21a) and (22a) differ merely in the addition of a conjunct—*on caffeine*—creating a coordinate structure with the additional help of *and*. However, while replacing *sugar* with *what* in set (21) yields a grammatical sentence, the same cannot be said for set (22). No variation of movement can return a grammatical sentence in set (22). As *on caffeine* and *on sugar* are conjuncts within the same coordinate structure, both will yield identical results when undergoing the same algorithm.

Again, it similarly occurs with contrastive topicalization:

(23a) I can rely on Björk, but I can't rely on Erasure

(23a') On Björk I can rely, but I can't rely on Erasure

(23a'') Björk I can rely on, but I can't rely on Erasure

(23b) I can rely on Björk and on Madonna, but I can't rely on Erasure

(23c) %On Björk I can rely and on Madonna, but I can't rely on Erasure

(23c') %Björk I can rely on and on Madonna, but I can't rely on Erasure

(23c'') \*And on Björk I can rely on Madonna, but I can't rely on Erasure

Where (23c) and (23c') are only marginally grammatical (in my English). As *on Madonna* and *on Björk* are also conjuncts within the same coordinate structure, both will also yield identical results when undergoing the same algorithm.

### Three

But now notice:

(3a) Which book and which film did they criticize?

Recall that *criticize* requires a DP complement:

(3e) \*He criticized

(3e') He criticized me

Thus, in deep structure, the wh-elements, appearing at the left edge, must have began as a complement to *criticize*:

(3a') Did they criticize which book and which film?

Comparing (3a') to (3a), it is clear that the entire pair coordinate structure has moved, and it can be seen that both *which book* and *which film* appear at the left edge. This is unlike the movement seen earlier, where moving only one element was ungrammatical.

Applying this same logic to previous sentences proves to be grammatical:

(13c) Coldplay and U2 I like, but I can't stand Metallica.

It seems that coordinate structures behave as islands within themselves, but can similarly move like other constituents when moved wholly.

### Four

But this logic behaves slightly different in wh-questions with identical wh-constituents:

(12c) Did they fire Who and who?

(12c') Who did they fire?

(12c'') Who and who did they fire?

Where (12c') sees the presence of only one wh-element despite being able to prompt the response "Sally and Georgia". (12c'') is also acceptable but demands two entities from the speaker, and may sound stilted. The following sentence reveals more about this phenomenon:

(4) Which movie do you think Sally will like and Georgia will dislike?

Recall that *like* and *dislike* require a DP complement:

(31) Sally will like that movie

(32) Georgia will like this movie

Thus, in deep structure, something must appear here:

(4a) Do you think Sally will like this movie and Georgia will dislike that movie?

We can replace *this movie* and *that movie* with wh-words:

(4a) Do you think Sally will like which movie and Georgia will like which movie?

But, when wh-movement occurs, only one wh-element appears at the left edge, as seen in sentence (4).

Also notice:

(5a) \*Which movie do you think Sally will like and Georgia will dislike it?

(5b) \*Which movie do you think Sally will like it and Georgia will dislike?

Where *it* leaves sentences (5a) and (5b) ungrammatical; but its removal yields the grammatical sentence (4).

Compare this to a similarly constructed sentence with *it*:

(4b) Do you think Sally will like this movie and Georgia will dislike it?

(4b') Do you think Sally will like which movie and Georgia will dislike it?

(4) Which movie do you think Sally will like and Georgia will dislike?

A movement from (4b') must return (4) to remain grammatical (compare these against sentences in set (5)). Thus, when similar sentences are conjoined in a coordinate structure, identical wh-words may fold into one as they appear at the left edge.

This behavior is seen not just with wh-words, but other lexical elements as well. Consider:

(9) Which car will Billy choose and his parents pay for?

The internal structure of (9) can be more clearly seen with a small change:

(9a) Which car will Billy choose and his aunt pay for?

(9a') \*Which car will Billy choose and his aunt pays for?

Where *pay* may not inflect for the third person singular. Thus, *will* must have some sort of commanding presence over *pay*; however, it can be seen in (9a) that *will* occurs only once. It may be that *will* occurs twice in deep structure but, much like *which car*, will combine into one to avoid redundancy:

(9b) Billy will choose which car and his aunt will pay for which car?

## Five

Finally, consider sentences such as:

(10a) Sally attended the demonstration and was arrested (by the police).

(10d) No prisoners were found guilty or confessed to any crime.

Dissecting the constituents within the coordinate structure of (10a) provides us with these two sentences:

(10e) Sally attended the demonstration

(10f) Sally was arrested (by the police)

But interrogation of the passive sentence (10f), by our current understanding of the passive structure, reveals the following as deep structure:

(10f') The police arrested Sally.

While *attended the demonstration* and *was arrested by the police* are both verb phrases—and can thus be easily paired in a coordinate structure—the latter constituent does not occur as a verb phrase in deep structure:

(10g) \*Sally attended the demonstration and the police arrested her.

Our current understanding of coordinates does not allow for this to occur, as *the police arrested her* assumes outright an entirely separate identity different from the VP *attended the demonstration*—it thus cannot be a member of a coordinate structure with the VP

The same is true for (10d):

(10d') \*Δ found no prisoners guilty or confessed to any crime.

Where (10d') is only grammatical if Δ is the non-confessor. However, it is meant to be understood that the prisoners were non-confessors.