Non-Constituent Coordination: Prosody, Not Movement

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Non-constituent coordination (NCC) has always been a topic of interest in generative grammar. In (1), the single-underlined NP in each conjunct does not form a constituent with the non-finite rationale clause (double underline). The NP is the object of the embedded verb, while the rationale clause modifies the matrix VP. Such examples are problematic for the view that coordination only targets constituents.

There are basically two current approaches to NCC. One with a long history involves left-edge ellipsis of a non-constituent. This analysis says that apparent instances of NCC are actually coordination of larger categories, say VP in (1), but a process of left-edge ellipsis can delete a linear string starting from the left edge of a non-initial conjunct, provided it is identical to a corresponding string in the first conjunct (e.g., Wilder 1997, Beavers and Sag 2004, Hofmeister 2010). An alternative movement analysis that does without non-constituent processes altogether has been proposed recently, by Frazier et al. (2012) and Sailor and Thoms (2013) (ST). In this alternative, the constituents that are pronounced in the second conjunct, in this case *an astronaut* and *to impress Bill*, undergo movement to the edge of the second conjunct, which again is larger, either VP or CP. The constituent out of which the two XPs moved is then elided.

I show that while the movement analysis is initially attractive, it runs into insurmountable problems. I propose instead that the way ellipsis works is that it targets a constituent XP and deletes all but the head, or most prominent sub-constituent, of XP. XP can be defined either syntactically or prosodically. So, in sluicing, a CP is targeted, and its most prominent syntactic subconstituent, the wh-phrase in Spec-CP, is stranded while everything else is deleted. (This immediately explains why elements in C are not stranded, a recalcitrant problem for TP ellipsis theories.) In VP ellipsis, a VP headed by an auxiliary is targeted, and all but the auxiliary verb that heads that VP is elided (explaining why VP ellipsis requires a licensing Aux). In coordination, a prosodic constituent is targeted rather than a syntactic one. In the example in (2), the sentence has to be pronounced with heavy stress on *Monday* in the first conjunct and *Tuesday* in the second conjunct. There must not be any stress preceding *on Monday*. On first reading the sentence, it is easy to stress *a fish*, which then leads to a garden path effect and necessitates reparsing the sentence. I take this to indicate that prosody plays a crucial role in NCC. Each conjunct is parsed into an intonational phrase (iP) as shown, with the head in square brackets. All but the head of the first iP in the second conjunct is deleted, as shown, since it is identical with the initial iP in the first conjunct minus its head. (Note that *and* is incorporated into the prosodic constituent following it, but I assume this takes place following deletion.)

Different Predictions. First, focusing something in the shared material renders NCC ungrammatical, because it disrupts the required prosody. But it does not affect movement (3). Second, sub-parts of compounds can be coordinated but cannot be extracted (4). Third, ST present relative clause islands as an argument for movement. However, some sub-constituents of relative clauses can be coordinated (5). Fourth, Frazier et al. (2012) and ST argue that the possibility of P-stranding strongly implicates movement. However, the preposition can only be deleted in English if it is leftmost in the non-initial conjunct, while there is no such restriction on movement (Dowty 1988; see 6). Additionally, PPs that have shifted to the right are islands to movement, but they allow NCC (7). Fifth, NCC of CPs does not pattern with extraction of CPs. For instance, verbs that do not permit NP objects in addition to CPs do not allow their complement CPs to move (e.g., Alrenga 2005). If movement were involved in NCC, we would then expect that it would not be

possible to coordinate the CP complement of one of these verbs along with a non-constituent chunk. This is false (8–9). <u>Sixth</u>, some TPs are acceptable in NCC, despite being immovable, contra ST (10).

All of these data indicate that the movement plus deletion analysis is incorrect, while the prosodic deletion account predicts the facts. The prosodic deletion account also fits with a uniform view of ellipsis, as explained above, but where the targeted constituents can be syntactic constituents or prosodic ones.

(1)   I claimed that I was a spy <u>to impress John</u> and <u>an astronaut</u> <u>to impress Bill</u>. (Sailor and Thoms 2013)

(2)   a.   Mary caught a fish on MONday with a fly rod and on TUESday with a spear. (Dowty 1988)

     b.   (Mary caught a fish [on MONday]) (with a fly rod)
         (~~Mary caught a fish~~ [on TUESday]) (with a spear)

(3)   a.   * I claimed that only I understood calculus to impress John and Ancient Greek to impress Bill.

     b.   What did you claim that only you understand?

(4)   a.   Brandi eats tuna salad SANDdwiches with mustard and WRAPS with mayonnaise.

     b.   * What does Brandi eat tuna salad with mustard?

(5)   a.   I disproved theories held by WITTgenstein last year and EINstein this year.

     b.   * Who did you disprove theories held by last year?

(6)   a.   Mary caught a fish with a spear and a rabbit with a snare.

     b.   * Mary caught a fish with a spear and a rabbit a snare.

     c.   What did she catch a rabbit with?

(7)   a.   * What did they depend last summer on?

     b.   They depended last summer on their wits for food and their quickness for protection.

(8)   a.   * That the moon was made of cheese, Billy insisted.

     b.   Billy insisted that the earth was flat on Tuesday and that the moon was made of cheese on Wednesday.

(9)   a.   * That we had crossed the equator, Sandy reasoned.

     b.   Sandy reasoned that it would rain by studying the clouds and that we had crossed the equator by studying the stars.

(10)   a.   Eve is praying for John to win with her fingers crossed and Bill to lose with a muttered hail Mary.

     b.   * John to win, Eve is praying for.

References

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