

# Move it to Spec&P and it'll work

## The syntactic side of Conditional Conjunction

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## Conditional Conjunction

Some cases of coordinate clauses can convey the meaning of a conditional statement. These constructions are called Conditional Conjunctions (CC).

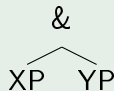
- (1) You come one step closer and I'll hit you in the face.  
↔ If you come one step closer, I'll hit you in the face.
- (2) You press the space bar and the little plumber jumps.  
↔ If you press the space bar, the little plumber jumps.
- (3) Bill comes home early and his wife will have a big problem.  
↔ If Bill comes home early, his wife will have a big problem.

## An exhaustive typology of clausal relations?

1. Subordination:



2. Coordination:



- ➔ Conditional Conjunctions seem to violate this dichotomy since they seem to be in between these two categories.

## Some general properties of CCs:

- Both conjuncts in CCs seem to be quite restricted in size. They can neither be full CPs (cf. (4-b)) nor vP/VPs (cf. (4-c)).

- (4) a. You know that you eat too many carrots and you turn orange.  
✓ has the CC-reading
- b. You know of course that you eat too many carrots and that you turn orange  
✗ does not have a CC-reading
- c. You eat too many carrots and turn orange  
✗ does not have a CC-reading

- Even though they are predominantly used in present tense, CCs can, under certain circumstances, occur in past tense.
- (5) Back in those days, schools were strict: you came one minute too late and you got detention for a week.
- However, it seems that tense in both conjuncts must be identical.
- (6) If he boarded the plane yesterday, he will be here soon.  
≠ He boarded the plane yesterday and he will be here soon.

Even though CCs look like coordinate clauses on the surface, they can neither undergo Right Node Raising nor Gapping.

- (7) \*Big Louie finds out about \_ and Big Louie puts a contract on \_, that guy who stole some loot from the gang.
- (8) \*Big Louie steals one more car radio and Little Louie the hubcaps.

(Culicover and Jackendoff, 1997, 198f)

According to the analysis proposed by Culicover & Jackendoff, the apparent mismatch between syntax and semantics of CCs has to be taken at face value: CCs are syntactically coordinate and semantically subordinate.

### Culicover & Jackendoff (1997)

**Syntactic Form:** coordinate

**Semantic Form:** subordinate

Mismatch



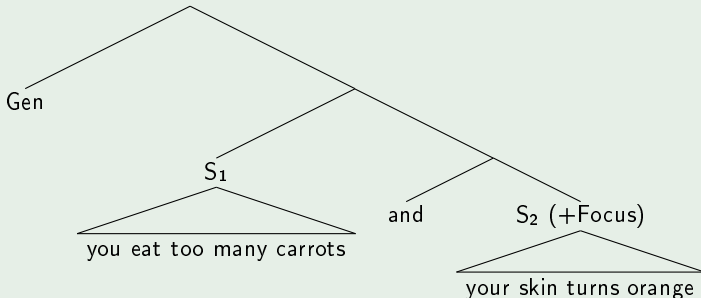
- Thus, the semantics cannot be derived on the basis of the syntactic output. They must be unrelated structures.
- Construction cannot be derived with a Generative Syntax Approach.

## Keshet (2013)

Keshet provides a comprehensive semantic analysis for CCs. According to him, the structure for a sentence like (9) looks as follows:

(9) You eat too many carrots and your skin turns orange.

(10)





- A generic operator takes scope over an ordinary case of coordination.
- The first conjunct of this coordination is unfocussed while the second is focussed.
- Similar to conditional clauses, the unfocussed constituent may join the restriction of the generic operator. (cf. Kratzer (2012))
- The second conjunct expresses the nuclear scope of the operator.

➡ GEN [*Restriction* you eat too many carrots]  
    [*NuclearScope* your skin turns orange]

➡ A sentence like (9) is interpreted as:  
*Generally, in situations in which you eat too many carrots,  
your skin turns orange.*

Since not all CCs have a generic interpretation (cf. (11)), Keshet proposes a covert future operator which works in the exact same way as its generic counterpart.

(11) You come one step closer and I hit you in the face.

➡ *is represented as:*

FUT [*Restriction* you come one step closer]  
[*NuclearScope* I hit you in the face.]

➡ *and interpreted as:*

In future situations in which you come one step closer, I will hit you in the face.

Keshet provides a number of convincing arguments for his analysis but since he is mainly concerned with the semantics of CCs, he cannot derive why the construction behaves idiosyncratically in the syntax:

Even though the construction looks like an ordinary case of TP/IP-coordination on the surface, in some respects, it behaves like a subordinate construction:

- Extraction
- Binding
- Adverb Raising

## 1. Extraction:

With CCs, one can extract asymmetrically out of only one of the conjuncts:

- (12) a. ?This is the loot that you just identify \_\_ and we arrest the thief on the spot.  
b. ?This is the thief that you just identify the loot and we arrest \_\_ on the spot.  
(Culicover and Jackendoff, 1997, 206)

This is not possible with standard coordination:

- (13) \*This is the car that Mary sold and Peter bought a bike.

## 2. Binding:

Also, elements within the second conjunct can bind elements within the first one:

- (14) a. Another picture of himself<sub>i</sub> appears in the newspaper and John<sub>i</sub> will definitely go out and get a lawyer.  
b. You give him<sub>i</sub> enough opportunity and every senator<sub>j</sub>, no matter how honest, will succumb to corruption.  
(Culicover and Jackendoff, 1997, 202,204)

Again, this is completely impossible with standard coordination:

- (15) \*A picture of himself<sub>i</sub> appeared in the newspaper and John<sub>i</sub> bought a car.

### 3. Raising of Adverbs:

Also, we find that raising of adverbs from out of the second conjunct seems to preserve the meaning:

- (16) You come early enough and you sometimes get a seat.  
= Sometimes, you come early enough and you get a seat.  
(Keshet, 2013, 242)

Again, this is not possible with cases of garden-variety coordination:

- (17) Peter went to Denmark and Mary sometimes visited him.  
≠ Sometimes, Peter went to Denmark and Mary visited him.

## Interim Summary:

- The analysis in Keshet (2013) nicely derives the semantics of the construction but cannot do justice to the syntactic idiosyncrasies of CCs.
- Even though the construction looks like a clear example of coordination on the surface, with respect to binding, extraction and adverb raising, the construction does not behave as if it was coordinate but rather as if it was subordinate.

➡ In the following, I will present an analysis which is compatible with Keshet's semantic proposal and derives the syntactic peculiarities of CCs.

Culicover & Jackendoff (1997) argue that CCs cannot be derived in a Generative Syntax Approach because one structure cannot be both subordinate *and* coordinate.

▶ I argue that in a Minimalist system, they can (but only at different stages of the derivation).

## Hypothesis

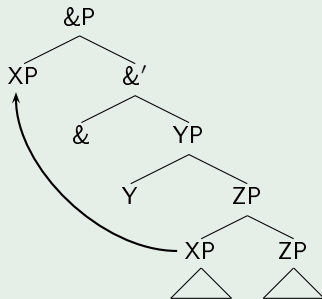
A clause can be merged as an adjunct clause (i.e. as an adverbial) and, at a later step of the derivation, be moved to the specifier of a coordination phrase.



The following tree illustrates the situation:

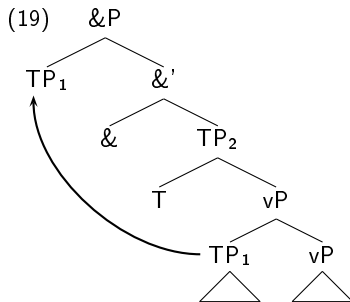
### Movement to Spec&P

(18)



Transferred to the present cases of CCs, I assume that...

- 1 both conjuncts are TPs (cf. (4a-c)).
- 2 the first conjunct is base-generated in the same position as normal conditional clauses (as vP-adjuncts (Haegeman 2003))
- 3 After the matrix TP is complete, an &-head is merged and the adjunct moves to its specifier.



## In a nutshell...

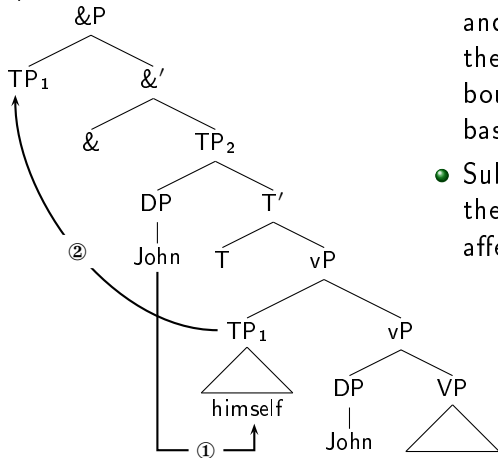
- A Derived Coordination Approach enables us to map a subordinate structure to a coordinate one by means of regular transformational rules.
- This way, we are able to account for the mixed properties of Conditional Conjunctions because...
  - ➔ subordinate properties of CCs can be deduced from processes and operations at an early step of the derivation,
  - ➔ coordinate properties of CCs follow from processes and operations at a later step of the derivation or its output.

## ① Binding:

- We have seen that CCs behave like adverbial subordinate clauses with respect to binding.
- Given the analysis proposed above, this is not surprising.
  - ➡ It has been known since Belletti and Rizzi (1988) that binding of anaphors and variable pronouns can apply at an early stage of the derivation:

(20) That picture of himself<sub>i</sub> bothered John<sub>j</sub>.

(21)



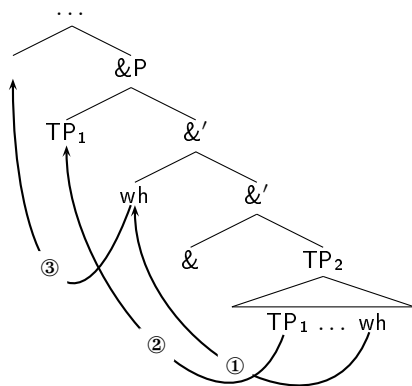
- Similarly to (21), anaphors and variable pronouns in the first conjunct may be bound as long as it is in its base position.
- Subsequent movement of the first conjunct does not affect the binding relation.

## ② Extraction:

According to some speakers, extraction is possible from both conjuncts of a CC (cf. ex. 10).

- ➡ Since extraction from the surface position of either conjunct would violate the Coordinate Structure Constraint (CSC, cf. Ross (1967)), extraction must have taken place as long as the first conjunct was in its base position.
- ➡ If extraction precedes movement of the first conjunct to Spec&P, no coordinate structure is present and the CSC is not violated.

(22)



- First, the extracted element (*wh*) moves to an intermediate specifier of the &-head (step ①)
- Second, TP<sub>1</sub> moves to Spec&P (step ②)
- Third, since *wh* is no longer part of either conjunct, it may move further without violating the CSC (step ③)

### Side Remark:

To derive extraction from the first conjunct, the operations in (22) are preceded by movement of *wh* out of the conditional adjunct.

- ➡ This step violates the Condition on Extraction Domains which prohibits movement out of adjuncts (Huang 1982).
- ➡ But it has been reported in the literature (cf. Etxepare (2002); Yoshida (2006); Taylor (2007)) that especially conditional adjuncts are sometimes more transparent than others:

(23) [ Which car ]<sub>1</sub> does Michelle believe if she buys t<sub>1</sub>, her insurance premium will increase?

Taylor (2007)



### 3 Raising of Quantified Adverbs:

In CC constructions, one can raise a quantified adverb out of the second conjunct without changing its meaning.

(24) You come early enough and you sometimes get a seat.  
= Sometimes, you come early enough and you get a seat.

This is not possible with ordinary garden-variety coordination:

(25) Peter went to Denmark and Mary sometimes visited him.  
≠ Sometimes, Peter went to Denmark and Mary visited him.

- Raising of quantified adverbs can violate the Coordinate Structure Constraint.
  - ➡ Raising must apply as long as the structure is a subordinate one.
  - ➡ If raising of the adverb precedes movement of  $TP_1$  to Spec&P, a violation of the CSC is voided.
- Why can't we raise a quantified adverb from a left conjunct?
  - ➡ It seems that unlike arguments (cf. ex. (21)) adverbs cannot be extracted out of adjuncts (they obey the CED).

## Summary:

In intended to show that...

- there is movement to Spec&P contrary to claims in the literature. Hence no additional stipulations about the nature and the properties of the &-head are necessary.
- this movement step can account for constructions which are in between subordinate and coordinate properties.
- one of these constructions is the so-called Conditional Conjunction Construction whose syntactic properties follow quite naturally from the Derived Coordination Approach

Outlook:

Open Questions are...

- whether the related constructions (conditional imperatives and OM-constructions) can be accounted for with the same mechanisms
- what the actual difference between argument and adverb movement is with respect to the CED
- whether the present analysis carries over to cases of asymmetric coordination as in (26).

(26) Here's the whiskey I went to the store and bought.

Ross (1967)

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