

The Syntax of Coordinate Structure Complexes

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1. Introduction

Coordinate Structure Complexes are coordinate structures that contain more than two conjuncts. (1) and (2) are both Coordinate Structure Complexes, although they vary in their interpretive breadth.

- (1) John and Bill and Mary went to the movies.
- (2) John, Bill, and Mary went to the movies.

Traditionally, the presence of an unpronounced coordinator has been posited to describe the difference between (1) and (2). However, the presence of an unpronounced coordinator does not explain the interpretive difference between (1) and (2). These interpretive differences are made clear by a pair of examples from Winter (2006),

- (3) Dylan and Simon and Garfunkel wrote songs in the sixties.
 - a. The three artists worked on their own solo projects during the sixties. (distributive)
 - b. The three artists wrote songs together in the sixties. (collective)
 - c. One artist wrote songs by himself while the other two wrote songs together. (subgroup)
- (4) Dylan, Simon, and Garfunkel wrote songs in the sixties.
 - a. The three artists worked on their own solo projects during the sixties. (distributive)
 - b. The three artists wrote songs together in the sixties. (collective)
 - c. # One artist wrote songs by himself while the other two wrote songs together. (subgroup)

(3) has three possible readings: a distributive, a collective, and a subgroup reading. (4) has two: a distributive and collective reading. Assuming the presence of an unpronounced coordinator in (4), the observed interpretive difference is unexpected.

In this paper, I explore an analysis of examples like (3) and (4) in which no covert syntactic coordinators are present. Instead of relying on covert material, I attribute the difference between (3) and (4) to details concerning the syntactic process Merge. I claim (3), a Repeated Coordinate Complex, is derived via a standard Merge operation. Additionally, I claim (4), a Multiple Coordinate Complex, is derived via Penultimate Merge, a principled Late Merge operation described by Safir (to appear). Attributing the distinction to Merge allows us to account for constructions like (3) and (4) without referring to construction-specific syntactic processes, without referring to construction-specific structure, and without referring to unpronounced syntactic material. Attributing distinct syntactic structures for each type of Coordinate Structure Complex makes interesting cross-linguistic predictions concerning syntactic processes like Agree and the Labeling Algorithm, predictions which are borne out.

In Section 2, I give further examples of the interpretive difference discussed above and address proposed solutions. In Section 3, I describe the assumptions I make about coordinate structures, largely based on work by Zhang (2010). In Section 4 I discuss the Peak Novelty Condition, a independently motivation revision to the Extension Condition proposed by Safir (to appear), and touch on Closest Conjunct Agreement. In Section 5, I discuss the consequences of my proposal for an analysis of coordinate structures like that given in Chomsky (2013).

* I'd like to thank Ken Safir, Mark Baker, Jose Camacho, and attendees of various reading groups and conferences at Rutgers for valuable feedback regarding this project.

2. Interpretive differences

To be further motivated in Section 3, I will often refer to three types of coordinate structure.

- (5) **Coordinate Simplex** – a coordinate structure consisting of one coordinator and two conjuncts.
Example: ‘Simon and Garfunkel wrote hits in the sixties.’
- (6) **Repeated Coordinate Complex (RCC)** — a coordinate structure consisting of $n - 1$ coordinators for n conjuncts while $n > 2$.
Example: ‘Dylan and Simon and Garfunkel wrote hits in the sixties.’
- (7) **Multiple Coordinate Complex (MCC)** — a coordinate structure consisting one coordinator for n conjuncts while $n > 2$.
Example: ‘Dylan, Simon, and Garfunkel wrote hits in the sixties.’

In the following examples, the presence of an unpronounced ‘and’ does not explain the disparity in available meanings between pairs. Repeated Coordinate Complexes have a full range of readings available, while Multiple Coordinate Complexes have a proper subset of those readings available.

2.1. Introduction by ‘both’ (Borsley (2005))

- (8) Both Hobbs and Rhodes went to the store. Coordinate Simplex
- (9) Both Hobbs and Rhodes and Barnes went to the store. RCC
- a. Both Hobbs and (Rhodes and Barnes) went to the store. (subgroup)
- b. Both (Hobbs and Rhodes) and Barnes went to the store. (subgroup)
- c. * Both (Hobbs and Rhodes and Barnes) went to the store. (collective/distributive)
- (10) * Both Hobbs, Rhodes, and Barnes went to the store. MCC

(9a) and (9b) show that Repeated Coordinate Complexes necessarily have an internal structure in which one conjunct is a Coordinate Simplex. ‘both’ is not compatible with a collective or distributive RCC. As a MCC only has collective or distributive readings, ‘both’ cannot be used with MCC constructions.

2.2. ‘each’ and ‘together’ (Borsley (2005))

- (11) Hobbs and Rhodes lifted the rock. Coordinate Simplex
- a. Hobbs and Rhodes each lifted the rock. (distributive)
- b. Hobbs and Rhodes lifted the rock together. (collective)
- (12) Hobbs and Rhodes and Barnes lifted the rock. RCC
- a. Hobbs and Rhodes and Barnes each lifted the rock. (distributive)
- b. Hobbs and Rhodes and Barnes lifted the rock together. (collective)
- c. (Hobbs and Rhodes) and Barnes lifted the rock together. (subgroup)
- d. Hobbs and (Rhodes and Barnes) each lifted the rock. (subgroup)
- (13) Hobbs, Rhodes and Barnes lifted the rock. MCC
- a. Hobbs and Rhodes and Barnes each lifted the rock. (distributive)
- b. Hobbs and Rhodes and Barnes lifted the rock together. (collective)
- c. * (Hobbs and Rhodes) and Barnes lifted the rock together. (subgroup)
- d. * (Hobbs and Rhodes) and Barnes each lifted the rock. (subgroup)

Again, only distributive and collective readings are available to MCCs. ‘each’ reinforces the distributive reading while ‘together’ reinforces a collective reading.

2.3. *Left-subordinating 'and' (Winter (2006))*

- (14) You drink another can of beer and I'm leaving. Simplex
 a. ? You drink another can of beer, Bill eats more pretzels, and I'm leaving. (MCC)
 b. You drink another can of beer and Bill eats more pretzels, and I'm leaving. (RCC)
- (15) Big Louis sees you with the loot and he puts out a contract on you.
 a. ? Big Louis sees you with the loot, you look guilty, and he puts out a contract on you.
 b. Big Louis sees you with the loot and you look guilty, and he puts out a contract on you.

In these examples¹, Winter describes the coordinator in each example as a kind of conditional. The Multiple Coordinate Complexes, (14a) and (15a), are semantically odd as one of the conditionals is missing. In contrast, Repeated Coordinate Complexes, (14b) and (15b), are fine because the second and third conjunct form a coordinate structure.

2.4. *Wide scope conjunction (Winter (2006))*

- (16) Here you're not allowed to dance and stamp your feet. Coordinate Simplex
 a. You may not do one thing but you may do the other.
 b. You may not do either thing.
- (17) Here you're not allowed to sing aloud and dance and stamp your feet. RCC
 a. You may not do two things but you may do one.
 b. You may not do three things.
- (18) Here you're not allowed to sing aloud, dance and stamp your feet. MCC
 a. You may not do three things.

In these examples, Winter describes two types of interpretations related to scope. Narrow Scope interpretations are those in which one thing may not be done but not to the exclusion of the other(s) (16a, 17a). Wide Scope interpretations are those in which every thing in the conjunction must not be done (16b, 17b, 18a). The Coordinate Simplex (16) and the Repeated Coordinate Complex (17a) allow both Narrow Scope and Wide Scope interpretations. (17b), and other Multiple Coordinate Complexes like it, may only mean,

- In regards to things *n*, you cannot do *n*.

In these examples, the overt presence of a coordinator has an immediate effect on the availability of certain readings. Coordinate Simplexes and Repeated Coordinate Complexes are open to collective, distributive, and subgroup readings, while Multiple Coordinate Complexes may only access collective and distributive readings. Assuming MCCs and RCCs share a common syntactic and semantic structure, the overt presence (or absence) of a coordinator does not explain the clear interpretive disparity between these constructions.

2.5. *Conjunction reduction*

A common proposal, perhaps best known from Lakoff & Peters (1969), claims (19) is derived from (20) via an ellipsis process which elides material common to both conjuncts from the first conjunct.

- (19) John and Bill went to the movies.
 (20) John went to the movies and Bill went to the movies.

However, the reading expressed in (21b) is not (easily) available to (19).

¹ I'd like to thank Benjamin Bruening for an enlightening conversation regarding examples like these.

- (21) John went to the movies and Bill went to the movies.
- a. John went to the movies and Bill went to the movies. They shared popcorn.
 - b. John went to the movies and Bill went to the movies. John went to a theater in Piscataway and Bill went to a theater in New Brunswick.

Assuming the interpretive difference between (19) and (21) is pragmatic, the addition of reflexives or reciprocals to (19) shows that (22) cannot be derived from (23) and condemns the analysis which posits that one conjunct is phonologically derived from the other.

- (22) John and Bill went to the movies together.
- (23) * John went to the movies together and Bill went to the movies together.

The interpretive difference between (19) and (21) is highlighted when additional conjuncts are introduced.

- (24) John and Bill and Sue went to the movies.
- (25) John and Bill and Sue went to the movies together.
- (26) John went to the movies and Bill went to the movies and Sue went to the movies.
- (27) * John went to the movies together and Bill went to the movies together and Sue went to the movies together.

The interpretive difference between (19) and (21) and between (24) and (26) cannot be captured by simply positing a shared underlying structure.

I take the preceding examples as arguments against positing covert coordinators in the syntax of Coordinate Structure Complexes. In addition, I show that accounts of coordination as a strictly clausal phenomenon are hard to maintain. This latter view is widely assumed in contemporary literature on coordinate structures, and I attempt to motivate the former in the following sections.

3. Coordinate structures

I adopt an analysis of coordinate structures by Zhang (2010), in which conjuncts relate to a coordinator as specifiers and complements to a head. I assume coordination is a standard syntactic process and refrain from appealing to processes or labels specific to coordinate structures. Appeals to special labels for coordinate structures are common in the literature, ConjP (Munn (1993)) and CoP (Johannessen (1998)) being well known examples. Additional appeals to special structure are made; famously, coordinate structures have been analyzed as ternary constructions. I assume, like every other syntactic construction, that coordinate structures are strictly binary branching.

I adopt Zhang (2010)'s terminology, referring to the conjunct in specifier position as a coordinate structure's External Conjunct (α) and the conjunct in complement position as a coordinate structure's Internal Conjunct (β). Coordinate Simplexes are the canonical coordinate structure, in which a coordinate structure's External Conjunct, is largely responsible for the coordinate structure's label.

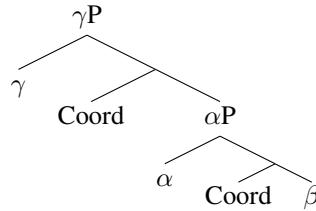
- (28)
-
- ```

graph TD
 alphaP["αP"] --- alpha["α"]
 alphaP --- Coord["Coord"]
 Coord --- alpha2["α"]
 Coord --- beta["β"]

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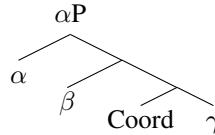
I propose both Coordinate Structure Complexes are derived from Coordinate Simplexes. After a Coordinate Simplex is formed, a Repeated Coordinate Complex is derived by treating a Coordinate Simplex as an Internal Conjunct for another Coordinate Simplex. In (29),  $\alpha$  and  $\beta$  are External and Internal Conjuncts, respectively, of a Coordinate Simplex. That Coordinate Simplex,  $\alpha P$ , is in turn a Internal Conjunct for another Coordinate Simplex,  $\gamma P$ .

(29)



I propose that Multiple Coordinate Complexes are derived via an application of Penultimate Merge, a principled Late Merge operation by which a conjunct is merged just below the undominated node of a Coordinate Simplex. In (30),  $\beta$  has been adjoined to the Coordinate Simplex after the derivation of a Coordinate Simplex, deriving a coordinate structure consisting of three conjuncts and one coordinator.

(30)



Again, using Zhang's terminology,  $\alpha$  is (30)'s External Conjunct, and  $\gamma$  is (30)'s Internal Conjunct. I call  $\beta$ , a conjunct inserted via Penultimate Merge, an Intermediate Conjunct. Intermediate Conjuncts only appear in Multiple Coordinate Complexes, as they are only inserted via Penultimate Merge.

Temporarily ignoring the details motivating Penultimate Merge, the result is two distinct syntactic structures: one structure for RCCs, another for MCCs. Each structure represents a distinct interpretation. Both Coordinate Structure Complexes are derived from a Coordinate Simplex, a distinct structure in its own right. At this point, we have an interesting 'what you see is what you get' analysis. Aside from accounting for MCCs without postulating an invisible coordinator, it isn't clear that anything of greater conceptual complexity has been obtained. In the next two sections, I describe compelling evidence from various syntactic processes that support my proposal.

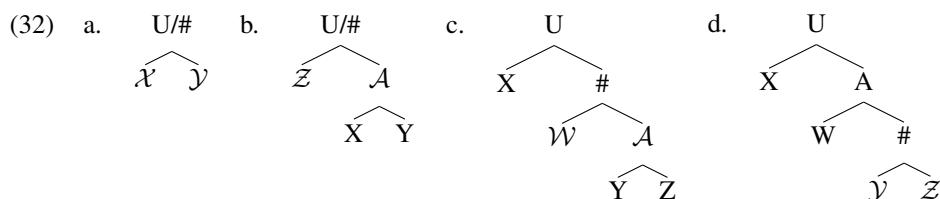
#### 4. The Peak Novelty Condition and agreement

The Peak Novelty Condition (PNC), described by Safir (to appear), is an independently motivated revision to Extension Condition outlined in Chomsky (1995). The PNC accounts for examples of Late Merge, crucially putting restrictions on where Late Merge may apply. Adopting Safir's Peak Novelty Condition licenses Penultimate Merge, a Merge operation that satisfies the PNC.

(31) **Peak Novelty Condition:** After every instance of Merge,  $M_i$ , the undominated node  $U$  of the resulting structure immediately dominates a node that  $U$  did not immediately dominate before  $M_i$ .

A well-known argument for the necessity of Late Merge operations is given in Richards (1997). Richards describes obligatory WH movement in Bulgarian as illustrating a phenomenon coined 'Tucking In'. In order to maintain the hierarchical order of WH items in Bulgarian, a language in which WH movement out of an in-situ position is obligatory, both WH items obligatorily move to specifier positions. The higher WH item moves to a specifier position, and the lower WH item obligatorily moves to a lower specifier position, a position in which the moved WH item is neither in-situ nor a potential target for processes like Agree.

The Peak Novelty Condition provides a principled account for Late Merge, requiring that the application of any Merge operation result in a novel node relative to the undominated node. Of the examples below, (36a), (36b), and (36c) represent constructions that satisfy the Peak Novelty Condition. (36d) does not.  $U$  represents the undominated node,  $\#$  represents a novel node, and the script characters represent items participating in Merge. In (32a),  $\mathcal{X}$  and  $\mathcal{Y}$  undergo Merge to form a node that is both novel and undominated. In (32b),  $\mathcal{Z}$  merges with  $\mathcal{A}$ ,  $\mathcal{A}$  being the result of a previous Merge operation, to form a node that is both novel and undominated. Penultimate Merge is shown in (32c), in which  $\mathcal{W}$  merges with  $\mathcal{A}$  to form a novel but not undominated, node.



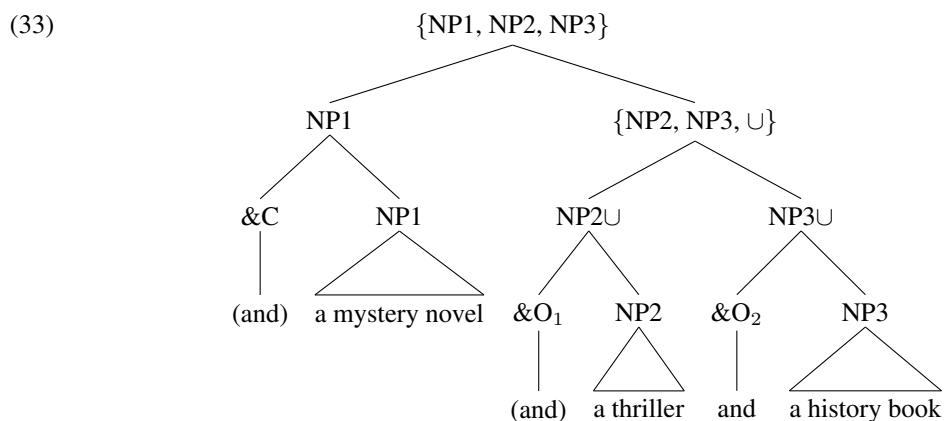
Z and Y Merge in (32d), but the resulting node is not novel relative to the Undominated Node and the PNC is not satisfied, resulting in an illicit structure. By adopting the Peak Novelty Condition, Late Merge operations are appropriately constrained, and applications of Penultimate Merge within a Coordinate Simplex results in the addition of Intermediate Conjuncts, conjuncts that neither undergo Merge with a coordinator nor are External Conjuncts.

Like the case of WH movement in Bulgarian, merging conjuncts via Penultimate Merge guarantees these conjuncts will never be targets for various syntactic processes. Treating Intermediate Conjuncts as analogous to lower WH items in Bulgarian meshes well with the observation that, cross-linguistically, what we might call ‘Middle Conjunct Agreement’ or ‘Intermediate Conjunct Agreement’ is unattested.

#### 4.1. Closest Conjunct Agreement

al Khalaf (2015) argues that agreement effects in Coordinate Structure Complexes can be best described via several construction-specific processes and additional covert material. The goal of the analysis is to account for the ephemeral phenomenon of ‘Closest Conjunct Agreement’, an agreement phenomenon in which a verb agrees with the conjunct closest to it, closest being defined in terms of linear order instead of the traditional conception of C-Command.

In an approach different from that presented here, al Khalaf (2015) describes noun phrases as obligatorily hosting optionally pronounced coordinators. The conditions under which this coordinator is pronounced is claimed to vary across language.



(33) represents the derivation of a Multiple Coordinate Complex in al-Khalaf’s system. &C represents a Closed Coordinator, a coordinator that, while present in the syntax, may not be pronounced. This reflects the intuition that coordinate structures in languages like English cannot begin with ‘and’. &O represents an Open Coordinator, a coordinator that may be optionally pronounced. However, the only truly optional Open Coordinator here is &O<sub>1</sub>, and it isn’t clear what requires &O<sub>2</sub> to be pronounced.

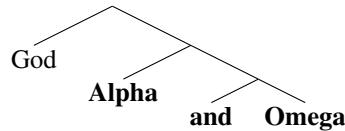
In an al-Khalaf style analysis, in which hierarchy is defined by linear order (structure being built left to right), one could imagine a situation in which an Intermediate Conjunct is interpreted as the closest conjunct to a verb. As far as I’m aware, Agreement with Intermediate Conjuncts is an unattested linguistic phenomenon. Due to their position within a Coordinate Complex, my proposal predicts Intermediate Conjuncts will never be targets for any Agree operation. I believe this prediction is borne out. I refer the reader to al Khalaf (2015) for more detail. Closest Conjunct Agreement is a phenomenon

that is hard to pin down, and the phenomenon itself is not well defined. To that end, I follow Linares (2012) in interpreting Closest Conjoint Agreement as a phonological repair mechanism for failed Agree operations.

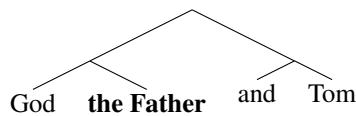
#### 4.2. Simple adjunction does not suffice

The Peak Novelty Condition and Penultimate Merge are required to give an appropriate interpretation to Intermediate Conjuncts, the ‘penultimate’ aspect making the difference. Regular adjunction, or Merge exclusively to the undominated node, derives a syntactic structure that is superficially similar to the desired structure derived via Penultimate Merge.

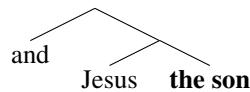
(34)



(35)



(36)

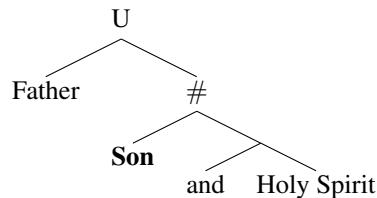


(34) is an appositive construction, in which ‘Alpha and Omega’, a Coordinate Simplex, is adjoined to ‘God’. In (35), ‘the Father’ is adjoined to ‘God’ to derive the appositive structure, ‘God, the father’. Finally, (36) is licit with the appositive reading in which ‘the son’ adjoins to ‘Jesus’. Cross-linguistically, coordinate structures of the form,

(37)  $[\alpha [\text{Coord } [\beta \gamma]]]$ 

are unattested, while appositives are commonly understood as adjuncts. A Multiple Coordinate Complex, in contrast, adjoins an Intermediate Conjunct.

(38)



While there exists a superficial similarity between appositive structures and Coordinate Complexes, the crucial difference lies in which Merge operation forms the structure under consideration. An easy way to untangle appositive structures, like those described in (34) – (36), and Coordinate Complexes (38) is to consider the cardinality of each structure. Although context may help disambiguate these examples, (34) refers to one entity. (38), a near-minimal pair, refers to three. In cases where the context doesn’t disambiguate, the prosodic break, orthographically represented by a comma, helps disambiguate Coordinate Complexes from appositive structures.

## 5. Chomsky (2013) and labeling

Chomsky (2013) describes coordinators as featureless. When a coordinator merges with a labeled constituent, the result is unlabeled. From the following structure,

(39)  $[\alpha \text{ Conj } [\beta \text{ Z W}]]$

either ‘Z’ or ‘W’ must undergo Internal Merge in order to be labeled. ‘Z’ is moved, and the following structure is the result.

(40)  $[_\gamma Z [_\alpha \text{Conj} [_\beta Z W ]]]$

What do  $\alpha$ ,  $\beta$ , and  $\gamma$  represent? Referring to (40), Chomsky says the following,

Now  $\beta$  receives the label of W, but what about  $\gamma$ ? It is, again, an {XP, YP} structure, hence unlabelable. But it needs a label. We know what the right answer is: the label is not Conj but rather the label of Z, typically shared with W; if the coordinated expressions are APs, then  $\gamma$  is an AP, etc. It follows that Conj and the construction  $\alpha$  that it heads are not available as a label, so that  $\gamma$  receives the label of Z. Chomsky (2013):46

In short, ‘Conj’ is unavailable as a label because ‘Conj’ has no features. I challenge this assumption with cross-linguistic data from Zhang (2010).

Zhang (2010) describes a special relation between a coordinate structure’s External Conjunct and its coordinator. Drawing on coordinators from languages like Mandarin Chinese, Turkish, and Japanese, Zhang distinguishes coordinators with intrinsic categorical features (Intrinsic Coordinators) from those that enter a derivation unspecified for categorical features (Inheriting Coordinators).

(41) Dai Jiaoshou xihuan he pijiu gen lu-cha.  
Dai Professor like drink beer and green-tea.  
“Prof. Dai likes to drink beer and green -tea.”

The Mandarin Chinese coordinator ‘gen’, a Intrinsic Coordinator, may only coordinate nominals. Zhang claims ‘gen’ enters a derivation already specified for said categorical features. Like any other syntactic head, the coordinating head ‘gen’ will project its categorical features to label the coordinate structure ‘DP’. ‘gen’ contrasts with a coordinator like ‘and’ in English, which may coordinate items of any lexical category.

(42) The ball is  $[_{AP} \text{red and } _{AP} \text{blue}]$ .

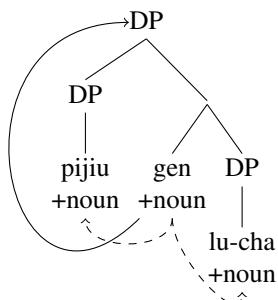
(43) John  $[_{VP} \text{drank a beer}]$  and  $[_{VP} \text{watched a movie}]$ .

(44) The hawk saw  $[_{DP} \text{a mouse}]$  and  $[_{DP} \text{a rabbit}]$ .

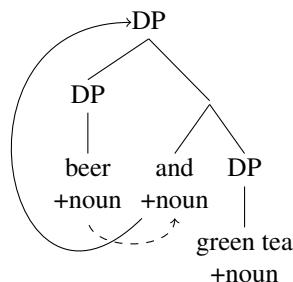
Like ‘gen’, ‘and’ projects its categorical features to label the coordinate structure it heads. Inheriting Coordinators, like English ‘and’, can be thought of as entering a derivation unvalued for categorical features. Instead of enforcing a restriction upon its External Conjunct, like ‘gen’, ‘and’ will inherit the categorical features of its External Conjunct. Like any other syntactic head, ‘and’ will project whatever categorical features it inherits.

The existence of coordinators like Mandarin Chinese ‘gen’ is at odds with syntactic theories of coordination like Chomsky (2013), which assume coordinators are devoid of features. ‘gen’, already specified for nominal categorical features, requires both its conjuncts to be nouns. Ascribing categorical features to the coordinator ‘gen’ begins to capture the special relationship between the External Conjunct and the coordinator.

(45) a.



b.



In (49a), ‘gen’, already specified for categorical features, checks both conjuncts for nominal features. If satisfied, ‘gen’ projects its categorical features to label its maximal projection, like any other syntactic head. In (49b), ‘and’, unspecified for categorical features, inherits them from its External Conjunct. After inheriting categorical features, ‘and’ projects its categorical features, like any other syntactic head.

### 5.1. Matching and Mismatching Coordination

In this section, I discuss Matching and Mismatching Coordination. Matching Coordination refers to coordinate structures in which all conjuncts are of the same syntactic type. A previous example from Mandarin Chinese is repeated below,

- (46) Dai Jiaoshou xihuan he pijiu gen lu-cha.  
 Dai Professor like drink beer and green-tea.  
 “Prof. Dai likes to drink beer and green -tea.”

On first blush, ‘gen’ seems to participate exclusively in Matching Coordination. As seen in (47) changing one nominal conjunct to an adjectival conjunct renders a coordinate structure with ‘gen’ illicit.

- (47) \* Dai Jiaoshou xihuan he pijiu gen VP.  
 Dai Professor like drink beer and VP.  
 “Prof. Dai likes to drink beer and VP.”

Coordinators like English ‘and’ may participate in either Matching and Mismatching Coordination.

- (48) John likes [<sub>DP</sub> beer] and [<sub>VP</sub> swimming in the ocean]. (Mismatched)  
 (49) John likes [<sub>DP</sub> beer] and [<sub>DP</sub> chocolate milk]. (Matched)

Cases of Mismatched Coordination with more than two conjuncts give us a chance to test the spec-head relation between a coordinator and its External Conjunct.

- (50) You can depend on . . .
- [<sub>DP</sub> John], [<sub>DP</sub> her assistant], and [<sub>CP</sub> that they will arrive on time].
  - John, that they will arrive on time, and her assistant.
  - her assistant, John, and that they will arrive time.
  - her assistant, that they will arrive on time, and John.
  - \* that they will arrive on time, John, and her assistant.
  - \* that they will arrive on time, her assistant, and John.

In the grammatical examples of Mismatched Coordination ((50a) – (50d)), the maximal projection must be a DP. In the ungrammatical examples, (50e) and (50f), the maximal projection is a CP. Why can’t the maximal projection in (50b) or (50d) be a CP? Although the CP conjunct is *closer* to the coordinator than DP (in linear terms), the CP conjunct is an Intermediate Conjunct and was not present at the point in the derivation where a coordinator gets categorical features (the point of a Coordinate Simplex). Intermediate Conjuncts, although superficially in a specifier position, might as well not exist as far as the coordinator is concerned.

Additional motivation for Intermediate Conjuncts comes from ‘gen’. Earlier, I assumed ‘gen’ participated exclusively in Matching Coordination. Some speakers of Mandarin Chinese have judged the following construction to be grammatical, given the reading provided in the gloss.

- (51) Dai Jiaoshou xihuan pijiu, qu xuexiao, gen lu-cha.  
 Dai Professor like beer go.to school and green-tea  
 “Professor Dai likes beer, going to school, and green tea.”

If this example is grammatical, it would lend further support to the idea that, in a Multiple Coordinate Complex, Intermediate Conjuncts may as well not exist as far as coordinators are concerned. Instead of exclusively participating in Matched Coordination, ‘gen’ may participate in Mismatched Coordination under the right conditions, again, presenting evidence for an analysis which treats Intermediate Conjuncts as elements that do not contribute to syntactic processes like Agreement or the Labeling Algorithm.

## 6. Conclusion

The first part of this paper was an attempt to describe the difference between examples like (3) and (4) without resorting to construction specific structure, construction specific processes, or covert material. The intermediate conclusion, after adopting the Peak Novelty Condition, were two structures: one structure representing three readings (a collective, distributive, and subgroup reading), the other representing two (a collective and distributive reading).

The appeal to the Peak Novelty Condition as a means of structurally distinguishing these readings lead to interesting observations concerning the status of Intermediate Conjuncts as they relate to syntactic processes (namely, Agree and the Labeling Algorithm). Distinguishing Intermediate Conjuncts from External and Internal Conjuncts makes an accurate prediction; Intermediate Conjuncts will never be targets for Agree, nor will the Labeling Algorithm need to account for their presence.

With observations from Zhang (2010) regarding the distinction between Intrinsic and Inheriting Coordinators, I’ve argued,

- Coordinators are heads that must be valued for categorical features.
- Intrinsic coordinators check their categorical features with against both External and Internal Conjuncts. Inheriting coordinators inherit categorical features from their External Conjunct.
- Intermediate Conjuncts, exclusive to a Multiple Coordinate Complex, have no effect on syntactic process like Agree or the Labeling Algorithm.

This proposal derives distinct syntactic structures for distinct semantic interpretations, without relying on non-standard processes, non-standard structure, or covert material.

## References

- Borsley, Robert D. (2005). Against conjp. *Lingua* 115:4, 461–482.
- Chomsky, Noam (1995). *The Minimalist Program*. The MIT Press.
- Chomsky, Noam (2013). Problems of projection. *Lingua* 130, 33–49.
- Johannessen, Janne Bondi (1998). *Coordination*. Oxford University Press.
- al Khalaf, Eman (2015). *Coordination and Linear Order*. Ph.D. thesis, University of Delaware.
- Lakoff, George & Stanley Peters (1969). Phrasal conjunction and symmetric predicates. Reibel, D. & S. Schane (eds.), *Modern Studies in English: Readings in Transformational Grammar*, Prentice-Hall, Englewood Cliffs, New Jersey.
- Linares, Carlo (2012). *The Dependency Axiom and the Relation between Agreement and Movement*. Ph.D. thesis, Rutgers University.
- Munn, Alan Boag (1993). *Topics in the Syntax and Semantics of Coordinate Structures*. Ph.D. thesis, The University of Maryland.
- Richards, Norvin (1997). *What Moves Where When in Which Language?* Ph.D. thesis, Massachusetts Institute of Technology.
- Safir, Ken (2010). Viable syntax: Rethinking minimalist architecture. *Biolinguistics* 4:1.
- Safir, Ken (to appear). The a/a’-distinction as an epiphenomenon. *Linguistic Inquiry*.
- Winter, Yoad (2006). Multiple coordination: Meaning composition vs. the syntax-semantics interface. Unpublished manuscript.
- Zhang, Niina Ning (2010). *Coordination in Syntax*. Cambridge University Press.

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