

The Lives of Coordinate Structures: Evidence from Distribution and Cases of Three (Or More) Conjuncts

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Abstract

Coordination has long been ignored in much of the previous syntactic literature. The goal of this article is to begin the task of explaining a variety of phenomena involving coordinate structures, such as their distribution and cases where there are three (or more) conjuncts. I begin by comparing two previous accounts of coordinate structures and investigate if and how each approach could account for the phenomena of the distribution of coordinate structures and cases where there are three (or more) conjuncts. I then conclude that these structures are best analyzed as being headed by the conjunction itself. Finally, I propose a set of minimalist features on the conjunction itself that can help us account for both the distribution and selectional properties of coordinate phrases.

Key words: coordination, conjunction, minimalism

1 Introduction

This paper critically evaluates two approaches to coordinate structures through a direct comparison of how these structures account for certain data. Specifically, this paper looks at the issue of how each theory may explain the distribution of such constructions, as well as the lesser-discussed issue of how these theories could account for cases in which three or more conjuncts are being coordinated. The first approach considered is *The Adjunct Approach* by Munn (1993). According to this approach, the conjunction is merged with the second conjunct, creating a Boolean phrase (BP; referred to here as &P), and that this phrase is then adjoined to the first conjunct (Figure 1a). The second approach considered is *The Conjunction Phrase Approach* (Kayne, 1994; Johannessen, 1998; Shepherd, 2014). This approach states that the conjunction is the head of the &P and that this head selects the second conjunct as its complement and the first conjunct as its specifier (Figure 1b).

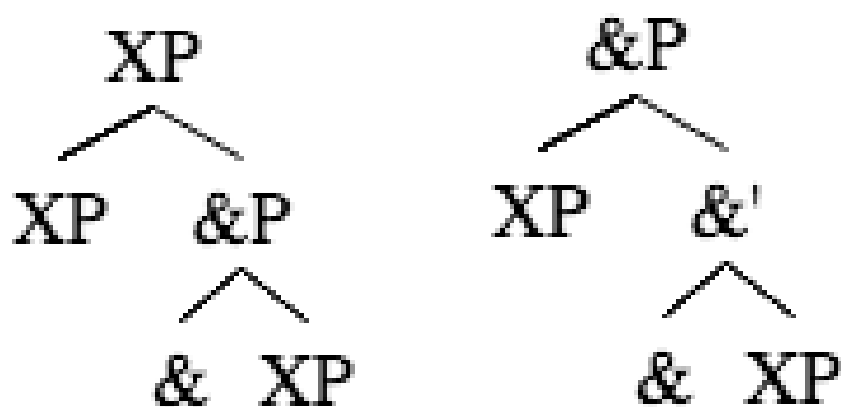


Figure 1. a. *The Adjunct Approach*

b. *The Conjunction Phrase Approach*

For consistency, all phrases headed by the conjunction *and* (&) are labeled as &Ps, although these were originally labeled BPs in the Adjunct Approach.

Each approach is analyzed through the investigation of how the approach is able to account for both the distribution of coordinate structures as well as cases involving three (or more) conjuncts. From this analysis of the two approaches, I conclude that coordinate structures are best analyzed as being headed by the conjunction itself i.e. The Conjunction Phrase Approach. I further argue that both the issues of selectional properties of conjunctions as well as the distribution of these phrases can be accounted for by positing minimalist features on the conjunction itself.¹

In Section 2, I outline the Adjunct Approach and showcases evidence in favour of this approach as well as outline its issues. In Section 3, I analyze the Conjunction Phrase Approach through a discussion of evidence in favour of and against this approach. Section 4

¹ That is, this paper assumes the minimalist syntactic framework first proposed by Chomsky (1995), and later presented by Adger (2003), Hornstein (2005), etc

then discusses whether each approach could account for cases involving three or more conjuncts and if so, how. Section 5 discusses if and how each approach could account for the distribution of coordinate phrases. In Section 6, I propose features on the conjunction *and*. Following these features, I account for both the selectional properties of these items and the distribution of conjunction phrases. This section also includes a brief discussion of the consequences of such a proposal. Finally, Section 7 summarizes the arguments made and provides direction for future work.

2 The Adjunct Approach

The main claim of this approach is that the structure of a coordinate phrase involves the conjunction, *and*, (labeled here as &) merging with the second conjunct (the XP on the right) to form a &P, followed by this &P being adjoined to the first conjunct (the XP on the left). This is demonstrated in Figure 1a, repeated below in Figure 2.

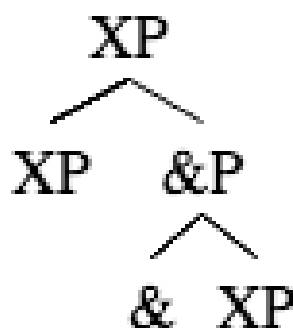


Figure 2. The general underlying structure of coordination under the Adjunct Approach.

To begin, Munn (1993) states that coordinate structures can be used to conjoin two phrases of different categories and that this is an argument in favour of the Adjunct Approach. This phenomenon is demonstrated in (1) below.

- 1) *Perot expects to run and that he'll win.*
(Munn 1993, p. 70)

In 1) above, we can see that the conjunction *and* conjoins the two phrases [*to run*] and [*that he'll win*]. From the presence of the overt complementizer *that* in the second conjunct, we can confidently say that this phrase is likely a CP. Although one could potentially analyze the phrase [*to run*] as being headed by a null C, this is not what is typically accepted in the literature (e.g. Adger, 2003; Hornstein, 2005). The reason for this is that *expect* is considered an ECM (exceptional case-marking) verb, where the subject of the embedded clause receives accusative case from the matrix verb (e.g. *Perot expects him to win*). Assuming that case checking cannot occur across a CP boundary, we would expect no null C in this case and that the phrase [*to run*] is indeed a TP. Therefore, Munn argues that the example in 1) appears to be a case of conjoining two unlike phrases – a CP with a TP.

It is not clear, however, that these are indeed two different categories. In 1), it appears that the first conjunct is instead a case of control. That is, *Perot* is both the agent of *run* and the experiencer of *expect*. Under the standard theory of control (Chomsky, 1981; Adger, 2003), we would then analyze this first conjunct [*to run*] as a CP with a controlled PRO. Following Chomsky & Lasnik (1993), PRO has a *uCase* feature that must be checked by a [*uCase: NULL*]. Such a feature is assumed to be found on a null C. Thus, in order for the PRO's case feature to be checked, this conjunct must be headed by a null C and therefore be a CP.

The second conjunct is clearly a CP with the presence of the overt complementizer *that*, and it could very well be the case that this is simply a case of two coordinated CPs. Another issue with this example lies in what happens if the example no longer contains the complementizer *that* as shown 2) below.

2) *Perot expects to run and he'll win.*

Here, we see that without the complementizer *that*, we cannot conjoin *to run* and *he'll win*, but instead can only get the reading of *expects to run* being conjoined with *he'll win*.

If, as Munn proposes, *to run* is indeed a TP, we should expect the elimination of the C *that* to make the coordination more acceptable. This is not the case as we can see in 2). This example then suggests that perhaps there is more to this example than Munn may have initially thought.

If, instead, it is the case that conjunctions can combine different types of phrases, why should this be evidence that the &P and the first conjunct are related by adjunction? It could be argued that if the two conjuncts were the complement and specifier of a single phrase, we would expect them to be more closely related (e.g. agreement) than if one were an adjunct above the phrase of the other. From this closer relationship, however, it does not necessarily follow that the category of the first conjunct should be identical to that of the second conjunct. In fact, it is quite typical that a certain head will accept specifier whose category is distinct from its complement. For example, the ditransitive verb *give* can take the DP argument [*a book*] as well as the PP argument [*to Mary*]. That is, even if we do see the coordination of two different categories, it does not rule out the Conjunction Phrase Approach as a viable option. More importantly, it is noted by Munn that these cases of distinct categories being coordinated are rare and only occur with very specific combinations and orderings. It is not clear, then, how adjunction would be able to account for such constraints on these categories and ordering.

A second argument in favour of the Adjunct Approach comes from what pieces we are able to extract from this structure, as seen in 3).

- 3) a. *John bought a book and a newspaper yesterday.*
 b. *John bought a book yesterday, and a newspaper.*
 c. **John bought a newspaper yesterday a book and.*
 d. **John bought a book and yesterday, a newspaper.*
 (Munn 1993, p.15)

In 3), in the conjunction [*a book and a newspaper*] (as seen in 3a)), it is possible to move the second conjunct with the conjunction out to the right edge 3b). In 3c), we cannot, however, move only the first conjunct and the conjunction, while leaving the second conjunct behind. Munn further argues that 3d) is also ungrammatical as the second conjunct has been moved without the conjunction itself. While this may be grammatical under a certain interpretation (i.e. with focus on *yesterday*), it is ungrammatical under the interpretation that both the book and the newspaper were bought yesterday. The facts in 3) suggest that the conjunction and the second conjunct form a maximal projection, and therefore form a constituent.

It is important to note that these facts have also been used in previous work as an argument for the Conjunction Phrase Approach (Shepherd, 2014). In their dissertation, Shepherd points out that these facts can be interpreted as evidence that the conjunction and second conjunct hold a Head-Complement relation, and thus also form a constituent. While this is true, this is also the case under the Adjunct Approach. In the Adjunct Approach, the conjunction and the second conjunct still hold a Head-Complement relationship, just as in the Conjunction Phrase Approach. The difference between the two approaches instead lies in whether this Head-Complement construction is a maximal projection and how the first conjunct is related to these two elements. This argument of whether the second conjunct and the conjunction form a constituent can therefore not help us decide between the Adjunct Approach and the Conjunction Phrase Approach.

The third argument of the Adjunct Approach is, I would argue, the strongest. This argument notes the fact that the distribution of these coordinate structures is clearly determined by what elements are being conjoined. This is demonstrated in 4) below.

- 4) a. [*Bill and Dave*] played catch → [*They*] played catch
 b. *Bill* [*ran a marathon and ate some cake*] → *Bill* [*did so*]

In 4a), we see a DP coordinated with a DP. This entire coordinate structure can easily be replaced by a simple DP pronoun. 4b) shows another example of this where our two conjuncts are instead VPs, and that this coordination can be replaced by the single VP *did so*. Here it can be seen that the distribution of the coordinate structure is determined not by the presence of a conjunction, but by the category of the conjuncts. This argument is discussed in more detail in Section 5, where I discuss how each theory of coordinate structure can account for distribution.

One issue with the Adjunct Approach that has not been brought up yet in the literature cited is that of agreement. Let us examine 5) below.

- 5) a. *John and Mary is*/are hiking.*
 b. *John is/are* hiking.*

In 5a), we see that in the case of conjoined DPs, we see plural agreement on the verb. It is clear from the contrast with 5b) that it is the presence of two conjuncts that triggers this agreement. If the first conjunct is simply an adjunct, we would not expect it to play any role in agreement. It is then not clear, under this approach, why we would see plural agreement in the presence of two conjuncts if one is simply an adjunct.

Although there have been several arguments made in favour of the Adjunct Approach, all have been questioned here. It is true that this approach can easily account for the distribution of coordinate phrases, however, the variety of other arguments put forth have some major flaws. The following section next outlines a different approach to such structures and discusses the arguments both in favour and against such an approach.

3 The Conjunction Phrase Approach

As mentioned in Section 1, the main premise of the Conjunction Phrase Approach is that a conjunction acts as the head of a conjunction phrase (&P), with the first conjunct being in the specifier position and the second conjunct in the position of the complement. This is illustrated in Figure 1b, repeated here as Figure 3.

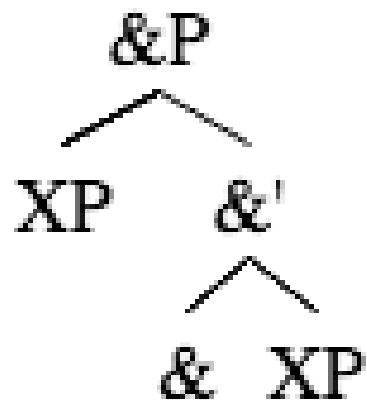


Figure 3. The general underlying structure of coordination under the Conjunction Phrase Approach

Several syntacticians have argued for such an approach (Kayne, 1994; Johannessen, 1998; Shepherd, 2014) for various reasons.

A first argument in favour of the Conjunction Phrase Approach is that provided by Kayne (1994) as a consequence of his theory of linearization. This theory states that the linear ordering of syntactic elements is directly determined by their c-command relationship. That is, any syntactic element which c-commands another, must precede it as well in linear order. In discussing the consequences of such a powerful claim, Kayne states that this theory of linearization can also account for the ordering of conjuncts in a coordinate structure. For example, in the flat structure hypothesis (Figure 4), the conjunction *and* c-commands both the first and the second conjunct which, according to Kayne's theory, would predict that the conjunction also precedes both conjuncts in terms of linear order. This is clearly not the case, and so Kayne argues that the flat structure hypothesis must be incorrect.

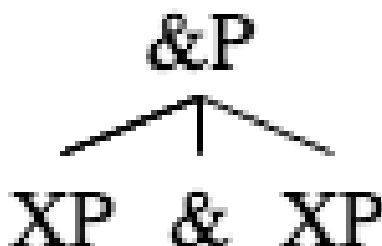


Figure 4. Coordination under the Flat Structure Hypothesis.

Kayne uses this comparison as evidence for the Conjunction Phrase Approach. It must be noted, however, that Kayne's theory of linearization does not consider the Adjunct Approach as it is stated here. Thus, although this theory has been used to argue for the Conjunction Phrase Approach in subsequent work (e.g. Shepherd, 2014), this work has not considered how Kayne's theory would rule out the Adjunct Approach. In the Adjunct Approach discussed in this paper, it is still the case that the first conjunct c-commands the conjunction, and the conjunction c-commands the second conjunct. Thus, it does not appear that the Adjunct Approach necessarily violates Kayne's theory. To conclude on this matter, although previous work has used Kayne's theory to argue in favour of the Conjunction Phrase Approach when compared to the flat structure hypothesis, it appears that this theory cannot help us decide between the Conjunction Phrase Approach and the Adjunct Approach.

The second argument that has been used in favour of the Conjunction Phrase Approach follows the arguments made by Shepherd in their (2014) dissertation. Shepherd explored the odd case marking seen in English DPs in coordinate structures and collected grammaticality judgements from native speakers. Several examples of this are given in (6).²

- 6) a. Me and him went shopping.
 b. She and he went shopping.
 c. She and him went shopping.
 d. *Him and she went shopping.
 e. She saw me and him yesterday.
 f. *I saw she and he yesterday.

From the data collected, Shepherd is able to make several generalizations. First, it seems that the first person singular DP *I* behaves differently from all other DP pronouns (see Shepherd, 2014 for arguments). After assuming that *I* should be analyzed separately, Shepherd makes

² These are not exact examples from Shepherd, but are instead used here to illustrate different possibilities of case markings in English according to Shepherd's study. Although Shepherd decided to make these generalizations, the data seems quite complex, and much of these acceptability judgements are subject to inter-speaker variation. Regardless of the exact judgements and generalizations made by Shepherd and their participants, the data does indeed show clear ordering constraints that may be difficult for the Adjunct Approach to explain.

the following generalizations. In a subject position, NOM+NOM, NOM+ACC, and ACC+ACC are all possible case combinations (6b, 6c, and 6a, respectively), while ACC+NOM is never possible (6d). In an object position, however, the only acceptable case combination is ACC+ACC (6e, 6f). Given this data, it seems that the case marking of the second conjunct is somewhat dependent on the case of the first conjunct – that is, in a subject position, we may only see NOM case on the second conjunct when the first conjunct also has NOM case. Shepherd argues that this is due to the fact that the first and second conjuncts form a chain and enter into an agreement relationship. Specifically, it is argued that the first conjunct's case feature is checked by the [*uCase: Nom*] on T (Chomsky, 1995) and that this NOM case feature is then passed on from the first conjunct to the second one through a Specifier-Complement relationship. This explanation for the case marking seen in English DP conjunctions is evidence that the first and second conjuncts do indeed have a much closer relationship than Munn (1993) originally proposed. On the Adjunct Approach, it is not clear why such case marking patterns seen in coordinate structures are attested. In a Conjunction Phrase Approach, however, it is quite conceivable how the Specifier and Complement of a single phrase could share case features. Thus, under the Conjunction Phrase Approach, we are able to explain the odd case marking patterns seen in coordinated DPs. It is unclear how the Adjunct Approach would account for the data in 6).

There are also several other arguments for such a structure that are not specifically outlined in the previous literature. First, as was stated in Section 2, Munn (1993) uses the fact that there are certain cases in which we see coordination between two phrases of different types as evidence in favour of the Adjunct Approach. An example of this is given in 1), repeated here as 7).

7) *Perot expects to run and that he'll win.*

Even if we agree that this is indeed a case of coordination of differing phrase types (see Section 2 for a detailed discussion), Munn (1993) himself states that these cases are exceptional and subject to ordering constraints. The fact is that the vast majority of cases (if not all) require that the two conjuncts are matching in category. A process of adjunction (as proposed by the Adjunct Approach) would not be constrained enough to predict this. Under the conjunction phrase approach, however, it is possible that this requirement for category matching and/or ordering constraints is related to some aspect of the Spec-Complement relationship in &Ps.

Another argument in favour of the Conjunction Phrase Approach is that a conjunct *must* attach two elements. Under the Adjunct Approach, the conjunction and the second conjunct together form a maximal projection, and the &P is an adjunct to the first conjunct. It is thus not clear under such an approach why it is required that we have two conjuncts and not simply one. This requirement is better explained by the Conjunction Phrase Approach, in that the head of a phrase may require both a complement and a specifier. Specifically, under the feature checking approach of minimalist syntax, we could assume that the head & has two features that must be checked or valued by different phrases (see Section 6 for a detailed discussion).

In the following sections (Sections 4 and 5), I investigate how each of these theories would hold up when trying to account for the structure of coordinate phrases with three or more conjuncts and, importantly, how each of these theories can account for the distribution of the coordinate structures discussed here.

4 Three (Or More) Conjuncts

This section discusses the consequences of cases with three or more conjuncts for each theory outlined in Sections 2 and 3. We will first consider the consequences for the Adjunct Approach in Section 4.1, followed by the consequences for the Conjunction Phrase Approach in 4.2.

4.1 Three (Or More) Conjuncts Under the Adjunct Approach

If we assume the Adjunct Approach, we could very well assume that a third conjunct simply means that we can optionally adjoin more conjuncts. Such a construction is depicted in Figure 5.

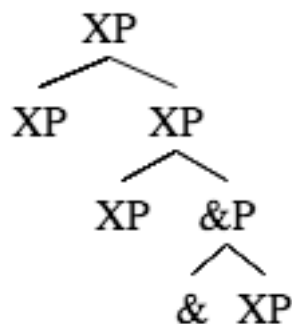


Figure 5. The general structure of a coordination of three conjuncts under the Adjunct Approach

Here, we see that the third conjunct is the complement of the conjunction and that the first and second conjuncts are adjuncts added on top of the &P. Such a structure is proposed for sentences like that in 8) below.

8) *John, Bill and Mary play soccer together.*

It is easy to see how this theory would then be able to account for the fact that we can add an infinite number of conjuncts, as they could just continue to be adjoined. This is exactly what is proposed briefly by Munn. It is also important to consider the fact that these cases may also contain an optional *and* between the first and second conjunct, as can be seen in 9).

9) *John and Bill and Mary play soccer together.*

The case shown in 9) can also potentially be explained by the Adjunct Approach. In this case, we would assume that the *and* between *John* and *Bill* selects the DP [*Bill and Mary*] as its

complement, forming the &P, and the DP John is adjoined to this &P. Such a solution, however, requires us to agree that a structure like that in 8) is underlyingly different than the one in 9). Each of these different structures are shown in Figures 6a and 6b below.

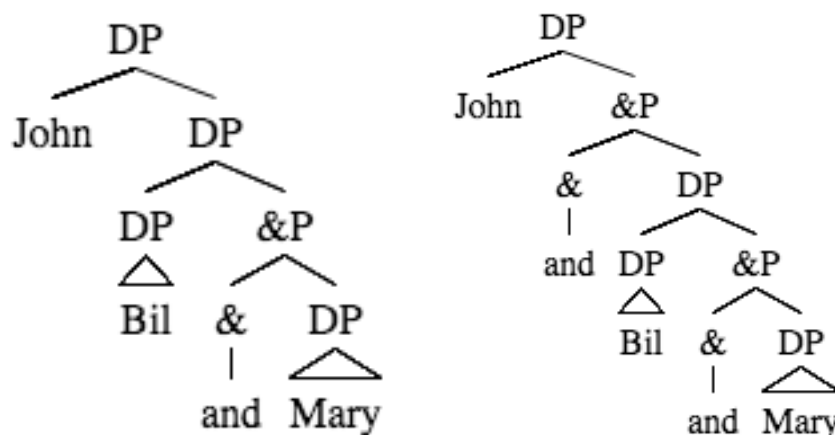


Figure 6. a. No optionally overt &

b. Presence of an optionally overt &

It seems odd to assume that these are entirely different structures rather than simply a difference in whether or not one chooses to overtly pronounce the higher conjunctions.

Another issue with the Adjunct Approach in light of three conjuncts is the fact that it assumes DPs are adjoined to other DPs in the case of three or more conjuncts. This is not typically a process in English, and therefore begs the question of when is such adjunction possible? It seems that a DP may only be adjoined to another DP when there is some DP lower that is adjoined to a &P. Such a constraint is very arbitrary and, therefore, does not seem to be a plausible explanation.

4.2 Three (Or More) Conjuncts Under the Conjunction Phrase Approach

If we apply the Conjunction Phrase approach to a case with three or more conjuncts, a null element is necessary. If coordinate structures are headed by the conjunction, each level of the coordinate structure must contain a conjunction. In a case of three conjuncts, only one overt conjunction is required. To account for these structures under this theory, we would then need to posit that an overt conjunction can project an infinite number of optionally null conjunctions. An example of such a derivation is given in Figure 7.

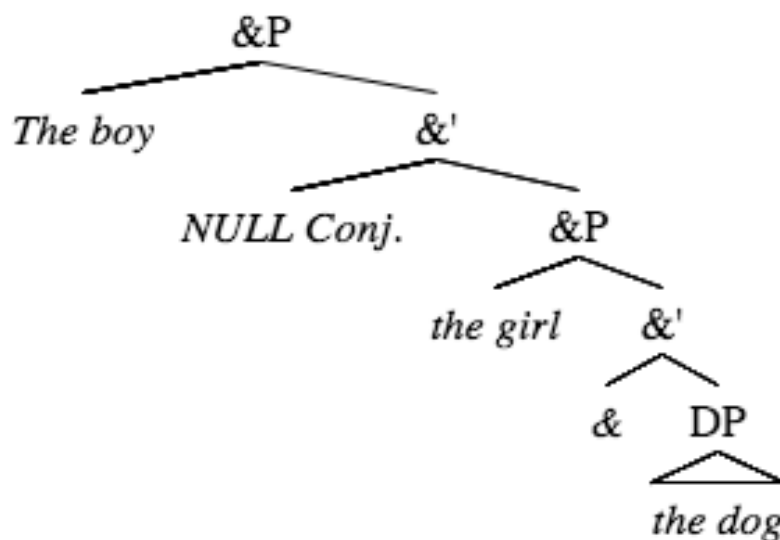


Figure 7. Derivation of a &P assuming null conjunctions.

In Figure 7, we see that the optionally null conjunction takes the lower &P as its complement and the highest DP as its specifier. Given that we already have a & head, it is simply an option of whether or not the speaker chooses to pronounce the higher conjunctions or not.

This is not the first time something like this has been proposed in the grammar. For example, it is commonly agreed that verbs show some sort of VP shell, or little *v* layer. In this case, we also see an element (the V) with overt content projecting an outer layer that is null (the little *v*; or VP shell analysis in earlier work (e.g. Adger, 2003; Hornstein, 2005)). A similar analysis has also been proposed for nouns, in that we have a little *n* shell above the overt N. The proposal for what we see in coordinate structure with three or more conjuncts then mirrors these phenomena. That is, we see an overt conjunction lowest in the tree and higher optionally null &-shells.

While this solution may seem elegant, it comes with major consequence. It was stated in Section 3 that in the vast majority of (if not all) cases, conjunctions take two elements of identical category. As was also expressed in Section 3, it seems that these cases where there is a category mismatch are highly exceptional and highly constrained. In the case of Figure 7 above, we see a conjunction selecting both a &P and a DP. These are clearly of different categories and this solution would therefore require us to accept yet another exceptional property of conjunctions – that they may conjoin two unlike elements in the case of three or more conjuncts. At face value, this seems like a major flaw in the current approach. This problem, however, stems from the issue of the distribution of such phrases. This is discussed in detail in the following section and a solution to this type of problem is proposed in Section 6 of this paper.

5 Explaining the Distribution

It is well known that the category of any syntactic element can be determined by its distribution. For example, any DP can be substituted by any other element of the same category – that is, a DP. This is demonstrated in 10) below.

- 10) DP[Bill] can do math.
 DP [The boy] can do math.
 DP[He] can do math.

In this section, we explore how the distribution of coordinate phrases can be accounted for under the two theories discussed in this paper. Section 5.1 looks at distribution under the Adjunct Approach, while 5.2 focuses on distribution under the Conjunction Phrase Approach.

5.1 Distribution Under the Adjunct Approach

As was noted briefly in Section 2, one argument in favour of the Adjunct Approach is the fact that it can account for the distribution of coordinated phrases. The reason for this is that this approach assumes that the head of the first conjunct is the head of the entire coordinate structure, and will thus pattern just as the first conjunct would on its own. Thus, if we have two DPs conjoined, the overall structure is headed by the higher DP, and will show the distribution of a DP. It can be seen that the distribution of coordinate structures then follows naturally from the Adjunct Approach.

5.2 Distribution Under the Conjunction Phrase Approach

Distribution of coordinate structures under the Conjunction Phrase Approach does not come as naturally as it does to the Adjunct Approach. If the head of the phrase is the conjunction itself, it is not clear why the conjunction phrase shows the distribution of whatever categories it immediately dominates. An example of this was given in 4), repeated here as 11).

- 11) a. [*Bill and Dave*] *played catch* → [*They*] *played catch*
 b. *Bill* [*ran a marathon and ate some cake*] → *Bill* [*did so*]

Here, we see that the &P in 11a) shows the distribution of a DP, while the &P in 11b) shows the distribution of a VP. Hornstein et al. (2005) argue that selectional properties should be blind to any features within the phrase that are not directly under the head. It seems as though the distribution of these phrases is instead depended on the category features of the complement and the specifier – not the head. At first glance, it seems that the specifier and the complement are being selected for here, making conjunction phrases different from all of other phrases we know. Thus, under this approach, the distribution of conjunction phrases is not so easily explained. In the following section, I provide an overall evaluation of both approaches to coordinate structure and a possible solution to the issue of distribution and selectional properties of conjunctions is proposed.

6 A Possible Solution

6.1 Evaluation and a Possible Solution

To begin this section, I provide a brief summary of the arguments discussed in the previous sections as well as a general evaluation of each at this point in time. I will first note that neither of the theories discussed here can successfully explain the selectional properties of conjunctions, which should be considered as a serious flaw.

It is also clear that each of these theories have some serious issues that must be explained before either can be considered satisfactory. The Adjunct Approach can easily account for the distribution of coordinate phrases. Aside from this, however, it seems that there are some serious problems. As discussed in previous sections, this approach fails to constrain the structure of coordinate phrases in any way. That is, it is not evident from this approach why a conjunction *must* have two conjuncts or why these two conjuncts must match in category. There are additionally issues of agreement in this approach.

The Conjunction Phrase Approach, on the other hand, can account nicely for the majority of the patterns we see in conjunctions. This approach can account for all of the issues discussed in this paper other than the distribution. The fact that the Conjunction Phrase Approach can account for everything, but the distribution of these phrases makes it quite appealing. This approach, however, also has the issue of explaining why higher &s (in cases with three or more conjuncts) connect &Ps with other XPs, seemingly violating the fact that conjunctions only conjoin elements of identical category.

As was stated in Section 4, this issue is directly linked to the issue of distribution. That is, to explain the distribution of &Ps, we must realize that they show properties of whatever it is they are conjoining. Since these phrases clearly behave as the items they conjoin in terms of distribution, it is not surprising that they seem to satisfy the selectional restrictions of higher &P shells (see Figure 7 from Section 4).

If there is then a way for this approach to explain the distribution of coordinate structures, it would fix a major flaw in the theory so far. Although several previous theories have attempted to predict the structures of coordinate phrases, exactly what features a conjunction may contain has yet to be proposed.

First, in order to account for the distribution of &Ps, I propose that there is some interpretable feature, $[X:]$, on & which must be valued by the category, X, of its complement through a c-command relationship. In essence, such a proposal assumes that conjunctions are without a category, and that this feature must instead be valued by one of its arguments. The purpose of using the variable X is to express the fact that & is impartial to which category its complement is.

As was discussed in Section 3, it is also the case that a conjunction requires two arguments. This being the case, I propose that there is a second feature on & that is similar to an uninterpretable selectional feature. Such a feature, having the shape of uX , must be checked by the specifier of &. The X on this feature now tells us that the category of the specifier must be identical to the category of the complement of & which is also now the

masquerading as an XP. Thus, it seems that higher &s are indeed correctly selecting for the correct features on the head of the &P.

Another interesting consequence comes with the coordination of DPs specifically. In a case where we have coordinated DPs in the subject position, it is clear that the entire &P moves up to satisfy the EPP and not simply the higher DP within the &P. This fact is exemplified in 12) below.

12) [TP Bill & John vP[<Bill & John> ate a sandwich]

If the head of the &P, &, has its category valued by its complement (a DP), it is then behaving just as a DP would. This &P is then the highest “DP” and we would expect the EPP to target it. It is clear that the consequences outlined here are far from complete, and must be further considered in future work. From this brief section, however, we can see how this proposal brings with it some clear benefits.

7 Conclusions & Future Directions

This paper has reviewed two different approaches to the structure of coordinate phrases. Specifically, I have argued that the Conjunction Phrase Approach, could account for the majority of phenomena discussed, but lacked the crucial ability to explain the distribution of such structures.

Given the fact that the Conjunction Phrase Approach can account for the majority of coordinate phenomena, while the Adjunct Approach cannot, it seems that the Conjunction Phrase Approach is a more viable option for a theory of coordination. I additionally argue that the Conjunction Phrase Approach can indeed account for both the distribution and the selectional features of coordinate structures if we posit certain minimalist features on the conjunction itself. Namely, we must posit a [X:] feature in order to account for the distribution, and a *u*X feature in order to account for the selectional properties of conjunctions.

Our work on conjunctions is far from complete. As stated in Section 6, a clear next step is to provide a more complete discussion of the consequences of the proposal made here. It was also stated in Section 6 that the exact mechanism of ensuring the complement and the specifier of & be of the same category is yet to be explored.

There are also several other issues that were not touched on at all in this paper. For example, this paper has (as have many others) only looked at the case of the conjunction *and*. The conjunctions *or* and *but* are not considered at all. In order for a theory of coordination to be complete, we must have an analysis that can account for the differences seen between different types of conjunctions as well.

Another limitation of the present paper is that it only considers English. It would be extremely beneficial to a theory of coordination for a future project to focus on documenting the behaviour of coordinated structures cross-linguistically. There are yet even more interesting questions we have left to solve when it comes to coordination. For example, there

seems to be some constraints on binding in coordination. In 13) below, we see that *himself* can only be co-indexed with *Tom*, but not with *Bill*.

13) *Tom_i likes Bill_j and himself_{i/*j}.*

The world of coordinate structures is one that has largely been ignored in the syntactic literature. As I hope is clear from the present paper, these structures are immensely complex. It can often be the case that such structures cause problems for theories of syntax (e.g. binding, agreement, case, etc.). Rather than ignore such structures, the present paper attempts to begin the difficult task of finding a place for these structures in a theory of syntax. Although these constructions are difficult to explain syntactically, they are not at all rare in the actual productions of speakers, and are therefore an important aspect of any syntactic theory. In order for a theory of syntax to be complete, we must be able to account for the strange lives of coordinate structures – the present paper aims to act as a first step in this pursuit.

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