The syntax of English comitative constructions[1]

Niina Ning Zhang
National Chung Cheng University
Lngnz@ccu.edu.tw
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This paper argues that in comitative constructions, two Determiner Phrases (DPs) and the word *with* form a complex nominal [DP_1 *with* DP_2] in their base-positions. Moreover, it establishes a distinction between two types of comitative constructions: symmetrical and asymmetrical. Unlike in symmetrical commitatives, DP_2 in asymmetrical comitatives denotes an appurtenance of the referent of DP_1. Other differences between the two types are that symmetrical comitatives always contain a plural feature and that in asymmetrical comitatives the cluster [*with* DP_2] is optional and the cluster [DP_1 *with* DP_2] may occur in preverbal subject positions and A-bar positions. My proposal is that in symmetrical comitatives the word *with* has features of [D, Plural, Case assigning], and takes DP_2 as its complement and DP_1 as its Specifier. In asymmetrical comitatives, by contrast, the word *with* is a regular preposition and the cluster [*with* DP_2] is a PP and an adjunct to DP_1. Finally, the paper also argues against an extraposition analysis of discontinuous surface word orders in comitative constructions.

Keywords: comitative constructions, coordination, extraposition, Case, plural, categorial features

1. Introduction

This paper studies a type of *with* construction in English in which the Determiner Phrase (DP) immediately following *with* (DP_2 henceforth) has the same animacy value as another DP in the clause (DP_1 henceforth). For instance, in the two examples in (1), DP_2 *Kim* is animate, so is DP_1 *Robin*; on the other hand, in the two examples in (2), DP_2 *the milk* is inanimate, so is DP_1 *the beer*. Such constructions are known in the literature as COMITATIVE CONSTRUCTIONS.

(1) a. Robin conferred with Kim.
    b. Robin sang with Kim.
(2) a. Peter compared the beer with the milk.
    b. Robin drank the beer with the milk.

In a comitative construction, the two DPs are either both necessary for a certain eventuality, or have an accompaniment relation in the same eventuality. In (1a), both Robin and Kim are necessary for the conference event, and in (2a), both *the beer* and *the milk* are necessary for the comparison event. In (1b) and (2b) DP_1 and DP_2 have an accompaniment or togetherness relation in the event.

The syntactic properties of English comitative constructions have been studied by Lakoff & Peters (1966, reprinted 1969; henceforth L&P), Fillmore (1968), Buckingham (1973), Walmsley (1971), Seiler (1974), Kayne (1994), and Stolz (2001), among others.[2] However, one basic syntactic issue is still not clear: what is the structural relation between DP_1 and the cluster [*with* DP_2]?

Considering the plural form of the predicate *is friends* in (3a), Kayne (1994: 66) suggests that its subject should also encode a plural entity. The surface subject of the sentence is however *John*, which encodes a singular entity. Kayne therefore assumes that the two nominals in this sentence, *John* and *Bill*, form a complex nominal in their base positions, as shown in (3b). This assumed complex, which

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[2] From a typological perspective, comitatives in the languages of Europe have now been studied by Stolz, Stroh & Urdze (2006).

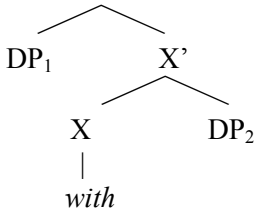
denotes a plural entity, is the real subject of the plural predicate *friends*. He claims that the surface order of (3a) is derived by the movement of *John* from this complex, as shown in (3c).

(3) a. John is friends with Bill.
b. [John with Bill]
c. $John_i$ is friends [t_i with Bill]

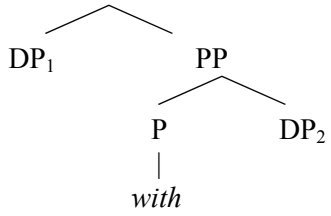
But on the same page (p. 66), he mentions a second possibility: the *with* in such examples might be introducing a verbal or adjectival complement, which means that [*with Bill*] in (3a) might not be part of any nominal complex, but rather a modifier of the predicate *is friends*.

In this paper, I will first adduce new arguments to support Kayne's constituency analysis in (3b), where DP_1 and the cluster [*with* DP_2] form a complex nominal in their base-positions, and thus the cluster [*with* DP_2] is not a VP adverbial. Secondly, I will distinguish SYMMETRICAL comitatives from ASYMMETRICAL comitatives, based on a series of syntactic differences between them. In order to account for the differences, I will propose that the two DPs of a symmetrical comitative are base-generated as in the complementation structure in (4a), as claimed in Kayne (1994), whereas the two DPs of an asymmetrical comitative are base-generated as in the structure in (4b), where the PP is a right adjunct of DP_1.

(4) a.



b.



My analysis differs from Kayne's (1994) in two major respects. One is that I identify two types of comitative constructions and propose an account of their differences. The other is that for the structure in (4a), Kayne (1994) proposes that the XP is a coordinate phrase, headed by either *and* or *with*, whereas in my analysis, the XP is a DP headed by *with*, which has the features [D, Plural, Case assigning]. Note also that this *with* shares [D] and [Plural] with regular nominals, and it shares [Case assigning] with regular prepositions.

Like Kayne, I claim that in the constructions where DP_1 is not adjacent to the cluster [*with* DP_2], as in (1) and (3), it is raised to the surface position. I will accordingly argue against an extraposition analysis of comitative constructions, such as that in (5).

(5) [John t_i] is friends [with Bill]$_i$

The paper is organized as follows. Section 2 provides new evidence for the structure in (3b). Section 3 presents the syntactic contrasts between symmetrical and asymmetrical comitative constructions. My accounts for the contrasts are put forward in Section 4. Section 5 examines comitative constructions with discontinuous word orders and argues against an extraposition analysis. Section 6 is a summary.

2. Comitative and coordinate nominal constructions

In this section, I argue that comitative constructions differ syntactically from coordinate constructions, but like the conjuncts of a coordinate nominal, the two DPs of a comitative construction are contained in a complex nominal in their base-positions.

In the generative syntax literature, the relationship between comitative and coordinate constructions has not been made clear. In Fillmore (1968), coordinate constructions are derived from comitative constructions, whereas in L&P it is just the other way around. In Kayne (1994), both constructions are derived from the same base-structure. It is claimed that the two nominals of a

comitative construction behave like conjuncts, and *with* behaves likes a conjunction. I will argue against this coordination analysis in §2.1. However, I will support in §2.2 the common claim made in Fillmore (1968), L&P, and Kayne (1994) that the two nominals in a comitative construction are base-generated in a complex nominal.

2.1. Differences

Comitative constructions differ from coordinate constructions in at least three respects, as detailed below.

2.1.1. DP_1 raising and the Coordinate Structure Constraint

In a comitative construction, it is always possible for DP_1 to be separated from the cluster [*with* DP_2]:

(6) a. John is friends with Bill.
b. John drank beer with Mary.
c. The apple is compared with the orange.

According to Kayne (1994), in this kind of examples DP_1 is raised out of the assumed coordinate complex. However, as pointed out by van Oirsouw (1987: 13), this raising of DP_1 out of the XP violates Ross's (1967) Coordinate Structure Constraint, which states that no conjunct may be moved.

2.1.2. The A-bar positions of the cluster [with *DP_2*]

The mobility of the cluster [*with* DP_2] in comitative constructions, as seen in (7), suggests that the cluster is different from the combination of a conjunction and a conjunct, which cannot move, as shown in (8) (Sledd 1959: 101).

(7) a. With which apple did Mary compare the orange?
b. (Together) with his mother, John went to a Chinese restaurant.
(8) a. John and his mother went to a Chinese restaurant.
b. *And his mother, John went to a Chinese restaurant.

This contrast in behaviour between the cluster [*with* DP_2] and the cluster [*and* DP_2] does not support Kayne's hypothesis that the structure of a comitative construction is the same as that of a coordinate construction.

In §4.1.2 and §4.2.2 below I will argue that in cases such as (7) the element that undergoes the A'-movement is not the constituent [*with* DP_2] alone, but the whole complex [DP_1 *with* DP_2], after DP_1 has moved out. This is a kind of remnant movement (see Baltin 2002, 2006: 734), in which part of a phrase is extracted, and then the rest of the phrase is moved. If *with* and coordinators behave the same way, one wonders why (8b) cannot be generated by the same derivation.

2.1.3. The occurrence of together *to the left of* with

In some comitative constructions, the adverb *together* may precede *with*. By contrast, genuine conjunctions can never be modified by *together*:

(9) a. A mother (together) with her two kids came.
b. A mother (*together) and her two kids came.

We conclude that *with* in a comitative construction is never a conjunction, and therefore English comitative constructions are not syntactically coordinate (contra the conclusion drawn from other languages by Camacho 2000 or Vassilieva & Larson 2005: 103, among others). Further differences between comitatives and coordinate constructions with respect to information structure will be adduced in §5.2.

2.2. Similarities

Despite the differences discussed above, comitative constructions and coordinate nominal constructions share a set of important properties that indicate that the two DPs are base-generated in the same complex nominal, so that the cluster [*with* DP_2] is not a VP adverbial. Among the properties listed in this subsection, the second and the third have been reported in L&P.

2.2.1. Overt presence of the cluster [with DP_2]

If the first conjunct is singular and the verb or predicate selects for a plural nominal, the presence of the cluster [*and* DP_2] is obligatory. This is shown in (10a) and (11a). Similarly, if DP_1 is singular and the relevant verb or predicate requires a plural nominal, the presence of the cluster [*with* DP_2] is obligatory. This is shown in (10b) and (11b).

(10) a. John *(and Bill) conferred.
b. John conferred *(with Bill).
(11) a. John compared Mary *(and Bill).
b. John compared Mary *(with Bill).

This shared property of coordinate nominals and comitative constructions shows that the cluster [*with* DP_2] in neither subject nor object comitative constructions is a VP adverbial.

2.2.2. The theta-role unification

In a coordinate nominal, the conjuncts cannot have opposite thematic roles (Johanessen 1998, among others): an agent and a patient cannot be conjoined. Similarly, comitative constructions show unification of theta-roles (L&P: 120). The theta-role unification of *Bill* and *John* in (12a) is explained if the two DPs are base-generated in a DP complex, which has a single thematic relation with the verb *kill*. Similarly, the theta-role unification of *Bill* and *John* in (12b) is explained if the two DPs are base-generated in a DP complex, which has a single thematic relation with the passive verb.

(12) a. John killed with Bill. (Like John, Bill was a killer)
b. John was killed with Bill. (Like John, Bill was the victim of a killer)

The theta-role unification of the two DPs in a comitative construction distinguishes the accompaniment reading of the construction from other readings of non-comitative *with* constructions. In (13), the amusing effect comes from the availability of two structural relations for *with his wife*: it can either be in construal with the agent *Heinrich Christian Schwan*, to form a comitative construction, or with the instrument *with cookies, colored ribbons, nuts, and candles*.

(13) Heinrich Christian Schwan, the newly appointed pastor, chopped down an evergreen in the forest near his parsonage, decorated it *with his wife*, Emma, with cookies, colored ribbons, nuts, and candles, and, according to the church's Web site, placed it in a prominent spot in the chancel. (Quoted as a filler in *The New Yorker*, Dec. 18, 2006, p. 94)

If *with his wife* is in construal with *Heinrich Christian Schwan*, both have an agent reading. In the syntactic literature the terms "comitative role" or "comitative case" are sometimes applied to the semantic function of DP_2 (e.g. Fillmore 1968, Walmsley 1971). However, this semantic role is never independent of the role of DP_1 in the comitative construction.

2.2.3. The do so *fact*

Like a conjunct in a coordinate nominal or a component of a complex nominal in general, but unlike adverbials, the [*with* DP_2] of comitative constructions cannot be stranded in the VP proform *do so*.

The form *do so* has been generally assumed to be a proform of VP, which contains a verb and its arguments (Lakoff & Ross 1966, Ross 1970, among others; see also Hallman 2004, who argues that the words *do* and *so* are realizations of v and VP, respectively). In (14a), *did so* replaces *read the book*. (14b) is ungrammatical because, as *did so* pronominalizes the whole VP, *magazine* is not licensed.

(14) a. John read the book on Monday, and Mary did so on Tuesday.
b. *John read the book on Monday, and Mary did so the magazine.

Returning now to comitative constructions, consider the following data; (15b,c) and (17) are from L&P (p. 119, fn. 5), (16c) is from Grosu (1976: 645), and the rest were confirmed with native speakers of English:

(15) a. *John compared A with B, and Mary did so with C. (object comitative)
b. *I drink milk with meat and John does so with fish. (object comitative)
c. *I stole the warden's wallet with his keys and John did so with his glasses. (object comitative)
(16) a. John ate the dinner with good cheer, and Harry did so with no cheer.
b. John ate the dinner slowly, and Harry did so with great speed.
c. John sliced a large piece of cake with a shining new knife before Mary had a chance to do so with a rusty old blade.
(17) John killed a man with Bill and Harry did so with Tom. (subject comitative)

The sentences in (15) are object comitative constructions whereas the sentences in (16) are not. The *with*-PPs in the latter group are manner expressions, which are adjuncts of the predicates. If we analyzed the [*with* DP_2]s in (15) as adjuncts of the predicates as well, we would not be able to explain the acceptability contrast between (15) and (16). However, the contrast can be accounted for if [A *with* B] in the first clause in (15a) is treated as a complex object. The intended object in the second clause is [A *with* C], and this makes the occurrence of the VP proform *does so* problematic, since part of the object, [*with* C], is stranded, and the well-established syntax of *do so* does not allow any stranding of objects or object fragments, as seen in (14b). The unacceptability of (15b) and (15c) can be accounted for in the same way.

In (16a) and (16b), however, the *with*-phrases are manner adverbials, and in (16c), the *with*-phrases are instrument adverbials. The phrase *did so* in (16a) legally substitutes for the VP, which contains the transitive verb *ate* and its object *the dinner*. Thus the acceptability of the sentence is expected. (16b) patterns with (16a), except for the fact that the manner expression in the first clause is an adverb (*slowly*) rather than a *with*-PP. The phrase *do so* in (16c) legally substitutes for the VP *sliced a large piece of cake.* Thus the acceptability of the sentence is also expected.

In (17), *with Tom* in the second clausal conjunct is not part of the object, either. Instead, it is semantically associated with the local subject, *Harry*. The *do so* legally substitutes for the VP, which contains the transitive verb *kill* and its object *a man*. Thus the acceptability of the example is expected. I will discuss the derivation of this sentence in §5.1 below (cf. (63a)).

2.2.4. The gapping fact

Like a conjunct in a coordinate nominal or any other constituent of a complex nominal and unlike adverbials, the [*with* DP_2] of comitative constructions cannot be stranded by gapping.

Gapping is subject to the Major Constituent Condition (Hankamer 1973: 18), whereby "[a] 'Major Constituent' of a given sentence S_0 is a constituent either immediately dominated by S_0 or immediately dominated by VP, which is immediately dominated by S_0." Roughly speaking, complete subjects, objects, or adverbials are major constituents, whereas a fragment of any of them is not. The Major Constituent Condition states that the remnants of gapping are major constituents. In (18a), the remnants of the gapping are *Akira* and *with a brush*. One is a complete subject and the other is a complete adverbial. Thus the sentence is acceptable. The gapping in (18b) is not legal because *a brush* is part of the instrumental adverbial *with a brush*.

(18) a. John writes with a pencil and Akira _ with a brush.
b. *John writes with a pencil and Akira _ a brush.

Consider the acceptability contrasts of the following gapping examples; (21c) is cited from Hankamer (1973: 18), and the rest were confirmed with native speakers of English:

(19) a. I enjoy beer with pretzels and he _ beer with peanuts. (object comitative)
b. *I enjoy beer with pretzels and he _ with peanuts.
(20) a. *I drink milk with meat and John _ with fish. (object comitative)
b. *I stole the warden's wallet with his keys and John _ with his glasses.
(21) a. John ate the dinner with good cheer, and Harry _ with no cheer.
b. Max eats with chopsticks, and Albert _ with a fork.
c. Max spoke fluently, and Albert _ haltingly.
(22) I went to London with Bill and Harry _ with Tom. (subject comitative)

The sentences in (19) and (20) are object comitative constructions, whereas the sentences in (21) are not. The *with*-PPs in the latter are adjuncts of the predicates. If we analyzed the *with*-PPs in (19)–(20) also as adjuncts of the predicates, we would not be able to explain the acceptability contrast between (19a) and (19b), nor the acceptability contrast between (19b)–(20), and (21). However, the contrasts can be accounted for if [*beer with pretzels*] in the first clause of (19b) is treated as a complex object. If so, then the intended object in the second clause should be [*beer with peanuts*]; since *with peanuts* is part of the comitative object, it is not a major constituent and therefore gapping as in (19b) is illegal. Similarly, in (20a), if *with fish* is part of a complex object, it is not a major constituent, and thus it cannot be a retained element of gapping. The same applies to *with his glasses* in (20b), which is also part of a complex object. This accounts for the ungrammaticality of (19b), (20a) and (20b).

In (21a) and (21b), however, the *with*-phrases are manner and instrument adverbials respectively, just like the adverb in (21c). The gapping in these sentences is legal, since the adverbials are major constituents.

In (22), *with Tom* is not part of the object, either. Instead, it is semantically associated with the local subject *Harry* and can be regarded as a major constituent, containing the trace of the surface subject *Harry*. I will discuss the derivation of this sentence in §5.1 (cf. (63b)).

2.2.5. Summary

The results yielded by the application of the *do so* (§2.2.3) and gapping (§2.2.4) tests show that the comitative object [DP_1 *with* DP_2] is base-generated as a constituent. If DP_1 alone were the object and the cluster [*with* DP_2] were an adjunct of the predicate, we would not be able to account for the above-mentioned acceptability contrasts.

The other two facts / pieces of evidence presented in §2.2.1 and §2.2.2 relate to both subject and object comitative constructions (see also §3.2 below) and also support my claim that comitative *with*-PPs are not adverbials, a claim implied in Kayne (1994) but not explicitly argued for.

3. Two types of comitative constructions

Having reviewed evidence that the two DPs of a comitative construction are base-generated inside a complex DP, I now examine a number of systematic variations that can be observed in comitative constructions.

I have found that there are two types of comitative constructions, namely symmetrical and asymmetrical, depending on whether DP_2 plays an equal role as DP_1 in the relevant eventuality. Specifically, if the two DPs together satisfy the selection requirements of a collective verb (e.g. *compare*, *mix*) or predicate (e.g. *be friends*), DP_2 plays a role equal with DP_1 in the eventuality, and thus the construction is a symmetrical comitative construction. Witness (23):

(23) a. John is friends with Bill. [sym: selected]
b. John mixed the rice with the powder. [sym: selected]

If the verb or predicate is not collective, there are two possibilities. If DP_2 functions as an appurtenance[3] of DP_1, such as an assistant (cf. *his staff officers* in (24a)), a follower (cf. *their blind mother* in (24b)), or an attachment (cf. *rice* in (24c)), the comitative construction is asymmetrical. Otherwise, it is symmetrical.

(24) a. The general (together) with his staff officers will inspect the camp.
b. Two small children (together) with their blind mother came through the door.
c. Curry with rice is my favorite dish.

With non-collective verbs or predicates, the occurrence of the word *together* to the left of *with* signals an asymmetrical reading. Thus, as pointed out by both my informants and a discussion in http://forum.wordreference.com/showthread.php?t=163085, (25a) encodes that John and Mary are symmetrical partners, whereas (25b) encodes that John played the major role.

(25) a. John baked a cake with Mary. [sym]
b. John baked a cake together with Mary. [asym]

Similarly, the occurrence of the phrase *by X's side* to the right of [*with* DP_2], where X is a pronoun co-referential with DP_1, also signals an asymmetrical reading.

(26) a. John will drink beer with Bill. [sym]
b. John will drink beer with Bill by his side. [asym]

Symmetrical and asymmetrical comitatives are syntactically different in at least four ways, as discussed in what follows.

3.1. The optionality of [*with* DP_2]

As pointed out above, verbs or predicates that select for plural dependents are excluded, by definition, from asymmetrical comitative constructions. With this kind of verbs and predicates, if DP_1 is singular, the cluster [*with* DP_2] is obligatory. By contrast, in asymmetrical comitative constructions the cluster [*with* DP_2] is always syntactically optional. This is shown in (27) and (28).

(27) a. A mother came through the door (together with her two children). [asym]
b. John is friends *(with Bill). [sym]
(28) a. John ate the apple (together with the orange). [asym]
b. John compared Berlin *(with Paris). [sym]

3.2. The cluster [DP_1 *with* DP_2] in preverbal subject position

In symmetrical comitatives the cluster [DP_1 *with* DP_2] cannot surface as preverbal subject, unlike in asymmetrical comitatives:

(29) a. *John with Bill are friends. [sym: selected]
b. *John with his wife collided. [sym: selected]
c. *John with Bill baked a cake. [sym]
d. *John with Bill will drink beer. [sym]
e. *John with Bill were killed in the accident. [sym]
(30) a. John together with Bill baked a cake.
b. John with Bill by his side will drink beer.
c. A mother with her two kids were killed in the accident.

[3] For the term *appurtenance* in connection with *with* constructions such as (24b) see Lindstromberg (1998: 209–210).

d. Sally's rude behavior together with Bill's polite reactions (obviously) amused John.
e. Fish (together) with wine sauce tastes good.

The fact that the cluster [*with* DP_2] can occur preverbally distinguishes it from VP adverbials:

(31) a. *John with his good appetite ate the dinner. (without a pause before *with*)
b. *John with his glasses saw the insects.

Examples such as (30) can be uttered without a pause before or after the *with*-PP. However, examples such as (31a,b) are only possible when there is a clear pause before and after the *with*-PP, as seen in (32). The pauses indicate that the PP is a parenthetical and not part of the subject nominal.

(32) John, with his good appetite, ate the dinner.

The non-adverbial status of the cluster [*with* DP_2] is also shown by the fact that its position is to the left of modals, auxiliaries, and sentential adverbs, as seen in (30b), (30c), and (30d), respectively. Recall that VP adverbials cannot occur to the left of these three types of elements.

That the preverbal cluster [DP_1 *with* DP_2] is a constituent in asymmetrical comitative constructions is also attested by the fact that it can be conjoined with another DP, as in (33a), or with another cluster of the same structure, as in (33b):

(33) a. A teacher and a student with his father arrived at the same time.
b. A father with his son and a mother with her daughter all came through the same door.

Finally, the subject status of the cluster [DP_1 *with* DP_2] in asymmetrical comitatives is shown by its ability to control PRO, as in (34a), and to bind a reflexive, as in (34b). Such properties are typical of subjects.

(34) a. A father (together) with his two children traveled ten miles *PRO* to attend the class.
b. A mother with her two kids tried to move the piano *themselves*.

3.3. A-bar movement of the cluster [DP_1 *with* DP_2]

The cluster [DP_1 *with* DP_2] cannot undergo A-bar movement in symmetrical comitatives, unlike in asymmetrical comitatives:

(35) a. *The apple with the orange, Mary compared. [sym: selected]
b. *Which apple with the orange did Mary compare? [sym: selected]
c. *John with Bill, Mary saw. [sym]
d. *Which guy with Bill did Mary see? [sym]
e. *This is the boy with Mary that I saw. [sym]

(36) a. A mother (together) with her two kids, Mary saw.
b. Fish (together) with wine sauce, Mary ate.
c. Which mother (together) with her two kids did Mary see?
d. Which kind of fish (together) with wine sauce did Mary eat?
d. This is the fish with wine sauce that I bought.

3.4. The presence of a plural feature with a singular DP_1

Symmetrical comitative constructions always exhibit a plural feature, even when DP_1 is singular. In contrast, asymmetrical comitative constructions do not have this property. The default plural feature of a symmetrical comitative construction can be determined in two ways.

First, symmetrical comitative constructions can satisfy the plurality requirement of collective predicates and verbs, even when both DPs are singular. In (37a), for instance, the collective predicate *confer* requires its external argument to be a non-singular element. This requirement is not satisfied by

either the surface singular subject *John*, as shown by the unacceptability of (37b), or the singular nominal *Bill*.

(37) a. John conferred with Bill.
b. *John conferred.

Similarly, in (38a), the comitative complex *Berlin with Paris* satisfies the plurality requirement of the verb *compare*, although neither *Berlin* nor *Paris* alone do so. (38b) confirms this same point.

(38) a. Peter compared Berlin with Paris.
b. John combined butter with sugar.

Second, symmetrical comitative constructions can license the plural feature of plural nominal predicates, even when both DP_1 and DP_2 are singular (Kayne 1994: 66f). This is illustrated in (39). The noun *friends* could be replaced by *mates, pals, buddies, twins, enemies, rivals*, and so on.

(39) a. John is friend**s** with Bill.
b. *John is friends.

The comitative construction in (39a) contrasts with the unacceptable (39b). The plural nominal predicate *friends* is not licensed in the latter, even though both examples have a singular surface subject. Note that no plural agreement is triggered on T in (39a) simply because the Specifier of T is filled by the singular DP_1 alone.

This default plural feature is not observable in asymmetrical comitatives. By definition, collective verbs or predicates are excluded from asymmetrical comitatives. Yet it is still possible to check whether a default plural feature is attested when DP_1 is singular. Recall that the cluster [DP_1 *with* DP_2] can surface as preverbal subject in asymmetrical comitative constructions (cf. §3.2). If asymmetrical comitative constructions also had a plural feature by default, we would expect that the complex [DP_1 *with* DP_2], when used as preverbal subject, would trigger plural agreement, regardless of the number features of DP1. However, this is not the case. If DP_1 is singular, then the complex [DP_1 *with* DP_2] triggers singular agreement:

(40) a. Jack (together) with several of his noisy friends *was* drinking till after 2 in the morning.
b. Sally's rude behavior together with Bill's polite reactions *amuses* John. (L&P: example (34))

Thus the number feature of the complex [DP_1 *with* DP_2] in asymmetrical comitative constructions is determined by DP_1 alone. In other words, asymmetrical comitative constructions with a singular [DP_1] have a singular feature available by default.

The four contrasts presented in this section are summarized in (41):

(41) Four contrastive properties of symmetrical and asymmetrical comitative constructions

	[*with* DP_2] is always optional	[DP_1 *with* DP_2] occurs in preverbal subject position	[DP_1 *with* DP_2] occurs in A-bar positions	plural feature, even when DP_1 is singular
symmetrical	-	-	-	+
asymmetrical	+	+	+	-

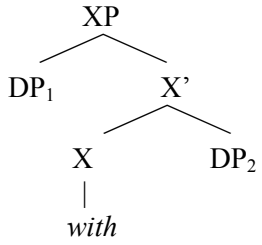
4. Nominal internal complementation and adjunction structures

In order to account for the contrasts outlined above, in this section I propose different syntactic structures for symmetrical and asymmetrical comitative constructions.

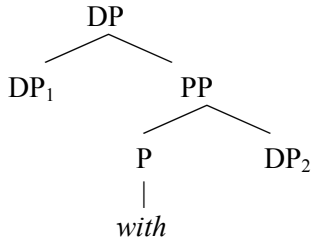
In Kayne (1994), the word *with* in comitative constructions is treated as a head element, and the two DPs in the construction are analyzed as the Specifier and Complement of *with*, as in (42a).

Another possible structure for comitative constructions is the nominal adjunction structure in (42b). Here the PP is an adjunct of DP_1; unlike in (42a), in this adjunction structure *with* is not the head of the complex nominal.

(42) a.



b.



In both structures, DP_1 c-commands DP_2. Since binding is licensed by c-command (see Baltin 2006 for a recent clarification of this issue), the acceptability contrast between (43a) and (43b), and between (44a) and (44b), can be accounted for by either structure:

(43) a. I compared every boy_i with his_i girlfriend.
b. *I compared his_i girlfriend with every boy_i.
(44) a. The $opponents_i$ sat down with each $other_i$'s examiners.
b. *Each $other_i$'s examiners sat down with the $opponents_i$.

However, the syntactic facts presented in §3.1 through §3.4 suggest that both (42a) and (42b) are needed to adequately account for comitative constructions. Specifically, I claim that symmetrical comitative constructions have the complementation structure in (42a), whereas asymmetrical comitative constructions, which Kayne (1994) does not discuss, have the adjunction structure in (42b).

4.1. The complementation structure of symmetrical constructions

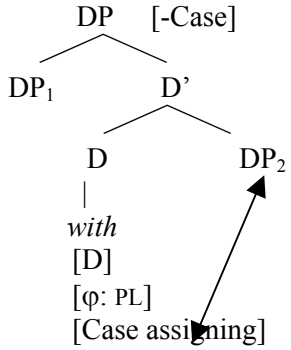
4.1.1. The configuration

My proposed structure for symmetrical comitative constructions is similar to Kayne's (1994) structure in (42a) in the sense that DP_1 is the specifier and DP_2 is the complement of *with*. This analysis of symmetrical comitative constructions as complex DPs serves to explain the non-adverbial features of the cluster [*with* DP_2] presented in §§2.2.1–4. The proposed complementation configuration also captures the first contrastive property of symmetrical and asymmetrical comitatives: the cluster [*with* DP_2] is not always optional, and thus cannot be an adjunct (cf. §3.1).

4.1.2. The formal features

In order to account for the other three properties of symmetrical comitatives reported in §3.2 through §3.4, I claim that *with* in symmetrical comitatives carries three important formal features, which are shared with both D and P. They are [D], [plural], and [+ Case assigning]. I further claim that the word *with* in symmetrical comitatives has the categorial feature [D], and is the head of the whole complex nominal.

(45)



The D feature of *with* accounts for the category of the projected complex. Under the assumption that c-selection must be satisfied locally (i.e., by either a complement or a specifier, rather than any element inside a complement), the D feature of *with* enables the whole complex in its base-position to satisfy the c-selection of selecting verbs (e.g. *combined* and *drank* in in (46a)-(46b)), predicates (e.g. *friends* in (46c)), or prepositions (e.g. *of* in (46d)).

(46) a. John combined *butter with sugar*.
b. John drank *beer with milk.*
c. *John* is friends *with Bill.*
d. a picture of *John with his fans*

The D feature of *with* in symmetrical constructions also accounts for the fact that unlike the conjunction *and*, which does not have intrinsic categorial features (Zhang 2006), *with* never projects any non-D complex: the complex headed by *with* must be a DP. By contrast, in (47a), the conjunction *and* integrates the two VPs, *cut the bread* and *melted the sugar*, together. Similarly, in (47b), the conjunction *and* integrates the two nominal predicates, *a good father* and *an excellent husband*, together (recall that nominal predicates are generally assumed to be NPs rather than DPs).

(47) a. John cut the butter {and/*with} melted the sugar.
b. My uncle is [a good father {and/*with} an excellent husband].

Moreover, like prepositions but unlike other D elements, the *with* in symmetrical comitatives has a [Case assigning] feature. The feature is checked with the Case feature of its complement, DP_2. This can be seen from the accusative Case of any pronominal DP_2 (e.g. *with* {*him/*he*}). After the checking, *with* does not have a Case feature any more, and thus the projected DP has no Case feature, unlike regular DPs. This accounts for the fact reported in §3.2, namely, that in symmetrical comitative constructions, the cluster [DP_1 *with* DP_2] cannot surface as preverbal subject (see (29) above). Preverbal subject positions in English are generally assumed to be Spec of TP, and have a Case relation with T. Now since the cluster [DP_1 *with* DP_2] does not have any Case feature, it cannot surface at Spec of TP. Instead, DP_1 alone is raised to Spec of TP to check the Case feature of T. This is further supported by the fact that all the unacceptable examples in (29) become acceptable if only DP_1 occurs in the preverbal subject position, leaving the rest behind (see §5.1 for more discussion of the raising of DP_1):

(48) a. John is friends with Bill. (cf. (29a)) [sym: selected]
b. John baked a cake with Bill. (cf. (29c)) [sym]

The symmetrical cluster [DP_1 *with* DP_2] cannot occur in the Accusative Case-checking position of an Exceptional Case Marking construction, either. Kayne (1994: 64) observes that examples like (49a) are not the only ones unacceptable, but also those like (49b) and (49c):

(49) a. *John with Bill will collide.
b. *I consider John with Bill to have collided.
c. *John is considered with Bill to have collided.

The comitative constructions in (49) are all symmetrical, since the predicate *collide* is collective. In (49b) and (49c), the embedded clause is a non-finite version of (49a). All three examples show that if the representation of a simple clause does not allow any movement chain of the whole complex *John with Bill*, the representations of any complex constructions that contain the chain will also be rejected. I assume that the syntactic representations of (49) are as in (50). In each structure in (50), the whole complex [DP_1 *with* DP_2] is moved to a Case position. In (50a), the complex is supposed to check the nominative Case of T and in (50b), the complex is supposed to check the accusative Case of the matrix v; in (50c), additionally, DP_1 alone moves further from a structure similar to (50b).

(50) a. *$[_{DP}$ John with Bill$]_i$ will collide t_i.
b. *I consider $[_{DP}$ John with Bill$]_i$ to have collided t_i.
c. *John$_j$ is considered $[_{DP}$ t_j with Bill$]_i$ to have collided t_i.

In each example in (50), the representation of the initial movement of the constituent indexed with *i* is unacceptable. Kayne (1994) claims that the failure to raise of the whole complex [DP_1 *with* DP_2] in data like (49) is related to Case. He states that DP_1 cannot be Case-licensed in the [DP_1 *with* DP_2] complex simply by virtue of the whole complex being in a licensed position. Therefore, DP_1 in the complex must be raised alone to get its Case licensed.

I adopt the basic idea of Kayne's Case analysis. But I emphasize that in symmetrical comitative constructions, the base-generated cluster [DP_1 *with* DP_2] does not have any Case feature, just like a PP, and that is why it cannot occur in a Case position. Thus, whenever the symmetrical cluster [DP_1 *with* DP_2] is merged as an argument, the Case-checking task of the argument is achieved by DP_1 alone. I claim that the difference between the cluster and a regular complex nominal is due to the mixed properties of *with* in the construction: it behaves like both a D (it projects a nominal) and a P (it assigns Case).

The discussion so far has dealt with agent comitatives of transitive verbs and with comitatives of intransitive verbs. I now extend the analysis to patient comitatives of transitive verbs. Following Johnson (1991) and Bowers (2002), among others, I assume that Accusative Case checking of v also requires raising of the direct object. If the patient argument of a transitive verb is a symmetrical cluster [DP_1 *with* DP_2], again, DP_1 alone is raised. This can been in the quantifier floating in (51), as pointed out by an anonymous reviewer:

(51) John saw the boys [all t with Sam].

Moreover, in both subject and object symmetrical comitative constructions, after raising of DP_1, DP_1 and [*with* DP_2] do not form a constituent any more. Therefore, there is no A-bar movement of the symmetrical cluster [DP_1 *with* DP_2], thus accounting for the fact presented in §3.3.

The proposed [Plural] feature of *with* accounts for the fourth contrastive property of symmetrical and asymmetrical constructions presented in §3.4. Like many D elements, the *with* in symmetrical comitatives has number features, and the value of the feature is plural. This plural feature satisfies the plural selection of collective verbs or predicates, regardless of the number feature value of either DP_1 or DP_2. In (52), for instance, both *an orange* and *an apple* are singular, and neither alone can satisfy the plural selection of *compared*. If *with* as a head has a plural feature and the feature is projected to the whole complex *an orange with an apple*, the selection of the verb is satisfied.[4]

(52) John compared an orange with an apple.

In addition to the four properties examined in §3, the complementation structure proposed for symmetrical comitatives also covers the fact that the cluster [*with* DP_2] may occur in an A-bar position,

[4] Conjunctive coordinate complexes are also plural. The plurality reading of a conjunctive coordinate complex comes either from the plurality feature of *and* itself (Zhang 2006: §4.3), or from the Set Product denotation of *and* (Heycock & Zamparelli 2005). Note that since both conjunctions and disjunctions (such as *or*) introduce coordinate nominals, the fact that only the conjunctive coordinate nominals have a plural feature indicates that coordinate constructions themselves do not carry a plural feature; instead, it is the specific lexical item *and* (but not *or*) that does so.

as shown in (53) and (54).

(53) a. With whom did you discuss linguistics? [sym: selected sbj]
b. With whom did John eat the dish? [sym: sbj]
(54) a. With which apple did Mary compare the orange? [sym: selected obj]
b. With which kind of liquid did Mary mix water? [sym: selected obj]
c. With which kind of beer did Mary drink milk. [sym: obj]

I assume that what undergoes the A-bar movement in data like (53) and (54) is the whole complex DP that contains the trace of DP_1. It is a kind of remnant movement.

4.2. The adjunction structure of asymmetrical constructions

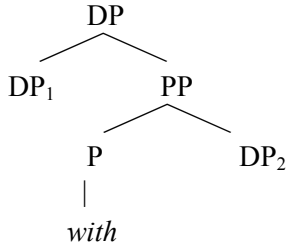
4.2.1. The configuration

In §2.2 and §3.2, I reached the conclusion that the two DPs of a comitative construction are base-generated inside a complex DP, and the cluster [*with* DP_2] is not a VP adjunct. The complex DP structure which I proposed in (42b) above for asymmetrical comitatives reflects this non-adverbial status of [*with* DP_2]; it is repeated here for convenience as (55a).

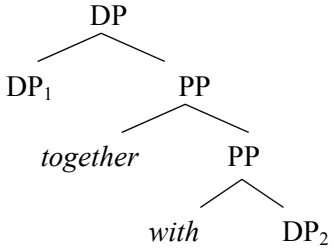
Moreover, we have also seen in §3.1 that in the case of asymmetrical comitatives the cluster [*with* DP_2] is always optional. This optionality is captured, too, by (55a), where DP_1 is the projecting element of the whole complex nominal and the cluster [*with* DP_2] is its adjunct.

Furthermore, as discussed in §3, the adverb *together* can left-adjoin to this PP, and similarly, the phrase *by X's side* can right-adjoin to the PP.

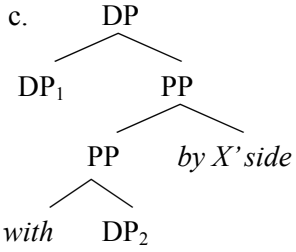
(55) a.



b.



c.



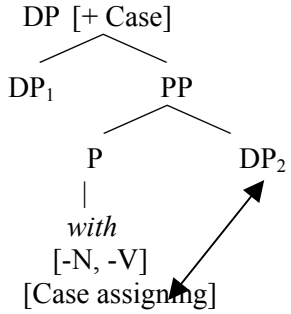
In both (55a) and (55c), we see the merger of right-adjunction. I assume that right adjunction is a possible merger operation (contra Kayne 1994). Following Reinhart (1979), Marantz (1984: 7–8), Chomsky (1995, 2005: 5, 2006), and Abels & Neeleman (2006), I assume that while a hierarchy in language is crucial to narrow syntax, linear ordering is not. Thus if left-adjunction merger is possible, as generally assumed, including Kayne (1994), right-adjunction merger is also possible.

4.2.2. The formal features

In this section, I account for the remaining three properties of asymmetrical comitative constructions presented in §3.2 through §3.4.

The proposed nominal-internal adjunct is headed by the preposition *with*. As assumed generally, the categorial features of the preposition *with* are [-N, -V], and the preposition has a Case checking relation with its complement, DP_2.

(56)



In this adjunction structure, the D category of DP_1 is the category of the whole complex. The category of the complex must satisfy the c-selection of any selecting predicate (e.g. *drink beer* in (57a)), verb (e.g. *drank* in (57b)), or preposition (e.g. *by* in (57c)), and the PP [*with* DP_2], being a nominal-internal adjunct, does not affect the category of the complex as a whole.

(57) a. [John with Bill by his side] will drink beer. [sbj]
b. Mary drank [beer together with milk]. [obj]
c. It was done by [John together with Harry]. [obj of *by*]

The proposed [Case assigning] feature in (56) accounts for the ability, discussed in §3.2, of [DP_1 *with* DP_2] to occur in preverbal subject position. Since the preposition *with* has a Case checking relation with its complement, DP_2, the projected PP does not have any Case feature, just like a regular PP. When the complex [DP_1 *with* DP_2] is base-generated in an argument position, it is always DP_1 that fulfills a Case checking task. Since DP_1 is the projecting element and the PP [*with* DP_2] is its adjunct, the Case features of the whole complex [DP_1 *with* DP_2] are those of DP_1. Thus, the complex has Case feaures and is able to occur at Spec of TP, checking the Case feature of T (see (30) above).

Moreover, since the complex [DP_1 *with* DP_2] is a regular nominal, it can undergo A-bar movement. This accounts for the fact presented in §3.3.

Furthermore, since [*with* DP_2] is an adjunct of DP_1, it does not affect the φ-features of DP_1. Then the number features of DP_1 are those of the whole DP complex. If DP_1 is singular, it triggers singular agreement by default. This accounts for the fact in §3.4.

In addition to the four properties examined in §3, the nominal-internal adjunction structure proposed for asymmetrical comitatives also explains the fact that the cluster [*with* DP_2] may undergo A-bar movement, as seen in (58):

(58) a. (Together) with his mother, John went to a Chinese restaurant. [sbj]
b. With Bill by his side, John will drink beer. [sbj]
a. Together with which kind of beer did Mary drink milk? [obj]
b. Together with wine sauce, John ate the fish. [obj]

The fronted cluster can be either a complex nominal containing the trace of DP_1, or the adjunct PP [*with* DP_2] alone. Either analysis could capture the word order in (58).

Summing up, I have argued in this section that both the complementation structure in (42a) and the adjunction structure in (42b) (= (55a)) are found in comitative constructions in English, before any movement affects the integrated elements. The complementation structure is that of symmetrical comitative constructions and the adjunction structure corresponds to asymmetrical comitative constructions. My explanations of the four contrasts existing between the two types of constructions are summarized in (59):

(59) The contrasts between symmetrical and asymmetrical comitative constructions

	[*with* DP_2] is always optional	[DP_1 *with* DP_2] occurs in preverbal subject position	[DP_1 *with* DP_2] occurs in A-bar positions	plural feature, even when DP_1 is singular
symmetrical	-, because it is not an adjunct	-, because it has no Case	-, because it is not a constituent after DP_1 moves	+, because the [φ: PL] of *with* is projected to the whole complex
asymmetrical	+, because it is an adjunct	+, because it has Case	+, because it can be a constituent	-, because the number feature of DP_1 is projected

5. Deriving the surface positions of the cluster [*with* DP_2]

I have argued so far that in an English comitative construction, DP_1 and DP_2 are base-generated in a nominal complex [DP_1 *with* DP_2]. The nominal complex can function as a subject, direct object, or complement of *of*, as seen in (60a), (60b), and (60c), respectively.

(60) a. *A mother with her two small children* came through the door.
b. John combined *butter with sugar.*
c. a picture of *John with his fans*

Following Kayne (1994), I have also claimed that when DP_1 is separated from the cluster [*with* DP_2], as seen in *John drank beer with Mary*, DP_1 has undergone leftward movement, as shown in (61a). An alternative analysis that has not been discussed in the literature is whether the construction could be derived by rightward movement of the cluster [*with* DP_2], as in (61b).

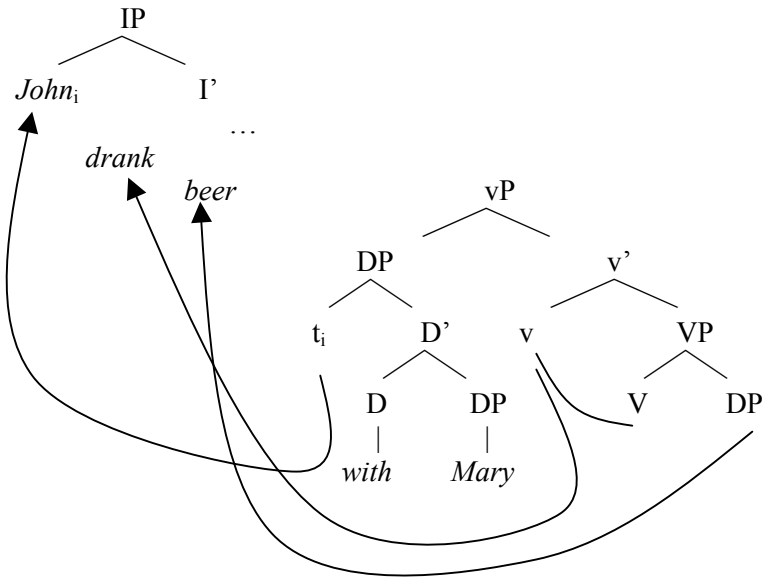
(61) a. *John*$_i$ *drank beer* [t_i *with Mary*] (DP_1 raising)
b. [*John* t_i] *drank beer* [*with Mary*]$_i$ (extraposition)

In this section, I will argue against the extraposition analysis in (61b).

5.1. The raising of DP_1 in comitative constructions

Like Kayne (1994), I claim that the separation of the subject DP_1 from the rest of the complex in the surface representation is derived by raising. Specifically, the tree structure of (61a) is the following:

(62)



The raising of DP_1 in comitative constructions has a parallel in nominals involving FLOATING QUANTIFIERS such as *all* (e.g. "John saw the boys *all* with Sam"), as discussed by Sportiche (1988) and others. The cluster [*with* DP_2], like *all*, demarcates argument positions.[5] Another analogue to this kind of DP Specifier raising from a complex DP can be found in possessor raising constructions in languages such as Hebrew (see Landau 1999: 10, among others).

In my analysis, the cluster [*with* DP_2] occurring to the right of the object in examples such as (61) is the remnant of a base-generated subject complex. The raising of the object/complement and the selecting verb in (62) is compatible with the hypothesis proposed in the literature that in English both objects and their selecting verbs have been raised out of their theta-domain, vP, to a position below IP (see Johnson 1991, Koizumi 1995, Runner 1998, Bowers 2002, and Baltin 2002, 2006 for various implementations of this view). Thus any vP-internal element that is not raised out of vP, including elements in the base-position of a subject, accordingly surface to the right of objects.

In addition to (61a), the DP raising can also be illustrated by the derivations of the *do so* sentence in (63a) (= (17)), and the gapping sentence in (63b) (= (22)).

(63) a. John killed a man with Bill and Harry did so with Tom.
b. I went to London with Bill and Harry _ with Tom.

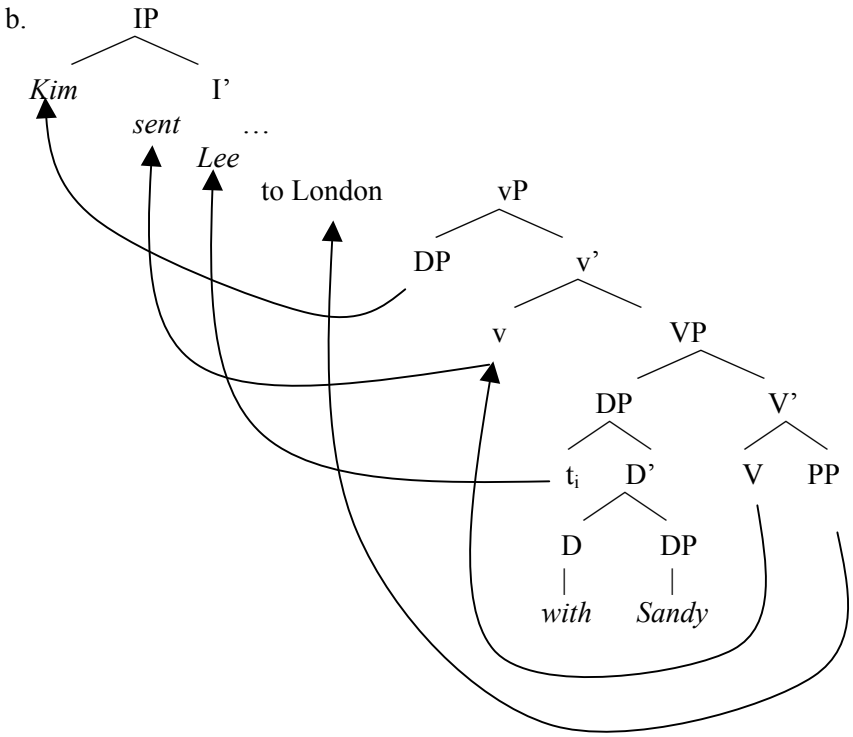
I argued in §§2.2.3 that the base-generated subjects of the two clauses in (63a) are the two nominal complexes [*John with Bill*] and [*Harry with Tom*], respectively. If *John* is raised out of the first complex and surfaces at the SpecIP of the first clausal conjunct, and if *Harry* is also raised out of the second complex and surfaces at the SpecIP of the second clausal conjunct, the surface order of the sentence is derived. In the second clausal conjunct, the VP is realized by the VP proform *did so*. Every step is fine and the resulting sentence is acceptable.

In (63b), *with Tom* occurs in the gapping construction, indicating that it behaves like a MAJOR CONSTITUENT in the sense of Hankamer (1973). I assume that gapping is a deletion operation in the phonological component, which is implemented after syntactic operations (for recent advocates of this deletion approach, see Schwarz 1999, Lin 2002; also Johnson 2002: 114, fn.14). In the case under discussion it is implemented after the raising of *Harry* from the complex DP [$_{DP}$ *Harry with Tom*] to SpecIP. The complex DP that is at SpecvP now contains *with Tom* only. The remnant DP can be regarded as a major constituent. This accounts for the acceptability of (63b).

If the whole complex nominal is base-generated as an object, DP_1 can also be raised alone, leaving the *with*-PP at the base-position. In (51) above we considered evidence from floating quantifiers supporting this raising. In (64a), *with Sandy* is associated with the object *Lee*. In this sentence, the complex DP *Lee with Sandy* is base-generated at Spec VP, and *to London* is base-generated as the complement of V. After the raising of *Lee* out of the complex object, and after the raising of the verb *sent* and the complement *to London* out of the VP, *with Sandy* occurs in sentence-final position. The derivation is shown in (64b).

(64) a. Kim sent Lee to London with Sandy.

[5] I am indebted to the anonymous reviewers for bringing this parallelism to my attention.



5.2. Against an extraposition analysis of the surface position of the cluster [*with* DP_2]

I have claimed that the separation of DP_1 from the cluster [*with* DP_2] of a comitative construction is the result of the leftward movement of DP_1. Instead of this, could the separation be accounted for in terms of the rightward extraposition of [*with* DP_2], as in (65a), a type of operation similar to the one undergone by *about the Soviet Union* in (65b)?

(65) a. [*John* t_i] *drank beer* [*with Mary*]$_i$
b. [$_{DP}$ Many books $\_\__i$] will appear soon [$_{PP}$ about the Soviet Union]$_i$

In this section, I present four arguments against the extraposition analysis in (65a).

First, if an extraposed element right-adjoins to another element, it should be an island for extraction, as shown in (66b) (Ross 1967).

(66) a. A man entered the room who was wearing a fez.
b. *What did a man enter the room who was wearing _?

However, in (67a), *who* is extracted from the sentence-final [*with* DP_2], and the sentence is fine. The acceptability of the extraction indicates that the sentence-final [*with* DP_2] is not an extraposed element.

(67) a. Who did a mother come through the door with _?
b. *Who(m) did a mother with _ come through the door?

The unacceptability of (67b) can be accounted for by the constraint that nothing can be extracted from a raised subject (Takahashi 1994, Stepanov 2001). In this example, the subject *a mother with whom* is raised from its theta position to SpecIP, and thus *whom* cannot be extracted.

Second, extraposed constituents are typically syntactically and phonologically "heavy," whereas the [*with* DP_2]s in comitative constructions do not have to be heavy. In fact, the situation is just the opposite. In symmetrical comitative constructions, the cluster [*with* DP_2] is usually short, yet it has to occur to the right of the clause, as in (68); by contrast, in asymmetrical constructions the cluster is comparatively longer, yet it need not occur at the right position, as in (69) (see §3.2).

(68) a. *John with Bill will drink beer. (light PP)
b. John will drink beer with Bill.
(69) a. John with his two children will drink beer. (heavy PP)
b. John will drink beer with his two children.

The [*with* DP_2]s in (69) are longer than those in (68). The longer PP can either be adjacent to DP_1, as in (69a), or follow the VP, as in (69b). The short PP, however, has to be separated from DP_1, as the contrast between (68a) and (68b) shows. In fact, the occurrence of the [*with* DP_2] to the right of a VP is always possible, regardless of the length of the PP, as seen in (68b) and (69b).

My third argument against an extraposition analysis of the surface position of the cluster [*with* DP_2] has to do with information structure. Assuming with Rochemont & Culicover (1990), Huck & Na (1990) and others that extraposed elements are semantically foregrounded and thus focused, we may now consider what is the information status of the [*with* DP_2] in comitative constructions.

The fact that the two DPs in a comitative construction are not parallel in interpretation has been discussed in Dougherty (1970: 858) and Stassen (2000: 6). Compare (70a), with a coordinate nominal as subject, and the comitative construction in (70b):

(70) a. Mary and John are in love.
b. Mary is in love with John.

The meanings of the two sentences are not identical. The reading of (70a) is that Mary and John love each other, whereas in (70b) the possibility exists that John does not love Mary, even though the construction is in fact a symmetrical comitative. Yet (70b) is symmetrical only in the sense that the two DPs, *Mary* and *John*, are necessary for satisfying the plural selection of the relational predicate *in love*, and *John* is not an appurtenance of *Mary* in the eventuality (see §3). As regards asymmetrical comitatives, the absence of an exact parallelism between the two DPs is of course a defining property of that type of construction. For instance, the reading of (71) (Svenonius 2004: example (41c)) is that it is we, rather than the audience, that sprayed the dog.

(71) We sprayed the dog with an audience of boy scouts.

This difference in interpretation between the two DPs in both symmetrical and asymmetrical comitatives is captured by the generalization that in the relevant eventuality, the individual expressed by DP_1 is foregrounded, and the one expressed by DP_2, which is the complement of *with*, is backgrounded. Since DP2 is introduced by a preposition (or a preposition-like element), it is expected to encode a background reading rather than a foreground reading (see Svenonius 2004).

The fact that the two DPs of a comitative construction are not identical in terms of information structure also accounts for the unavailability of reciprocals in comitative constructions. I have argued that like the conjuncts of a nominal coordinate complex, the two DPs of a comitative construction are base-generated within a complex DP. Baker (1992: 46) observes that reciprocals can be licensed by conjoined nominals, as in (72a), but not by comitatives, as in (72b):

(72) a. John and Mary kissed each other.
b. *John kissed each other with Mary.

I claim that reciprocal eventualities are never encoded by comitative constructions simply because the two DPs in a comitative construction have different statuses with respect to information structure.

In some cases, however, the contrast between the two partners in a comitative construction with respect to the degree of affectedness is not so striking. Consider data like the following:

(73) a. They eat meat with dairy products.
b. A person with his daughter came in.

Obviously, the two encoded entities, meat and dairy products, are both affected in the ingestion event expressed by (73a). Similarly, both a person and his daughter must take part in the coming event expressed by (73b). This means that the difference discussed in this section between the interpretation of [DP_1 *and* DP_2] and [DP_1 *with* DP_2] can be captured by Seiler's (1974) generalization that comitative constructions leave unspecified the extent of the participation of the backgrounded element (i.e. the referent of DP_2) in the action in question. In other words, the backgrounded element participates in the action to varying degrees, from mere "accompanying" to full-fledged "partnership".

I conclude from the above that the backgrounded reading of comitative [*with* DP_2]s is not compatible with the foregrounded status of extraposed elements.

Finally, a fourth argument against an extraposition analysis is that extraposed elements occur at the right edge of sentences:

(74) a. A man came into the bar *who we knew in school.*
b. *A man seemed *who know the truth* to be late.

However, the [*with* DP_2] in comitative constructions does not need to be at the right edge. For instance, in (75a) *with Harry* precedes the subject-oriented depictive *naked*, and in (75c) *with Bill* precedes *about politics*.

(75) a. $John_i$ ate the fish *with Harry* $naked_i$.
b. $John_i$ ate the fish $naked_i$ *with Harry*.
c. John chatted *with Bill* about politics.

It could perhaps be argued that *naked* and *about politics* are themselves extraposed, in accordance with the requirement that when a constituent is extraposed and is followed by another constituent, the latter must also be extraposed. Witness in this connection the following example from Bianchi (2000: 136; see also the references there):

(76) A man entered the room last night that *I had just finished painting who had blond hair*.

However, I have not seen any argument for the claim that subject-oriented depictives such as *naked* are derived by extraposition, nor have I seen any argument for the extraposed status of a PP like *about politics* in (75c). Actually, a depictive can be followed by an emphatic reflexive, as in (77) (Nakajima 1989). Since an emphatic reflexive is not an extraposed element, its preceding depictive cannot be extraposed, either.

(77) John ate the meat nude himself.

Two more issues need addressing. First, why are the two orders in (75a) and (75b) both possible? Developing Hornstein & Lightfoot (1987) and Larson (1988), I assume that subject-oriented depictives are adjuncts, and they are adjoined either to the left or the right of the kernel vP. The two orders of *with Harry* and the depictive *naked* are parallel to the two orders of an agent-hosting phrase and a depictive in passives. In (78) (from Collins 2005: 102), for instance, the agent-hosting phrase *by the campus* and the subject-oriented depictive *nude* are ordered freely:

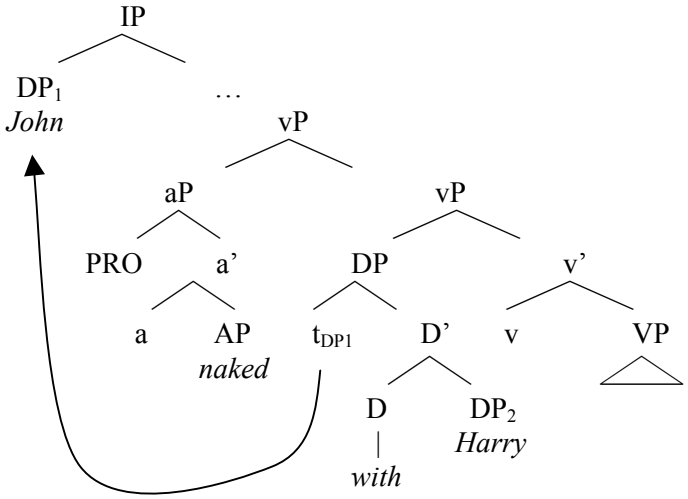
(78) a. Breakfast is eaten nude by the campers.
b. Breakfast is eaten by the campers nude.

As we know, the agent-hosting phrases in passives are not extraposed elements. According to Collins (2005), the surface position of an agent in passives is exactly its base-position, i.e. Spec of vP. Data like (78) show that the base-position of agents can be either followed or preceded by depictives. I have argued earlier that the positions of the *with*-PPs in (75) are the base-positions of subjects. It is thus expected that the positions can be either followed or preceded by depictives.

Second, why are the depictives not base-subject-oriented? If *John with Harry* is a complex constituent at some point (where the whole complex gets the agent theta role), why does *naked* modify

only *John* but not *Harry* or both *John* and *Harry* in (75)? This question in fact asks for a detailed analysis of depictive predication. Following Hornstein & Lightfoot (1987), I assume that the subject of a depictive is a PRO, the controller of which is the apparent "shared argument" of the kernel predication. I illustrate the relevant structure in (79). I label the element containing an adjectival depictive and its PRO subject as aP. If this aP is adjoined to vP, neither the complex DP at Spec of vP, nor DP_2, can be the controller of the PRO, since they do not c-command the PRO at any stage of the derivation. The only possible controller is DP_1, the surface subject. This is exactly what we see in (75).

(79)

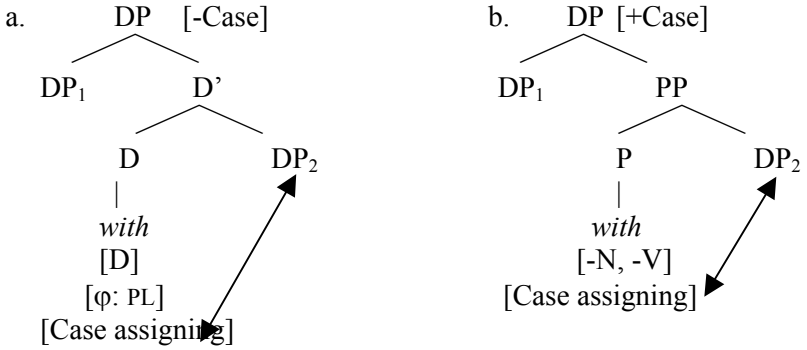


6. Summary

I have argued that in comitative constructions, the two DPs are both contained in a complex nominal in their base-positions, and thus the cluster [*with* DP_2] is structurally different from a VP adverbial.

I have also argued that two different types of comitative constructions can be distinguished: symmetrical and asymmetrical. The proposed base-structures for each of these are (80a) and (80b), respectively (see also (45) and (56) above):

(80)



It can be seen that *with* has different formal features in the two structures in (80). In (80b), *with* is a regular preposition. In (80a), however, *with* shares features with both nominals and prepositions. Its [D] and [φ: PL] features are shared with nouns, and its [Case assigning] feature is shared with verbs or prepositions. Since syntactic elements are bundles of formal features (Chomsky 1994: 7) , the special kind of *with* postulated in (80a) is conceptually possible.

I have presented four differences between symmetrical and asymmetrical comitative constructions and have put forward relevant explanations for them. First, the cluster [*with* DP_2] is always optional in asymmetrical comitative constructions, but not in symmetrical constructions. This contrast can be explained in view of the structural differences between the two constructions: the cluster is base-generated as an adjunct of DP_1 in asymmetrical constructions, but not in symmetrical ones. In these, DP_1 is the Specifier of *with* and DP_2 is its complement. Second, the cluster [DP_1 *with* DP_2] may occur in preverbal subject position in asymmetrical constructions, but not in symmetrical

constructions. This is because in asymmetrical constructions the syntactic properties of the cluster are identical to the properties of DP_1; hence the cluster may occur in a Case position, just like a regular DP. However, in symmetrical constructions, the syntactic properties of the cluster are projected from the word *with*. Since the Case feature of *with* has been checked with its complement, DP_2, the complex projected by *with*, like a regular PP, has no Case feature and thus is not able to occur in any Case position. Thus whenever the cluster [DP_1 with DP_2] is base-generated at an argument position, it is always DP_1 that is raised to a Case position. Third, the cluster [DP_1 *with* DP_2] may occur in A-bar positions in asymmetrical constructions, but not in symmetrical constructions. My account for the contrast is that in symmetrical constructions, since DP1 has to move alone, it is not adjacent to the rest of the cluster after the movement, therefore, the whole cluster can never surface as a constituent. By contrast, in asymmetrical constructions, the whole cluster may undergo either A or A-bar movement, and surface as a syntactic constituent. Fourth, a plural feature is always present in symmetrical constructions, even when DP_1 is singular, whereas asymmetrical constructions lack such plural feature. My explanation for the contrast is that in symmetrical constructions, the word *with*, like many D elements, has a plural feature, and thus the projected complex nominal is always plural; however, in asymmetrical constructions, the projecting element is DP_1, and if DP_1 is singular, then the whole projected complex nominal is singular. Finally, in addition to examining the various differences between symmetrical and asymmetrical comitatives, I have also argued (cf. §5) against an extraposition analysis of discontinuous surface orders in comitative constructions.

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