Remarks on the syntax and semantics of so-called comitative coordination*

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Al Khalaf, Eman. 2018. Remarks on the syntax and semantics of so-called comitative coordination. *Linguistic Research* 35(2), 253-273. Natural languages exhibit two conjunction strategies: the coordinate strategy and the comitative strategy (Stassen 2000). Recent work claims that there exists a hybrid construction that appears to employ both strategies, namely comitative coordinate construction. This paper argues against this claim and shows that what the literature assumes to be a hybrid construction is in fact a pure comitative, which is different from a coordinate semantically and syntactically. The paper also offers an alternative structural analysis of this construction, which captures the various differences between comitatives and coordinates. The analysis proposed has consequences on the status of the conjunct constraint, the constraint that bans extracting a whole conjunct. (**The University of Jordan**)

Keywords coordination, comitative coordinates, the coordinate structure constraint, English, Chinese, Russian

1. Introduction

Stassen (2000) shows that natural languages employ two conjunction strategies: the coordinate strategy and the comitative strategy. McNally (1993), Zhang (2010a), among others argue for the existence of a hybrid construction, called a *comitative coordinate*, which is claimed to exhibit comitative and coordinate properties. They contend that this construction should be structurally analyzed as a coordinate. Citing syntactic and semantic evidence, this paper argues that comitative coordinates are just comitatives. The paper also shows that the arguments that have been used to analyze comitative coordinates as coordinates in fact argue against treating them as such.

The rest of the paper is organized as follows. Section 2 presents syntactic and semantic differences between comitatives and coordinates. Section 3 presents the arguments for viewing comitative coordinates as coordinates, mainly those brought by McNally (1993) and Zhang (2010a). Section 4 shows the various issues with these arguments and argues that the facts do not impose a coordinate analysis of comitative coordinates, and they argue for their being coordinates instead. The section then ends with two alternative structures for comitatives. Section 5 is the conclusion.

2. Comitatives versus coordinates

Although the distinction between comitatives and coordinates is clear in languages that employ different markers to encode these constructions, like English in which comitatives mainly involve the preposition *with* (Lakoff and Peters 1966; Fillmore 1968; Kayne 1994; Stolz 2001) and coordinates involve *and*, it is not the case in many languages that employ the same marker for both constructions (e.g., An 2017). In this section, I present many of the differences between comitatives and coordinates. Throughout the paper, when discussing the NPs contained in a comitative construction, I will follow Arkhipov (2009) in referring to the NP with the higher structural status as the *core NP* and the NP following the comitative marker as the *comitative NP*.

The main domain of difference between comitatives and coordinates is whether or not extraction of an NP contained within the construction is allowed (Kayne 1994; Zhang 2007). It is well-known that coordination strictly bans movement out of the coordinate phrase (Ross 1967; Grosu 1981; Goodall 1987; Postal 1998; Levine 2001; Levine and Hukari 2006; Zhang 2010b; Chaves 2012, among many others). This restriction takes the form of an island constraint called the coordinate structure constraint (CSC; Ross 1967). What is relevant to the discussion here is a subconstraint of the CSC, the conjunct constraint (CC; Grosu1981) which bans extracting a whole conjunct (I use two underscores "__" to mark the base position of moved/raised elements).[1]

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[1] Another constraint is the element constraint (EC) which bans extracting an element within a conjunct. Much literature shows that, in contrast to the conjunct constraint (CC), the EC can be violated in many contexts. See Al Khalaf (2015) for a recent review.

(1) a. Sally eats [peanut butter and jelly] in the morning.
    b. *[Peanut butter]$_i$ is often eaten [__$_i$ and jelly] in the morning.

On the other hand, comitatives impose no restrictions on movement. Both the core and the comitative NPs may move out of the comitative, as in (2b, 2c). Note that, like any preposition, the comitative marker may strand in movement:[2]

(2) a. Sally eats peanut butter with jelly in the morning.
    b. [Peanut butter]$_i$ is often eaten __$_i$ with jelly.
    c. Jelly is what$_i$ Sally eats peanut butter with __$_i$.

In the same way, *wh*-movement of a core or comitative NP is free, with no restrictions (Huddleston and Pullum 2002; Zhang 2007), whereas *wh*-movement out of a coordinate is impossible. For example, in (3c), the comitative NP is pied-piped in *wh*-movement, and in (4a), it is extracted out of the PP, again leaving the preposition stranded. Compare these to the coordinate examples (3d, 4b) which do not allow movement.

(3) a. I mixed food coloring and water.
    b. I mixed food coloring with water.
    c. [With what]$_i$ did you mix food coloring __$_i$?
    d. *[And what]$_i$ did you mix [food coloring __$_i$]?

(4) a. What$_i$ did you mix food coloring with __$_i$?
    b. *What$_i$ did you mix [food coloring and __$_i$]?

Another major syntactic distinction between comitatives and coordinates is that the former allows disruption/interruption, while the latter does not (e.g., McNally 1993). More specifically, the core and the comitative NPs may be separated by linguistic material, such as adverbs (5) or PPs, but conjuncts may not (6).

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2   It should be noted that sentence (1b) can be grammatical with a pause before *and*. This possibility is not relevant to the discussion here. These cases have been analyzed by many as clausal coordination involving ellipsis (e.g., Progovac 1993).

(5)   I mixed canola oil carefully with the unidentified compound I had found.

(6)   *John met both his ex-wife at the park and his girlfriend on the same day.

Iteration provides a further distinction between comitatives and coordinates (McNally 1993; Dalrymple *et al.* 1998). Iteration is possible in coordination because coordinators are group-forming, so in a coordinate phrase, conjuncts form a list that can be expanded and added to. Iteration of a comitative NP is not possible, on the other hand:

(7)   I, my parents and my friends ate tacos at a nearby restaurant.

(8)   I ate tacos with my parent (*with my relatives) at a nearby restaurant.

Note, however, that in some cases the comitative NP can iterate, but the resulting interpretation does not involve group expansion in the way we see with iterating conjuncts. Instead, it gives the meaning of 'stacking' or 'accumulation'. This reading is irrelevant for the discussion here. For example, in (9), *coffee* and *with milk* form a single NP, referring to a single beverage, that is accompanied by biscuits. This sentence cannot mean: I drank coffee, and the coffee was accompanied by milk and biscuits, indicating that the stacked NP cannot form a subgroup with *milk* (the first comitative NP). In contrast, iteration in coordination is more like listing. In (10), the relevant reading is a list in which three items are equivalent on that list.

(9)   I drank [[coffee with milk] with biscuits].

(10)   I drank milk and coffee and tea.

Turning to semantic differences, much of the early work on comitatives argues that comitatives and coordinates are semantically parallel since alternating between the two constructions is possible, as exemplified below (Lakoff and Peters 1966; Kayne 1994; Zhang 2007; Zhang 2010b):

(11) a. The motorcycle collided with the van.

b. The motorcycle and the van collided.

However, the alternation seen does not entail semantic parallelism between the two constructions. First, as has been argued by Gleitman *et al.* (1996) who investigate the semantics of verbs like *collide*, which they refer to as *symmetricals*, the nature of the semantic roles in a comitative is distinct from the nature of the semantic roles in a coordinate (see also Choi 2012 on the argumenthood of the preposition *with*). More specifically, in a comitative as in (11a), two semantic functions can be identified: *figure* and *ground*. This classification assumes that the core NP is more foregrounded than the comitative NP (cf. Lakoff and Peters 1966). In (12a), *bus* functions as figure and *scooter* as ground. In (12b), *scooter* is the figure while *bus* is ground. In contrast, in coordination, it is unclear which conjunct is figure and which one is ground (12c). In fact, all conjuncts must have parallel semantic functions.

(12) a. The bus collides with the scooter.

b. The scooter collides with the bus.

c. The scooter and the bus collide. (Gleitman *et al.* 1996: 363, (22))

In addition, further empirical evidence indicates that comitatives and coordinates are semantically nonequivalent. Consider the pair in (13), in which the oddness of (13b) arises from the fact that in the coordinate *a neighbor and her pet*, both conjuncts must have the same thematic role, meaning that the pet should be involved in the action of cleaning (Johannessen 1998). No such oddness arises in the comitative in (13), since comitatives do not impose similar semantic roles on the participants: *a neighbor* is the agent, while *her pet* is just a passive observer of the action.

(13) a. A neighbor was cleaning with her pet.

b. #A neighbor and her pet were cleaning.

Consider the examples in (14), which also lead to the same conclusion. The semantic oddness of sentences like (14b) shows that in coordination the conjuncts

should have the same thematic roles. In particular, the unacceptability of the conjunction of *a motorcycle* and *a lamppost* arises from the fact that the *lamppost* should be assigned a semantic function that is parallel to *a motorcycle*, which would lead to a denotation in which both the motorcycle and lamppost are moving entities. The lack of oddness in (14a), on the other hand, is due to the non-parallel nature of the semantic roles in comitative constructions.

(14) a. A motorcycle collided with a lamppost.
     b. #A motorcycle and a lamppost collided.

The last semantic distinction is in distributivity: coordinates admit a distributive reading, but comitatives generally do not, as has been noted by many (e.g., McNally 1993; Dalrymple *et al*. 1998; Zhang 2007, 2010a, among others). Distributive adverbs like *each* can associate with a coordinate (15), but may not associate with a comitative (in which the core NP is singular) (15a).

(15) a. *[A man together with his girlfriend] each bought an ice cream cone.
     b. [A man and his girlfriend] each bought an ice cream cone.

To recapitulate, in this section, some of the major differences between comitatives and coordinates were reviewed. Conjuncts of a coordinate phrase may not move, nor can they be disrupted by linguistic material. In contrast, comitative and core NPs of a comitative construction may be moved and may be separated by linguistic material. Semantically, coordination is group forming and it imposes semantic parallelism on its conjuncts, in contrast with comitatives in which the core NP is foregrounded and should be of a different semantic role from the comitative NP. These differences will become significant when I review the claim that there is a hybrid construction, called a comitative coordinate. Table 1 summarizes the differences.

Table 1. Differences between Coordinates and Comitatives

Phenomenon	Coordinates	Comitatives
Extraction	X	√
Interruption	X	√
Iterativity	√	X
Parallel Semantic Roles	√	X
Distributivity	√	X

3. The current claim: Complex NP analysis

In this section, I will present the claim that there exist so-called comitative coordinates as hybrid constructions exhibiting both coordinate-like and comitative-like properties. The attempt to correlate comitatives and coordinates is not new; it originates from at least Dyla (1988) who claims that Polish putative comitatives should be analyzed as coordinates. I will primarily focus on more recent work that investigates the phenomenon in Russian (McNally1993) and Chinese (Zhang 2010a, and subsequent work).[3] McNally (1993) observes that some constructions (*s*-constructions) that would otherwise be considered comitatives, act in a way that is unexpected of putative comitatives.[4] More specifically, although at the face of it these constructions appear to be

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3   The following abbreviations will be used in the glossed examples: NOM = nominative, PL = plural, INSTR = instrumental, SG = singular, CONJ = conjunction, ACC = accusative, Q = question marker, PRF = perfective, FUT = future marker, PST = past, RECIP = reciprocal, CL = classifier.

4   Note that McNally distinguishes between *s*-constructions that are pure comitatives in which the comitative NP is a VP adjunct and those that are comitative coordinates which she claims they should be analyzed as complex NPs. Interruption is only banned in the latter type, as exemplified in the pair below.

(i) a. Anna   segodnja s   Petej   ugla.
        A.-NOM   today   with   P.-INSTR   left-F.SG
        'Anna left today with Peter.'
    b. *Anna   sedgodnja s   Petej   pridut
        A.-NOM   today   with   P.-INSTR   come-3PL (McNally 1993: 353-354, (15)) (Russian)

For McNally, plural agreement is a diagnostic of whether the *s*-construction is a pure comitative or a comitative coordinate; only in the latter, plural agreement occurs. (Obviously, McNally makes this generalization based only on cases in which the two NPs contained in the construction are singular.)

comitatives, they have many features that make them different form typical comitatives and more like coordinates. First, McNally notes that like regular coordinates, these constructions induce plural agreement on the verb. Compare the coordinates in (16) and *s*-constructions in (20):[5]

(16) a. Anna　　i　　Petja　　pridut.
　　　　A.-NOM　and　P.-NOM　come-3PL
　　　　'Anna and Peter are coming.'
　　 b. Anna　　　s　　Petej　　napisali　pis'mo.
　　　　A.-NOM　with　P.-INSTR　wrote-PL　letter
　　　　'Anna and Peter wrote a letter.' (McNally 1993: 349, 347; (3a), (1)) (Russian)

Furthermore, as has been observed for coordinates, discontinuity is strictly prohibited with the *s*-constructions. Linguistic material may not intervene between the core NP and the comitative NP, as shown in (17b).

(17) a. Anna　　　s　　Petej　　pridut.
　　　　A.-NOM　with　P.-INSTR　come-3PL
　　　　'Anna and Pete are coming.'
　　 b. *Anna　　pridut　　s　　Petej.
　　　　A.-NOM　come-3PL　with　P.-INSTR (McNally 1993: 353, (13)) (Russian)

Additionally, like coordination which bars extraction of the conjuncts, *s*-constructions do not allow extraction of the comitative NP:

5　A reviewer asks whether example (16a) denotes just one event or two separate eventive readings as in the Korean example in (i), where the conjuncts have matching case, in contrast to (ii) in which only the second conjunct is case marked:

(i)　John-i　　kuliko　Mary-ka　　wa-ss-ta.
　　 J-NOM　CONJ　M-NOM　　came
　　 'John and Mary came.'　　　 (Two separate events)
(ii)　John-kwa　Mary-ka　　wa-ss-ta.
　　　J-CONJ　　M-NOM　　came
　　　'John and Mary came.'　　　 (One event preferred)

According to a native speaker of Russian, examples like (16a) may yield one or two eventive readings.

(18) a. *S   kem   ugli   Anna?
        with   who-INSTR   left-PL Anna?
     b. Molodye ljudi,   s   kotorymi   ugli   Anna, ...
        young   people-NOM,   with who-INSTR   left-PL A.-NOM . . . .

                                    (McNally 1993: 354, (16)) (Russian)

Also, McNally claims that the constructions pattern with coordinates in being complex NPs by virtue of being able to antecede anaphors, such as *svoi* 'one's own' and *sebja* 'one'.

(19) a. Anna   s   Natagej   videli   sebjav zerkate.
        A.-NOM with N.-INSTR saw-PL selfin   mirror
        'Anna and Natasha saw themselves in the mirror.'
     b. Anna   s   Petej   čitajut   svoi   knigi.
        A.-NOM with P.-INSTR read-3PL selves books-ACC
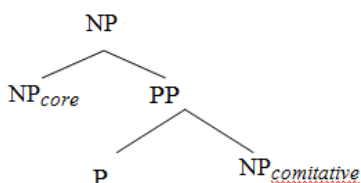   'Anna and Peter are reading their books.' (McNally 1993: 355, (18)) (Russian)

At the same time, *s*-constructions show various comitative-specific properties. First, they combine only NPs (20); other categories are not allowed. Second, unlike coordinates, they are non-iterative (21):

(20) a. Anna   s   Petej   napisali pis'mo
        A.-NOM with P.-INSTR wrote-PL letter
        'Anna and Peter wrote a letter.'
     b. *Anna vymila s   narezala ovošči
        Anna washed with cut-up   vegetables
        'Anna washed and cut-up vegetables.' (intended)
     c. *Anna vysokaja s   strojnaja
        Anna tall   with slender
        'Anna is tall and slender.' (intended)
     d. *Boris prigatovil obed, s   Petja/Petej   prinës   vino
        Boris prepared   dinner, with P.-NOM/P.-1NSTR brought   wine
        'Boris prepared dinner, and Peter brought wine.' (intended)
                              (McNally 1993: 347, (1); 351, (8)) (Russian)

(21)   *Anna   s   Magej   s   Natagej   pridut
      A.-NOM   with   M.*INSTR with N.-INSTR   come-3PL
      'Anna and Maggie and Natasha came.'   (intended)

                                (McNally 1993: 351, (9)) (Russian)

The conclusion that emerges from the above facts, according to McNally, is that a comitative coordinate is, like any coordinate phrase, a complex NP: the core and comitative NPs form a single complex NP, as shown in the tree below:

(22)   (McNally 1993: 348, (2); adapted)

Turning to Chinese, Zhang (2010a) argues for the existence of comitative coordinates in Chinese, mainly to account for extraction phenomenon in *gen*-constructions as in (23), highlighting other facts parallel to these shown by McNally for Russian.[6]

(23)   Huoche$_i$ hui   [_$_i$ gen qiche] xiangzhuang   ma?
      train$_i$ might [_$_i$ and bus]   collide   Q
      'Might the train collide with the bus?'

                    (Zhang 2010a: 114, (4.81a); adapted) (Chinese)

Chinese *gen*-constructions have a pure coordinate form and a comitative coordinate form, according to Zhang (2010a). To distinguish the two constructions, Zhang shows that pure coordinates (24b), but not comitative coordinates (24a), allow distributive adverbs. Note that a distributive adverb is unacceptable when the initial NP/core NP is extracted away from the comitative NP. This means that, according to Zhang's analysis, distributivity is only

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6   Zhang makes the same claim for *he*-construction. I will take *gen*-construction as a representative.

associated with pure coordinates, but not with comitative coordinates like (24a).

(24) a. *Lao Li hui gen Lao Wang fenbie   qu-le Shanghai ma?
         Lao Li   will and Lao Wang separately go-PRF Shanghai Q
     b. Lao Li gen Lao Wang hui fenbie   qu-le   Shanghai ma?
        Lao Li   and Lao Wang will separately go-PRF   Shanghai Q
        'Might Lao Li and Lao Wang have gone to Shanghai separately?'

<div align="right">(Zhang 2010b: 115, (4.83)) (Chinese)</div>
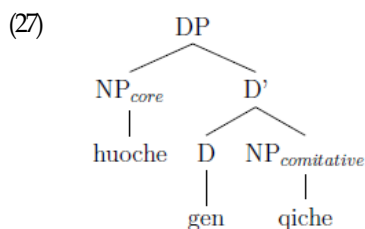
Moreover, using interruption as a point of distinction, Zhang claims that some *gen* constructions allow the NPs contained within them to be separated, and these are the ones that also ban the distributive reading, as exemplified in (25). Compare these examples to those in (26). This is used as evidence that a subset of *gen* constructions are impure conjuncts: comitative coordinates with a hybrid nature.

(25)   *Comitative Coordinates*
     a. [Akiu gen Baoyu] zai Riben jian-le   mian.
        Akiu   and Baoyu at Japan meet-PRF face
        'Akiu and Baoyu met in Japan.'
     b. Akiuizai Riben [_ genBaoyu] jian-le   mian.
        Akiuat   Japan [_and Baoyu] meet-PRF face

(26)   *Pure Coordinates*
     a. *[Baoyu] zai Riben [_ gen Daiyu] gezi   baifang-le pengyou.
        Baoyu   at Japan [_ and Daiyu] separately visit-PRF   friend
     b. [Baoyu gen Daiyu] zai Riben gezi   baifang-le   pengyou.
        Baoyu and Daiyu at Japan separately visit-PRF   friend
        'Baoyu and Daiyu visited their friends separately in Japan.'

<div align="right">(Zhang 2010b: 116, (4.84), (4.86)) (Chinese)</div>

According to Zhang, the above facts argue that comitative coordinates (which would otherwise be considered comitatives) should be structurally analyzed as coordinates. Zhang, therefore, assigns them an adapted version of a complementation structure, a structure that has been proposed for coordination,

in which the coordinator projects its own phrase (Larson 1990; Munn 1993; Kayne 1994; Johannessen 1998; Zoerner 1995; Zhang 2010b, among others). In this structure, *gen* heads a DP phrase in which the core and comitative NPs are external and internal NPs, respectively. The structure is illustrated in (27) for (23).

(27)

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                DP
              /    \
        NP_core     D'
           |       /   \
        huoche    D    NP_comitative
                  |         |
                 gen      qiche
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To sum up, I presented the arguments for assigning a complex NP structure to so-called comitative coordinates. The arguments were initially motivated by agreement (in Russian) and extraction (in Chinese), and were further claimed to be supported by iteration and interruption (in Russian) and distributivity (in Chinese). Although the analyses discussed differ in the details, both of them argue that core and comitative NPs of a comitative construction are base generated in a complex NP projection, and consequently assign to comitative coordinates a structure similar to coordinate structure.

4. Against comitative coordinates

In this section, I will critique McNally and Zhang's evidence for comitative coordinates. I will propose that what McNally and Zhang claim to be a comitative coordinate is just a comitative. To achieve this goal, I will address three issues: agreement, Case, and extraction. I will then propose alternative structures for comitatives in which core and comitative NPs are not contained in a complex NP.

As has been shown in section 3, McNally argues that a subset of *s*-constructions patterns with coordinates, although they exhibit comitative-like properties. The primary reason why McNally believes so is that these constructions trigger plural agreement on the verb although the *s* marker is not

a coordinator. The reason why the *s* marker cannot be a true coordinator, according to McNally, is the lack of case parallelism between the NPs of the construction. The NP that follows the *s* marker does not receive the same case as the NP that precedes it, assuming that true coordinators enforce case matching on the conjuncts, as can be seen in several Russian examples above (e.g., (17a)).

However, case mismatch is not a diagnostic of whether the construction is a coordinate or a comitative. Although coordination enforces some form of parallelism on the conjuncts, case parallelism is not required in coordination. Much work has argued that coordination imposes category parallelism; conjuncts must be matching in syntactic category, which has been labeled as the law of coordination of likes (LCL) by Chomsky (1957) (see also Bayer 1996; Camacho 2003, e.g.). Recent work argues that category parallelism in coordination can be violated (Gazdar *et al.* 1985; Sag *et al.* 1985; Bayer 1996; Al Khalaf 2015), and that the only combanitorial restriction on coordination is semantic parallelism (Munn 1993; Fox 2000; Al Khalaf 2015). No work that I am aware of argues that case matching is obligatory in coordination. In fact, much work shows that case mismatch is very common (Zoerner 1995; Johannessen 1998, among others). Below are some examples:

(28) a. ?Him, her and I all left.
  b. Robin saw he, she and me. (Progovac 1998: 5, (56)-(57))

(29) a. She and him will drive to the movies.   (Johannessen 1998: 16)
  b. All debts are cleared between you and I. (Shakespeare, *Merchant of Venice*, quoted in Johannessen 1998)

(30) Ana   waiy yak   sa-nusafiru   qariiban
   I.NOM   and   you.ACC FUT-travel.3PL soon
   'Me and you will travel soon.' (Arabic)

Thus, case mismatch as in *s*-constructions in Russian does not necessarily argue for analyzing these constructions as similar to coordinates in structure.

In addition, we have seen that McNally uses plural agreement in *s*-constructions to argue for their being coordinates. In fact, plural agreement is

not a reliable diagnostic. Some work reports that plural agreement is possible even with discontinuous constructions, showing that number agreement does not enforce a specific structure of the element triggering agreement. A good example is what Yamada (2010) labels as *discontinuous plural agreement* in which a comitative construction that is disrupted by linguistic material still triggers plural agreement:[7]

(31) Hiroki-ga   kinoo   Yasu-to   home-at-ta.
      Hiroki-NOM yesterday Yasu-with   praise-RECIP-PST
      'Hiroki and Yasu praised each other yesterday.'
                                        (Yamada 2010: 127, (176)) (Japanese)

In addition, recent work shows that number agreement can be triggered by non-syntactic factors. Reid (2011) offers a new line of research which explains various number agreement phenomena. He contends that number agreement is often determined by pragmatic/discourse factors in many contexts. In particular, verb number does not have to be controlled by noun number, and that several factors affect number agreement, including textual cohesion. For example, in (32a), *the sex lives of Roman Catholic nuns* functions as a singular although it is semantically plural. So we can say that the plural represents a set and this set is construed as singular in this case. The same can be found in (32b) in which a syntactically singular subject triggers plural agreement, indicating that number agreement does not have to be syntactically or semantically triggered. The reader

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7   A reviewer asked whether switching the order of NPs in examples like (i) is possible. As pointed out to me by Masahiro Yamada (personal communication), switching the order of the conjuncts in examples like (ii) is possible:

(i)   Hiroki-ga   Yasu-to   ikada-o   hito-tsu   tsukut-ta.
      Hiroki-NOM   Yasu-with raft-ACC 1-CL.object build-PST
      'Hiroki built one raft with Yasu.'   (Yamada 2010, 132, (185d))
(ii) Yasu-to   Hiroki-ga   ikada-o   hito-tsu   tsukut-ta.
      Yatsu-with   Hiroki-NOM raft-ACC 1-CL.object build-PST (Japanese)

However, changing the order does have an effect on the interpretation of the sentence. More specifically, in Japanese, *-to* can be a coordinator (i.e. *and*) or a comitative marker (i.e. *with*), in this ordering, as 'and' follows a noun phrase in Japanese (i.e., [NP-and NP]). While (i) strongly suggests a collective reading (Hiroki and Yasu built a raft together), (ii) allows a distributive reading (they built one raft each) in addition to a collective reading.

can check for herself that sentence (32c) leads to the same conclusion.

(32) a. [The sex lives of Roman Catholic nuns] **does** not, at first blush, seem like promising material for a book.
   b. [The biggest threat to the joint force] **are** the hundreds of IEDs Taliban fighters have planted in and around Marja.
   c. We're here to prove that old masters **don't** bite. There's this popular conception that old masters **is** something esoteric and remote and hard to understand.   (Reid 2011: 1088, (1)-(3))

Therefore, the plural agreement seen in *s*-constructions does not necessarily enforce a specific structure of the constructions.

Turning to Chinese *gen* constructions, as shown in section 3, Zhang claims that they can also be analyzed as comitative coordinates, bringing evidence from extraction. It is not clear, however, how extraction could argue for structurally analyzing these constructions as coordinates; in fact, coordinates ban extraction. The more likely scenario is that when *gen*-construction allows the initial NP to move, we are dealing with a (pure) comitative and *gen* should be viewed as a comitative marker. In other words, there are two *gen*'s here. The empirical evidence provided by Zhang leads to this conclusion. All the syntactic and semantic points of difference between comitatives and coordinates, listed in Table 1 above, are the exact same points of difference between the two uses of *gen* reported by Zhang. For example, that iteration is impossible for some of the *gen*-constructions indicates that these constructions are comitatives. In (33), iteration of the PP with the verb 'collide' is not possible (this is intuitive if we know that the PP is an argument of the verb).

(33)   *Huoche hui   gen gongjiaoche gen qiche xiangzhuang Q
       Train   might   and bus   with car   collide   ma?
       '*The train might (have) collided with a bus with a car'
                                            (Al Khalaf 2015: 358, (359)) (Chinese)

Note that there are cases that appear to involve iteration, like in (36a). However, the interpretation of the sentence indicates that *gongjiaoche he qiche* 'bus

and car' is a coordinate phrase within a comitative construction. The interpretation of the sentence is: a train collided with [a bus and a car]. This means that *he* here functions as a true coordinator, while *gen* is a comitative marker. Therefore, these examples do not show that iteration is possible in comitatives.

(34)   Huoche hui   gen gongjiaoche he   qiche xiangzhuang ma?
       Train   might and bus   and car collide   Q
       'A train collided with [a bus and a car].'

                                      (Al Khalaf 2015: 163, (360)) (Chinese)

Thus, the inability of *gen* NP to iterate shows that it is a comitative, and not a comitative coordinate that is parallel to coordinates in structure.

　　Moreover, semantic evidence argues against correlating so-called comitative coordinates to coordinates. Zhang's analysis predicts that sentences as in (35) should have the same information structure, which is not the case. Going back to the semantic characterization proposed by Gleitman *et al*. (1996), taking the pair in (35) as an example, if *huoche* and *qiche* were base generated in a coordinate complex, the sentences (35a) and (35b) should not be different in interpretation, as I have shown for an equivalent pair from English in section 2. In (35a), *huoche* is figure and *qiche* is ground, but in (35b), it is not clear which one is figure and which one is ground.

(35) a. Huoche hui   gen qiche xiangzhuang ma?
        train   might and bus collide   Q
        'Might the train collide with the bus?'
    b. Huoche gen   qiche hui   xiangzhuang ma?
       Train   and bus   might collide   Q
       'Might the train collide with the bus?'
                                   (Zhang 2010b: 114-115, (4.81), (4.82)) (Chinese)

　　The same semantic distinction can be found when more than two NPs are involved. Consider (36), in which an NP complex with two occurrences of *gen* has raised to the subject position. Compare it to (36a) above in which only the
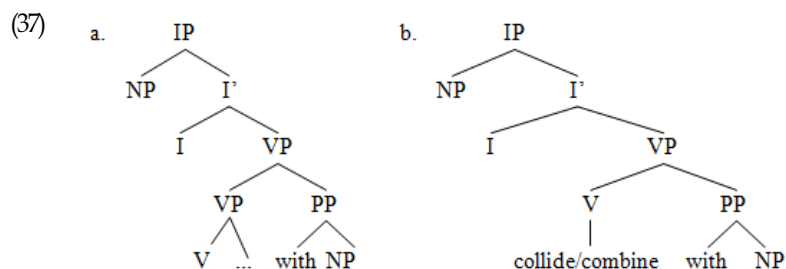
initial NP of the complex has moved. A native speaker reports that the denotation of these sentences is not the same. In (36a), 'car', 'train' and 'bus' should be construed as moving entities; all of them must be moving at the moment of collision. The sentence in (36b), however, does not have to have the same interpretation: it admits the reading in which 'car' and 'train' are stationary. This semantic distinction is the exact same distinction reported in the literature to distinguish coordinates from comitatives. This indicates that the sentence involving raising is a comitative, and not a comitative coordinate.

(36) a. [Huoche gen qiche gen gongjiaoche] hui   xiangzhuang?
       Train   and car   and bus   might collide
       'a train, a car, and a bus might collide.'
   b. Huoche hui   gen gongjiaoche he qiche xiangzhuang ma?
       Train   might and bus   and car collide   Q
       'A train collided with [a bus and a car].'

                             (Al Khalaf 2015: 164, (361)) (Chinese)

Therefore, as I have shown above, the facts of Russian and Chinese do not argue for comitative coordinates. They only show that in these languages, and presumably in all the languages that pattern with them, the same linguistic item belongs to two categories: coordinators and comitative markers. I, therefore, propose that so-called comitative coordinates should be syntactically analyzed as comitatives, meaning that the core and comitative NPs are not part of a complex NP as claimed by McNally (1993) and Zhang (2010a). Below are the structures I propose for comitatives (see also Al Khalaf 2015). The structure in (37a) represents cases in which the comitative is an adjunct. The structure in (37b) is specific to cases in which the comitative NP is an argument of the predicate like the PP complement of verbs like *collide*:[8]

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8   Note that Zhang (2007; 2010a) makes a similar distinction between symmetrical and asymmetrical comitatives, but as mentioned above, she assigns to symmetrical comitatives (comitative coordinates) a coordinate structure, which is what I argue against here.

(37)

As can be seen above, neither of the structures has the core and comitative NPs dominated by a complex NP projection. Both structures allow the core NP to move freely without restrictions, and they capture all the differences between coordinates and comitatives, like intervention, for instance.

5. Conclusion

In conclusion, a closer look at the facts presented by McNally (1993), Zhang (2010a) and others should make one wonder if they really argue for the existence of so-called comitative coordinates. As shown in the paper, a more logical scenario would be that in languages like Russian and Chinese, the same lexical item may function as a coordinator or a comitative marker; that is, we are dealing with two distinct constructions, not one hybrid construction with comitaive and coordinate characteristics. This assumption is not too far-fetched given that much typological work shows that many languages encode comitatives and coordinates using the same lexical item or marker (e.g., Stassen 2000). This means that there is no reason to believe that comitative coordinates exist and that there is no reason to believe that a subset of them can be assigned a coordinate structure. This result has consequences on the conjunct constraint, the constraint that bans extracting a conjunct out of a coordinate phrase: it turns out that the constructions which Zhang (2010a) claims that they violate this constraint are not coordinates; therefore, her claim that the conjunct constraint can be violated is untenable.

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