Some Notes on Ellipsis

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ABSTRACT. This paper is a first step toward elucidating the relationship between the possibility of ellipsis and word order. Here I concentrate mainly on the verb deletion in German, which exhibits both forward and backward verb gapping. After reviewing some of the previous research and the relevant data, I turn to cases where coordinate conjunctions and complementizers are crucial factors. More specifically, I propose that the complementizer blocks the licensing of gapping by the coordinate conjunction. I hope to extend this analysis to further types of elliptical constructions and to other languages, in particular another OV-language such as Japanese.[*]

Keywords: deletion, gapping, right node raising, coordinate conjunction, complementizer, German

1. Introduction

In this paper, I will deal with some aspects of the phenomenon relating to ellipsis, the focus being placed on German. Among various research areas subsumed under ellipsis, I am mainly concerned with the deletion of verbs, usually dubbed gapping in the relevant literature. Right node raising (henceforth: RNR) constructions will also be taken up so long as they are relevant to the present discussion. One of the goals of my ongoing research is to elucidate the relationship between the possibility of ellipsis and word order patterns, whereby other OV-languages such as Japanese should also be taken into consideration. As a prerequisite for a thorough contrastive exploration on this matter, the present paper will lay out some preliminary investigations, while including also new proposals that provide an explanation for some German data.

The present paper is organized as follows: Section 2 introduces the most basic examples of gapping and RNR along with some relevant remarks as a starting point. Section 3 recapitulates data that are relevant to the discussion on the possibility of deletion and word order patterns. Section 4, the main part of this paper, puts forth an analysis that captures some aspects of forward verb deletion in German. Specifically, I propose that the coordinate conjunction and the complementizer play a crucial role in accounting for the relevant data.

Section 5 finally gives a brief summary and points to some issues that should be handled in future research. In some of the example sentences cited below, notations are sometimes altered for expository purposes.

2. Gapping and right node raising

Gapping and RNR are among the topics that have been discussed most intensively in the literature when it comes to phenomena subsumed under ellipsis. To make it simpler, I will just illustrate cases where only two conjuncts are conjoined. Ross (1970: 250) maintained that sentences such as (1b) are converted into those like (1a) by a rule he called gapping. Apparently the same procedure can be applied to German (2) (cf. Hartmann 2000: vii):

(1)   a. Tom <u>has</u> a pistol, and Dick ___ a sword.

         b. Tom <u>has</u> a pistol, and Dick <u>has</u> a sword.

(2)   a. Julian <u>verachtet</u> Coca Cola und Robert ___ Pepsi Cola.

         Julian <u>despises</u> Coca Cola and Robert ___ Pepsi Cola.

         b. Julian <u>verachtet</u> Coca Cola und Robert <u>verachtet</u> Pepsi Cola.

Postal (1974: 126) took up sentences such as (3a), whose underlying structure should look like (3b), and named them RNR constructions. In such cases, the string shared by each of the conjuncts typically appears at the right edge of the whole sentence.[1] Here too, we find parallel constructions in German (cf. Hartmann 2000: 56):

(3)   a. Jack may be ___, and Tony certainly is, <u>a werewolf</u>.

         b. Jack may be <u>a werewolf</u>, and Tony certainly is <u>a werewolf</u>.

(4)   a. Peter jagte ___ und Maria schoss <u>einen schwarzen Elch</u>.

         Peter hunted ___ and Maria shot <u>a black moose</u>.

         b. Peter jagte <u>einen schwarzen Elch</u> und Maria schoss <u>einen schwarzen Elch</u>.

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[1] As mentioned in the text, the appearance of the shared string at the right edge, as in (3/4), is not a necessity, but merely a typical instantiation of RNR. Differently from forward gapping, RNR, which is a type of backward deletion, is not restricted to coordinate structures (cf. Phillips 2003: 68):
i)   The people who liked ___ told the people who disliked <u>the movie</u> that it was hard to see why anybody wouldn't love it.
See also Hudson (1976) and Wilder (1999) for further data and discussion as well as relevant examples in section 3.

These two types of constructions have in common, on the one hand, that a string can be missing in one of the conjuncts under identity. One apparent difference between them is, on the other hand, that the deletion under identity is taking place in opposite directions: (1/2) are cases of forward deletion (or gapping) and (3/4) are instances of backward deletion. As far as the SVO-structure is concerned, as we are observing here, the patterns can be summarized as follows (as we will see below, α is not necessarily a syntactic constituent):

(5)   Gapping (forward deletion): [... $α_i$ ...] Conj. [... $\emptyset_i$ ...]
(6)   RNR (backward deletion): [... $\emptyset_i$] Conj. [... $α_i$]

It seems that the term "gapping" is usually used in the literature to refer to the deletion of verbs.[2] Let us now take a look at examples in Japanese in which a verb in one of the conjuncts is deleted:

(7)   Taro-ga hon-o ___ sosite Hanako-ga hana-o <u>katta</u>.
       Taro-Nom book-Acc ___ and Hanako-Nom flower-Acc <u>bought</u>
       'Taro bought a book and Hanako (bought) a flower.'
(8)   *Taro-ga hon-o <u>katta</u>/<u>kai</u> sosite Hanako-ga hana-o ___ .
       Taro-Nom book-Acc <u>bought</u>/<u>buy</u> and Hanako-Nom flower-Acc ___

To the unacceptable variant (8), we will come back later. One might wonder whether the construction in (7) should be called gapping or RNR. Some authors (e.g. Ross 1970, Kato 2006, etc.) call it gapping in the sense that the verb is deleted as in (1/2). By others (Hankamer 1979, Saito 1987, Yatabe & Tanigawa 2018, etc.) it is dubbed RNR (cf. (3/4)), whereby the schema (6) applies. Since this question of terminology is of little importance for our purposes, I will not dwell on this matter here and use the term "(backward verb) gapping" for cases such as (7), where just a verb or a string of verbs is involved (see Yatabe & Tanigawa 2018 for this matter).

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[2] As one of the first to investigate this phenomenon, Ross (1970: 250) maintains for the "English rule of GAPPING" that it "operates to delete indefinitely many occurrences of a repeated main verb in a conjoined structure." Maling (1972: 101) also regards "Gapping" as "a transformation which deletes verb(s) in a conjoined structure", while taking into consideration not only the English-type SVO-languages, but also SOV-languages such as German.

3. Deletion and word order

We will now take a closer look at the correlation between the possibility of deletion and the word order. Ross (1970: 251) already discusses this matter and puts forth the following hypothesis:

(9)   The order in which Gapping operates depends on the order of elements at the time that the rule applies; if the identical elements are on the left branches, Gapping operates forward; if they are on right branches, it operates backward.

A simplified version of his schemata (Ross 1970: 225) is given below:

(10)   Forward gapping:
        a. SVO + SO   (cf. (1/2))
        b. SOV + SO
        Backward gapping:
        c. SO + SOV   (cf. (7))
        d. *SO + SVO

(10a) and (10c), which do justice to (9), are typically represented by English and Japanese, respectively. (10b) is a possibility in German and some other languages like Turkish and Hindi, to which I will come back below.

While Ross (1970) tries to treat forward and backward ellipsis uniformly, it seems to have become more likely in the course of research that they should be regarded as different phenomena. Wilder (1999: 587), for example, states that the "directionality of the dependency correlates with a constraint on the placement within conjuncts of 'gaps' corresponding to the shared constituent α" and puts forth (11) (emphasis by Wilder):

(11)   a. If α surfaces in the *final* conjunct (RNR), gap(s) corresponding to α must be at the *right edge* of their non-final conjuncts.
        b. If α surfaces in or to the left of the *initial* conjunct (Gapping), α-gaps in non-initial conjuncts underly no such edge restriction.

The backward gapping described by (11a), also schematized by (6), underlies this specific condition regarding the surface ordering of strings. Whatever the explanation for the existence of (11a) might turn out to be, it seems to be a correct descriptive generalization. Let us now

recapitulate some of the previous findings from the literature regarding this point a little bit further.

It has repeatedly been pointed out in the literature that the shared string in a RNR construction need not be a syntactic constituent, which might apparently speak against an analysis of RNR as an instance of right node "raising" in its literal sense or as one of syntactic movement (cf. Postal 1974, Sabbagh 2007, etc.)[3]. Examples of various types from different languages are given below:

(12) a. Karl tritt für eine großzügige ____ und Heinz tritt für eine sparsame <u>Lösung ein</u>. (Höhle 1991: 147)

Karl steps for a generous ___ and Heinz steps for a parsimonious <u>solution in</u>.

'Karl pleads for a generous solution and Heinz pleads for a parsimonious solution.'

b. Karl hat einen Mann, der zwei __ und Anna hat eine Frau, die drei <u>Hunde besitzt, gekannt</u>.   (Wesche 1995: 55)

Karl has a man, who two ___ and Anna has a woman, who three <u>dogs owns, known</u>.

'Karl knew a man who owns two dogs, and Anna knew a woman who owns three dogs.'

(13) Mike-ga raion-ni ___ , Tom- ga kuma-ni <u>osowareta otoko-o tasuketa</u>.   (Mukai 2003: 210)

Mike-Nom lion-Dat ___ , Tom-Nom bear-Dat <u>was-attacked man-Acc saved</u>.

'Mike saved the man who was being attacked by a lion, and Tom saved the man who was being attacked by a bear.'

(14) We must distinguish psycho-___ from socio<u>linguistic claims</u>.   (Wilder 1997: 87)

(15) Es scheint so, als ob jeder, der die rote ___ , auch die grüne <u>Scheibe getroffen hat</u>. (Wilder 1997: 87)

it seems so, as if everyone, who the red ___ , also the·green <u>target hit has</u>.

'It seems as if everyone who hit the red target also hit the green target.'

Obviously, none of the shared strings above is a syntactic constituent. (14) and (15) further show that RNR is applicable also to non-coordinate structures, so long as the generalization in (11a) is observed.[4]

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[3] Saito (1987) maintains that the raising of the shared string takes place at PF. This assumption may surely exempt the syntactic constituency problem. However, he also has to assume that the ECP applies at PF as well.

[4] It is well known that the construction is also constrained by semantic and pragmatic factors, which I do not go into here. See e.g. Kuno (1976), Hartmann (2000), etc.

Let us now see how backward gapping can operate in verb-final structures. We have already seen an example in Japanese as (7), which is repeated below as (16). A parallel case can also be found in German, which exhibits OV-structures besides the VO-order. The relevant schema represented as (18) can be regarded as a subcase of various RNR patterns, in which the clause-final verb in the first conjunct is deleted (cf. (6), (10c)):[5]

(16) Taro-ga hon-o ___ sosite Hanako-ga hana-o katta.

(17) weil Peter den Brief ___, und Heidi das Buch las, ...   (cf. Maling 1972: 106)
      because Peter the letter ___ and Heidi the book read, ...
      'Because Peter read the letter, and Heidi the book, ...'

(18) [S O __] Conj [S O V]

As the generalization by Wilder (1997) in (11a) predicts, the deletion of a non-right-edge string is not allowed under backward deletion, whether the structure is OV or VO (cf. (10d)):

(19) *Taro-wa ___ katta/kai, Hanako-wa kuruma-o utta.
      *Taro-Top ___ bought/buy, Hanako-Top car-Acc sold.
      'Taro bought and Hanako sold a car.'

(20) *weil Frank ___ kaufte, und Eric ein Auto verkaufte, ...
      *because Frank ___ bought, and Eric a car sold, ...
      'because Frank bought a car and Eric sold a car, ...'

(21) *Frank ___ ein Auto, und Eric kaufte ein Motorrad.
      *Frank ___ a car, and Eric bought a motorcycle.
      'Frank bought a car and Eric bought a motorcycle.'

(22) *[S __ V] Conj [S O V], *[S __ O] Conj [S V O]

The condition on right peripherality in (6/11a) can be fulfilled even when it is a result of some "stylistic" operation, like extraposition or right dislocation:

(23) Taro-wa kai/(?)katta ___, Hanako-wa utta, kuruma-o.   (cf. (19))
      Taro-Top buy/bought ___, Hanako-Top sold, car-Acc.
      'Taro bought and Hanako sold a car.'

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[5] Let us just point out that the RNR-structures exemplified here can also appear embedded, e.g. as complement or relative clauses.

(24)   a. ?*weil mir Frank ___ rät, und Eric [das Auto zu kaufen] abrät   (cf. (20))

        ?*because me$_{Dat}$ Frank ___ advises, and Eric [the car$_{Acc}$ to buy] advises-against

        'because Frank advises me to buy the car and Eric advises me not to buy the car'

        b. weil mir Frank rät ___ , und Eric abrät [das Auto zu kaufen]

This state of affairs implies that the backward deletion in question is to be regarded rather as a surface phenomenon, which corresponds to the assumption entertained by a certain number of researchers who regard RNR to be a deletion operation taking place at PF (cf. e.g. Hartmann 2000: 55ff).

So far, German and Japanese, both being basically OV-languages, have exhibited parallel behaviors concerning the possibilities of deletion. This may be rather expected, given the often pointed-out observation that the possible patterns of deletion are correlated with the basic word order of the language (cf. Ross 1970, Hankamer 1979, Wilder 1997, Abe & Hosih 1997, etc.). There is, however, a clear contrast between the two languages when it comes to the representation of (25) (cf. Maling 1972: 106). The Japanese example in (8) is repeated here as (27):

(25)   [S O V̲] Conj [S O ___] (cf. (10b))

(26)   weil Peter den Brief la̲s, und Heidi das Buch ___ , ...   (cf. (17))

        because Peter the letter r̲ead and Heidi the book ___ , ...

(27)   *Taro-ga hon-o ka̲tta/ka̲i sosite Hanako-ga hana-o ___ .

        *Taro-Nom book-Acc b̲ought/b̲uy and Hanako-Nom flower-Acc ___ .

The problem concerning this contrast will not be dealt with in this paper, but it will be discussed in some detail in Inaba (in preparation).

4. Observations and proposals

Let us now look into the situation in German more closely. The German example in (26), repeated below as (28), is apparently a case of TP-coordination; the subordinating conjunction *weil* ('because') is a shared element and introduces the two conjoined clauses. Now, minimally different from it is example (29):

(28)   weil Peter den Brief la̲s, und Heidi das Buch ___

(29)   *weil Peter den Brief la̲s, und weil Heidi das Buch ___

        *because Peter the letter r̲ead and because Heidi the book ___

This is a case of CP-coordination, in which *weil* is repeated. The presence of the subordinator or the overt element in C in the second conjunct renders the sentence ungrammatical. One may well ask how this contrast can be accounted for.

A possible way to go would be to assume that the well-formed German sentence in (28) is actually an instance of CP-coordination and the deletion of the verb in the second conjunct is taking place from the V2-position.[6] That is, one could posit representation (30b) instead of (30a):

(30)   a. weil [TP Peter den Brief ~~las~~], und [TP Heidi das Buch ~~las~~]

   b. [CP weil Peter den Brief ~~las~~], und [CP Heidi ~~las~~ das Buch]

If this were the case, (28) could be regarded as a subcase of the normal forward gapping demonstrated by (1/2) and schematized as (10a). The representation in (30b), in which a verb-final and a V2-clause are coordinated, is not completely far-fetched, since German allows for this kind of asymmetric coordination (cf. Höhle 1990: 222); in (31), the two coordinated clauses, one verb-final and the other V2, are both within the scope of the subordinating conjunction (*wenn* 'if'), just as in (28):

(31)   wenn jemand nach Hause <u>kommt</u> und da <u>steht</u> der Gerichtsvollzieher vor der Tür, ...

   if someone to home <u>comes</u> and there <u>stands</u> the bailiff before the door, ...

   'if someone comes home and finds the bailiff standing in front of the door, then ...'

Assuming that the forward gapping of the verb is only possible from the medial position (or, in German, from the second position) but not from the clause-final position, one could predict the ill-formedness of (29), where the second position is occupied by the subordinating conjunction and gapping therefore cannot take place from that position, but has to take place, by necessity, from the clause-final position. Further support for the assumption here might be the absence of the German type (28) in Japanese, (27), which correlates with the observation that there is no verb fronting in Japanese.

Such an analysis, however, requires the stipulation that the apparently clause-final verb in the second conjunct may not be deleted, for which a principled explanation would be called

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[6] The grammaticality of this type in German led Ross (1970) to the conclusion that German is basically an SVO-language.

for. Furthermore, the assumption that the verb in the final position of the second conjunct may not be gapped seems to be empirically inadequate:

(32)   a. Ich <u>habe</u> das Fleisch <u>essen</u> <u>wollen</u>, und meine Mutter ___ den Salat ___ ___.
  I <u>have</u> the meat <u>eat</u> <u>want</u>, and my mother ___ the salad ___ ___.
  'I wanted to eat the meat and my mother wanted to eat the salad.'
  b. weil ich das Fleisch <u>gegessen</u> <u>habe</u>, und meine Mutter ___ den Salat ___
  because I the meat <u>eaten</u> <u>have</u>, and my mother ___ the salad ___
  'because I ate the meat and my mother (ate) the salad'

(33)   Er lässt Peter morgens <u>arbeiten</u> und Maria abends ___.
  he makes Peter in-the-morning <u>work</u> and Maria in-the-evening ___.
  'He makes Peter work in the morning and Maria in the evening.'

In (32), at least one of the verbs is deleted from the clause-final position. Also in (33), the position from which the deleted verb originates must be at the end of the clause. In order for such an approach to go through, one could further postulate that the clause-final *finite* verb in the second conjunct may not be gapped. How this restriction can be motivated, if at all, remains open at the moment.

We have observed that the forward gapping of the clause-final verb is not always permitted in German. Specifically, the presence of C renders the construction unacceptable, as (29) showed. In short, the schemata for the forward gapping in German should look like (34):

(34)   a. [$_{XP}$ ... V] Conj. [$_{XP}$ ... e$_v$]   (X = T, v, V, etc.)
  b. *[$_{CP}$ C ... V] Conj. [$_{CP}$ C ... e$_v$]

We now need to explain why there is a difference between (34a) and (34b), i.e. in the possibility of forward gapping in German depending on the coordinated category. Let us recapitulate the relevant data, which are in accordance with the schemata in (34):

(35)   weil [$_{TP}$ Peter den Brief <u>las</u>] und [$_{TP}$ Heidi das Buch ___]   (< (28))
(36)   *[$_{CP}$ weil Peter den Brief <u>las</u>] und [$_{CP}$ weil Heidi das Buch ___]   (< (29))

The following example now appears at first glance to be a CP-coordination with forward gapping of the finite verb in the V2-position and that of the clause-final infinite verb (cf. (38b)). If so, it should be excluded due to (34):

(37) Ich habe das Fleisch gegessen und meine Mutter den Salat.

      I have the meat eaten and my mother the salad

      'I ate the meat and my mother ate the salad.'

I would, however, like to assume the representation in (38a) instead of (38b) for (37):

(38) a. Ich$_i$ habe [$_{TP}$ t_i das Fleisch <u>gegessen</u>] und e$_{Aux}$ [$_{TP}$ meine Mutter den Salat ___].

      b. [$_{CP}$ Ich habe das Fleisch <u>gegessen</u>] und [$_{CP}$ meine Mutter e$_{Aux}$ den Salat ___]

In the case of forward gapping of the finite verb, it is well-known that the two occurrences of the finite verb need not agree in their phi-features:

(39) dass Johann Austern <u>liebt</u> und seine Eltern Krabben ~~lieben~~   (cf. Wesche 1995: 139)

      that Johann oysters <u>loves</u> and his parents shrimps ~~love~~

      'that Johann loves oysters and his parents love shrimps'

(40) Johann <u>liebt</u> Austern und seine Eltern ~~lieben~~ Krabben.

We also know that the subject in German need not move to the "subject position" (cf. Haider 2010, etc.). It seems then that nothing speaks against the representation in (38a), at least as an option.

      For the obligatory absence of an element in the C-position in the second conjunct under forward gapping (cf. (35) vs. (36)), Wilder (1997:74) postulates the following:

(41) Head Condition on FWD [forward deletion]:

      An ellipsis site may not be c-commanded by an overt (non-deleted) head in its domain (= conjunct).

This should, according to Wilder (1997: 75), correctly predict the ill-formedness of (42) as well as the contrast in (43) (the relevant head is marked in bold):

(42) *Hans hat mir ein Buch gekauft und ~~Hans~~ **wird** ihr ~~ein Buch~~ geben

      *Hans has me$_{Dat}$ a book$_{Acc}$ bought and ~~Hans~~ **will** her$_{Dat}$ ~~a book$_{Acc}$~~ give

      'Hans bought me a book and will give her a book.'

(43) a. *... that John gave her a book and **that** Mary ~~gave her~~ flowers

b. I wonder what John gave to Mary and what ~~John gave~~ to Sue

Our problem at hand, i.e. the contrast between (35) and (36), can also be subsumed by this proposal.

Condition (41), however, seems to have no independent motivation and is at best a descriptive generalization. Wilder (1997) indeed provides no explanation for it and admits himself that its status is not clear in the current theory (p.97f). From an empirical point of view, it also incorrectly allows for examples like the following:

(44)   *Ich weiß nicht, ob Peter zum Fußball <u>gegangen ist</u>, und wann Maria zum Konzert ___ .
        *I know not, if Peter to-the football <u>gone is</u>, and when Maria to-the concert ___ .
        'I don't know whether Peter went to the football game and when Maria went to the concert.'

If (41) predicts the well-formedness of (43b), although not of (43a), (44) should be acceptable as well, contrary to fact. See also Hartmann (2000: 40ff), among others, for some other counterarguments to Wilder (1997).

In order to account for the contrast observed between (35) and (36), I first propose that the coordinate conjunction, here *und* ('and'), licenses the gap in (35). This seems to be a natural assumption considering the observation that forward gapping is allowed only in the coordinate structures and not, for instance, in subordinate structures (cf. Jackendoff 1971, Lobeck 1995, Kato 2006, Johnson 2017, etc.). For coordinate structures, I follow the view now standard in theoretical investigations that the conjunction heads the whole phrase which includes both the first and the second conjunct (cf. e.g. Wilder 1997, Johannessen 1998, etc.). The gap in the second conjunct is now licensed by way of c-command by the coordinate conjunction. It is further assumed that this licensing takes place at the syntax-phonology interface: It is, on the one hand, obvious that the deletion process here has an effect on the phonological representation. It should, on the other hand, also have some structural relevance, as argued for e.g. by Wilder (1997). To say the least, the forward deletion in question here is not totally ignorant of structural issues like c-command, as we would like to maintain here.

I further propose that the unacceptability of (36) is to be attributed to the very presence of the C-head, here realized as a subordinate conjunction.[7] This element intervenes between

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[7] Another possibility to exclude (36), which is not pursued here, is to take into consideration the phase status of the CP, out of which a putative extraction should be prohibited, as pointed out by Yoshihito Dobashi.

the c-commanding licenser, the coordinate conjunction, and the gap to be licensed. Its presence gives rise to something like a relativized minimality effect (cf. Rizzi 1990).[8] Let us note in passing that both the licenser and the intervener are X^0-categories, which qualifies the latter to act as an intervener.

It is now worth considering why C can function as an intervener in this case. In the current literature, it is commonly assumed that C determines the mood or the force of the sentence (cf. e.g. Truckenbrodt 2006 and contributions in Lohnstein & Trissler 2004) and thus makes the sentence "complete". The presence of C should consequently imply that the sentence is "complete" in this respect. Now, the verb can be regarded as the most essential building block of the clause or of the CP, in the sense that the latter is the topmost extended projection of the former (cf. Grimshaw 2000). Along these lines, I would like to assume that the presence of C, which in our case at hand is realized as a subordinating conjunction, necessitates the realization of the verb or bans its deletion, so that the sentence becomes "complete" (cf. also Hartmann 2000: 156 for her remark on the correlation between C and verb, which will be mentioned below).

Let us next turn to the following data:

(45) Peter <u>will</u> den Brief schreiben und Heidi <s>will</s> das Buch lesen.

Peter <u>wants</u> the letter write and Heidi <s>wants</s> the book read.

'Peter wants to write the letter and Heidi wants to read the book.'

(46) ?*weil Peter den Brief schreiben <u>will</u> und Heidi das Buch lesen <s>will</s>

These sentences make a minimal pair, the sole difference being the main vs. subordinate status of the clauses, which necessarily leads to the different positioning of the finite verb. In both examples, the finite modal verb in the second conjunct is deleted, and this brings about unacceptability only in the case of coordination of subordinate clauses (46).

The well-formed pattern, (45), can be subsumed under the most canonical case of forward gapping of a verb in a non-final position (cf. (1/2), (5)). I will not go into the exact licensing mechanism of it but just refer to previous research (cf. e.g. Johnson 2019, and the literature cited therein). The problem now is the ill-formedness of (46), in which the same modal verb of the same function as in the licit (45) is deleted. As a first approximation, it should be pointed out that a string of verbs in the clause-final position in German forms a unit, at least

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[8] Hernández (2007) also draws on relativized minimality to account for forward gapping constructions in some languages. Her proposal is different from ours here in that it is the conjunct that potentially acts as an intervener for the licensing of the gap by the antecedent verb in the first conjunct.

phonologically (cf. "clitic group" in the sense of e.g. Nespor & Vogel 1986) and potentially also syntactically,[9] i.e. it may well be a unit of category V^0. Given our assumption that the relevant deletion rule applies at the interface between the syntactic and the phonological component (see above), it can be formulated drawing also on syntactic notions. Thus, it may well be expected that the string to be deleted should be of the same status as the licenser (here X^0), on the one hand, and should be accessed by the licenser minimally, on the other. In the following schema, what is accessed by $Conj^0$ minimally is the topmost V^0 and, crucially, not just some part of it, i.e. V_1 or V_2.

(47)   ... $Conj^0$ [$_{TP}$ ... [$_{VP}$ ... [$_{V0}$ [$_{V0}$ V_1] [$_{V0}$ V_2]]

This natural assumption correctly excludes cases in which only a subset of the clause-final verbs, instead of the whole verbal complex, is deleted, i.e. the aforementioned (46) as well as (48/49) below:

(48)   ?*weil Peter den Brief geschrieben <u>hat</u> und Heidi das Buch gelesen ~~hat~~
         ?*because Peter the letter written has and Heidi the book read ~~has~~
         'because Peter wrote the book and Heidi read the book'

(49)   ?*weil Peter den Brief schreiben <u>will</u> und Heidi das Buch lesen ~~will~~
         ?*because peter the letter write wants and Heidi the book read ~~wants~~
         'because Peter wants to write the letter and Heidi wants to read the book'

Our proposal further explains the following data in that it predicts the relevant blocking effect caused by the element in C, i.e. the overt *hat* in (51):

(50)   Ich habe das Fleisch essen wollen, und meine Mutter ~~hat~~ den Salat ~~essen wollen~~.
         I have the meat eat want, and my mother ~~has~~ the salad ~~eat want~~.
         'I wanted to eat the meat and my mother wanted to eat the salad.'

(51)   ?*Ich habe das Fleisch essen wollen, und meine Mutter hat den Salat ~~essen wollen~~.

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[9] It is controversial whether a string of verbs at the end of a clause constitutes a complex verb in the syntactic structure. To me, there does not seem to be decisive evidence that would show that the verbal complex cannot exist, at least as an option. Be that as it may, in the example in question here, the clause-final verbs form at least a phonological unit and behave as such, unless a contrastive focus should come into play.

What appears to be problematic in this regard is sentence (44) above, here repeated as (52) with some notational supplementation added:

(52)   *Ich weiß nicht, ob Peter zum Fußball <u>gegangen ist</u>, und wann [$_C$ Comp/[+Q]] Maria zum Konzert ___ ___ .

(53)   I woaß ned wann daß da Xaver kummt.   (Bayer 1984: 212)
        I know not when that the Xaver comes.
        'I don't know when Xaver will come.'

As it stands, there is no phonologically overt element in the relevant C-position in this case, which would predict the well-formedness of the sentence, on par with (50). Here, we can say that there is a [+Q]-feature in the C-position, which is inherited to the CP it projects, and this feature gives rise to the blocking effect relevant here. Another possibility is to assume that there *is* an overt element in C, which is actually attested in some dialects in German (see (53) for a Bavarian example), and this element is deleted in Standard German only at a later point in the phonological component, crucially after the application of the forward gapping rule, which should apply immediately after spell-out, as maintained above.

Still, the following example given in Hartmann (2000: 158) seems to contradict our proposal here:

(54)   Ich verwechsle immer, was Peter Ute zum Geburtstag geschenkt hat, und was sie ihm ~~zum Geburtstag geschenkt hat~~.
        I confuse always, what Peter$_{Nom}$ Ute$_{Dat}$ to-the birthday given has, and what she him ~~to-the birthday given has~~.
        'I always confuse what Peter gave to Ute on her birthday with what she gave to him on his birthday.'

If there is some abstract feature also in the C-head position of the second *was*-clause here, the gapping should be expected to be unacceptable, as in (52), contrary to fact. For the well-formedness of (54), I would like to either suggest, without further discussion, that this example should better be handled as a kind of sluicing rather than gapping. Or else, the relevant *wh*-clause here is different from that in (52) in that the former is not an indirect question with a [+Q]-feature in C but a relative clause equivalent to an NP. Thus, the properties that apply in (52), as described above, do not hold here.

For the obligatory absence of the complementizer as demonstrated in (36) and discussed here, Hartmann (2000: 160) claims that when the finite verb, which can be a bearer of the assertion feature, is dropped, the host of the assertion feature, which is a complementizer in a verb-final clause, must also be dropped. At the basis of her analysis is the "Finite-First Condition" she postulates (Hartmann 2000: 156):

(55) In a Gapping Construction, the finite (part of the) verb is obligatorily left out in a non-first conjunct.

As far as I can see, there is no principled explanation provided for the existence of this condition. Along with her aforementioned conjecture concerning the assertion feature and the finite verb, I am not very sure how persuasive her argumentation is on this matter. I would rather like to think of my approach to be more principled and thus more plausible for the phenomena presented here.

5. Concluding remarks and prospects

This paper has discussed some of the phenomena subsumed under ellipsis in the current theoretical research. With the goal to clarify the relationship between the possibility of ellipsis and word order patterns, I have mainly investigated the deletion of verbs in German as a starting point in this paper. Considering the observation that the word order pattern in the language has influence on the possibility of gapping, German is an interesting research target in this area in that it exhibits both VO- and OV-orders. Specifically, while German shows the same forward gapping pattern as in English, i.e. "SVO & SO", it also allows for the variant typically observed in OV-languages like Japanese, i.e. "SO & SOV". Furthermore, there is the "SOV & SO" pattern, which is not an option in Japanese. I looked at this construction in some detail and provided an explanation for the observation that the presence of an element in the C-position of the second conjunct makes the sentence unacceptable, while reviewing some other previous analyses and pointing out their shortcomings.

Based on the findings mainly from German so far, the situation in Japanese should be investigated next, with the main focus on where and why these two OV-languages differ from each other in constructions involving ellipsis. Most conspicuously, Japanese does not allow for the pattern "SOV & SO" attested in German, as mentioned above. In my ongoing research, I would like to tackle this and other related problems in a principled way. To do this, I plan to investigate two independently necessary premises; (i) canonical directionality of licensing in

each language, and (ii) morphosyntactic properties of conjunctions and complementizers, especially in Japanese.

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