

Chapter 5

Silent heads in Early New High German

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The rising standard language in Early New High German (1350–1650) provides particularly interesting cases for the question of missing heads on all levels of language structure. A well-known example are subordinate clauses lacking a finite auxiliary verb, traditionally called Afinite Constructions. Based on new data, drawn from two treebanks of Early New High German, the present paper will briefly sketch the distribution of ACs, before establishing that they are in fact a type of ellipsis and do not cluster with other non-finite clauses in German. The remainder of the paper addresses the question what kind of information is missing in ACs and how this information is retrieved. Obviously, auxiliary drop in ENHG represents a type of ellipsis rarely attested in present-day German.

1 Introduction

The language of the Early New High German period (= ENHG) is set apart from the language in other periods of German by its overwhelming array of contexts where graphemes, bound morphemes and words may be left out. Two well-known examples are provided below: in (1a), the inflectional suffix *-e*, indicating first person singular, is dropped. And the unbound morpheme *landt* is omitted in the first conjunct of the N N-coordination in (1b).

- (1) a. Jch *clopffet* an man ließ mich ein
 I knocked.1SG.PST at one let me in
 ‘I knocked at the door and was let in.’ (1490: KalF s1052)¹

¹For each source, the publication date and a siglum of the respective text in the treebank is provided along with the number of the clause.



- b. Weilen der Anstandt beschlossen/ kömpt teglich viel Volcks aus
 since the armistice declared comes daily much people from
Holl: vnd Seelandt allhero (1609: Aviso 151)
Holl: and Zeeland here
 ‘Since the armistice is declared, a lot of people from Holland and
 Zeeland arrive here each day.’

A prominent example for dropping a segment of syntactic structure is provided by so-called Afinite Constructions (= ACs) widely attested in the German language of the 16th and 17th century. The finite auxiliary is absent in the relative clause in (2a) and the adjunct clause in (2b). The probable position of the omitted auxiliary is indicated by an underscore in clause-final position. This assumption of the gap in clause-final position proves reasonable in view of the fact that ACs are restricted to syntactically dependent clauses exhibiting either a subordinator or a relative pronoun at the left periphery. The type of ellipsis illustrated below is hence different from coordinate ellipsis which will be addressed in the present paper only in passing.

- (2) a. Diesen Monat seynd auß Holland vnd Seeland/ vber 80. Schiff/
 this month are from Holland and Zeeland over 80 ships
 so nach Spania gewählt ___/ abgeseglet/ (1597: AC s118)
 which to Spain wanted sailed
 ‘This month 80 ships have left Holland and Zeeland heading for
 Spain.’
- b. Ob schon der Friede mit Engeland vor richtig gehalten ___/ so
 even if the peace with England for right considered so
 wird dennoch dieses Reiches Krieges-Floote wenig vermindert
 is however this country’s war-fleet hardly diminished
 ‘Even if the peace with England is considered to be good, the war
 fleet of this country is hardly diminished.’ (1667: M s4619)

This type of auxiliary drop is still attested in present-day German, as witnessed by an example found in *Buddenbrooks* from the beginning of the 20th century, an example taken from Schröder (1985). Its use in present-day German, however, is very restricted.

- (3) Begreift man das stille Entzücken, mit dem die Kunde, als
 comprehends one the quiet delight, with which the news, when
 das erste, leise, ahnende Wort gefallen __, von der Breiten in die
 the first, soft, guessing word dropped, from the Breite to the

Mengstraße getragen worden ____ (1901: Buddenbrooks 408)

Mengstraße carried been

‘If one comprehends the quiet delight characterizing the news that has been carried from Breite to Mengstraße when the first, soft, guessing word has been dropped ...’

Regarding the data in (2) and (3), the question arises whether the respective subordinate clauses in fact include a gap, i.e. are headless clauses, or rather pattern with infinitival and participial clauses. Assuming that we are dealing with ellipsis here, how do we retrieve the missing information? With respect to present-day German, two ways are distinguished to fill an obvious gap: either by referring to a suitable antecedent or to the current situation and world knowledge (Reich 2011).

The outline of the paper is as follows: before tackling the aforementioned questions in Section 3, the basic facts about ACs in ENHG are presented in Section 2. The remainder of the paper addresses the question why this particular type of auxiliary ellipsis is productive for only 200 years in the history of German. The data used in the present paper mainly come from two constituent-based treebanks for ENHG comprising a total of 770.000 tokens with 2.789 attestations of ACs from the whole language period.

2 Afinite Constructions in Early New High German

2.1 Background

ACs are a phenomenon characteristic of ENHG syntax. While they are only rarely attested for the 14th century, and their occurrences remain sparse even throughout the 15th century, the 16th and the 17th centuries represent the heyday of the construction. In the 18th century, attestations of ACs are scattered again (Admoni 1980, Härd 1981, Breitbarth 2005, Ebert et al. 1993).² As regards register as a parameter driving the distribution of ACs, Admoni (1967), Biener (1925) and Stammler (1954) observe the first instances in formal registers, namely chancery texts of the 14th century, indicating that ACs are characteristic of rather formalized varieties of language. Recent corpus studies however suggest that there are in fact considerable differences not only with respect to register but also with respect to individual authors (Breitbarth 2005, Thomas 2018). Future corpus studies covering even more variation across registers will contribute to this still open issue.

²Härd (1981: 171, 172) provides the time course of ACs in three-place verb complexes of the type “*sein* ‘be’ + *worden* ‘been’ + past participle” or “*haben* ‘have’ + past participle + modal verb”.

The frequent use of ACs in ENHG gave rise to a significant number of accounts for this type of auxiliary ellipsis, starting with the assumption that ACs are due to language contact with Latin, in particular with its participial constructions (Biener 1925). Their early attestations in chancery language were taken to support such a view. But Behaghel (1928: 491) and Breitbarth (2005) point out that the patterns in German and Latin are too different in crucial respects to suggest the influence of language contact as a plausible explanation. As regards language contact, Blum (2018) also considers the possible impact of Low German and Swedish on ENHG, because both languages likewise include some version of afinite constructions. He argues that in the first case, we are probably dealing with an independent development, while the impact is the other way round in the latter: the omission of the auxiliary verb *hava* ‘have’ in Swedish is due to language contact with (Low) German because of its chronology. A more promising account for the rise of ACs is based on the syncretism of finite and non-finite past tense forms, emerging for instance in cases where *ge-* is prefixed to both forms, a proposal put forward by Biener (1925). As illustrated by example (4a), the prefix *ge-* may be attached to a finite verb in past tense in order to focus the result state of a complex event. Note that the strongly inflected verb *sprechen* ‘speak’ has distinct stem forms for past tense and present perfect in German. Weakly inflected verbs such as *machen* ‘make’ on the other hand give rise to an ambiguity between the non-finite participle and the finite preterite form, when the person and number marker *-e* is absent (4b), cf. Ebert et al. (1993: 242) for more information on *e*-apocope in ENHG. The dental suffix as well as the prefix are interpreted as past tense marker.

- (4) a. So bald sy die wort ge-sprach, für sy durch die lüft
 as soon she the words PFV-spoke, went she through the air
 ‘As soon as she had spoken these words, she flew away’
 (1509: Fortunatus 150.6)
- b. wann sie got auz dem selben ertreich ge-machet als uns
 because them God from the same soil PFV-made like us
 ‘Because God has created them from the same soil like us.’
 (Ebert et al. 1993: 386)

As stated by Ebert et al. (1993: 386), the use of *ge-* with finite verbs is most frequent in the 14th century when only a few examples of ACs are attested. Therefore there are some doubts in the literature that the chronology does fit the syncretism scenario (Ebert et al. 1993, Breitbarth 2005). We will come back to the syncretism of finite and non-finite verbs in Section 4.

The particular historical development of ACs is certainly at odds with another proposal interpreting the rise of ACs in subordinate clauses as an analogy to main clauses with the right sentence bracket in both clause types restricted to non-finite verbs. According to Bock (1975), the V-second pattern might have affected V-final clauses in such a way that finite verbs were omitted from the right sentence bracket. Breitbarth (2005), however, can show in her study that the right sentence bracket is attested earlier in dependent clauses than its counterpart in V-second clauses.

Further accounts include possible influences from auxiliary ellipsis in other contexts (Behaghel 1928, Bock 1975, Schröder 1985) as well as the use of ACs as a marker for syntactic dependency (Admoni 1967, Breitbarth 2005, Demske-Neumann 1990). We will come back to a possible trigger for the rise of ACs in Section 4, when the particular history is embedded in the ENHG context.

2.2 Distribution of Afinite Constructions

This section will present the properties of ACs in more detail, based on data from two treebanks of ENHG. Table (1) shows absolute frequencies for the period from 1400 until 1700 as well as relative frequencies referring to the number of all dependent clauses in texts of the respective century.³ Regarding the size of the underlying corpus for each subperiod, the treebank data confirm earlier observations that the frequency of ACs increases rapidly from the 15th to the 16th century.⁴

Table 1: Afinite constructions from the 15th to the 17th century

ENHG	Tokens	Afinite Constructions	
		absolute	relative
1401–1500	201,870	65/5,917	1,1%
1501–1600	241,238	1,648/10,824	15,2%
1601–1700	229,184	1,076/15,953	6,7%
Total	672,292	2,789/32,694	8,5%

The gap in ACs concerns the finite auxiliary in syntactically dependent clauses. All auxiliary verbs can be omitted, *haben* ‘have’ and *sein* ‘be’ outnumber the aux-

³The number of dependent clauses in each century comprises clauses with a subordinator or relative pronoun. Infinitival clauses are not considered. cf. discussion in Section 3.1.

⁴Many thanks go to Iskra Fodor who drew the numbers from both treebanks.

iliary verb *werden* ‘get’ and the modal verbs by far, as already noted by Breitbarth (2005) and Blum (2018). The following examples provide different contexts, each of them suitable for one of the auxiliary verbs, disregarding possible changes affecting the alternation between *haben* and *sein* in combination with the past participle (Ebert et al. 1993, Sapp 2011: 387).⁵ The missing auxiliaries are given in the gloss of each example.

- (5) a. vnd bekamen gleich am Morgen vor tags widerumb den
and got right in the morning before day again the
Maistral, welchen wir ... mit frewden angenommen ___/
Mistral which we with pleasure accepted (have)
‘Right in the morning before daylight, we got the Mistral which we
welcomed with pleasure.’ (1582: RW s64)
- b. Zu dem ist ein Gallion so auß Spania / nach Genoua
furthermore is a galleon which from Spain to Genoa
abgefahren ___/ durch vngewitter/ in den Hauen Diff. in Prouinz
gone (is) due to thunderstorm in the harbor Diff. in Provence
eingelauffen / (1597: AC s190)
landed
‘Furthermore a galleon which left Spain heading towards Genoa has
landed in the harbor of Diff. in Provence.’
- c. Ob schon der Friede mit Engeland vor richtig gehalten ___/ so
even if the peace with England for right considered (gets) so
wird dennoch dieses Reiches Krieges-Floote wenig vermindert
is however this country’s war-fleet hardly diminished
‘Even if the peace with England is considered to be good, the war
fleet of this country has not been diminished.’ (1667: M s4619)

Auxiliary ellipsis means that the dependent clause contains at least one non-finite

⁵Consider for instance the use of *haben* ‘have’ with *gelingen* ‘succeed’ by Friedrich Schiller, a verb that is restricted to the perfect auxiliary *sein* ‘be’ in present-day German:

- (i) Man unterrichte sich demnach im Verfolg dieser Geschichte, wie weit ihr’s gelungen
hat – Ich denke, ich habe die Natur getroffen.
‘One may inform oneself by following the story how far it has succeeded – I think I
pictured the nature quite well.’ (Die Räuber; Behaghel (1924: 275))

Further discussion and data for the changes concerning the alternation of perfect auxiliaries are provided by Behaghel (1924: 273–282).

form of a main verb.⁶ Besides the past participle, the infinitive is attested either with or without the infinitival marker *zu* ‘to’, though there is a clear preference for the past participle in ACs, cf. Table (2).⁷ The table records all instances of auxiliary ellipsis attested in two-place verbal complexes. Auxiliary ellipsis in three-place verbal complexes is not taken into account, since we only find a few instances in our data.⁸

Table 2: Non-finite forms in Afinite Constructions

ENHG	PAST PARTICIPLE	<i>zu</i> INFINITIVE	BARE INFINITIVE
1401–1500	45 (90%)	1 (2%)	4 (8%)
1501–1600	1,606 (89%)	108 (6%)	81 (5%)
1601–1700	964 (92%)	47 (4%)	41 (4%)
	2,615	156	126

The examples in (6) provide instances for auxiliary ellipsis in two-place and three-place verbal complexes with the first example comprising *zu* ‘to’ + infinitive and the second example two participles in a passive construction. Our findings from the ENHG treebanks hence match findings such as Breitbarth (2005) and Thomas (2018) regarding the form of the non-finite verb in ACs in qualitative and quantitative respects.

⁶There is disagreement in the literature regarding the inclusion of copula constructions. In contrast to the present paper, Ebert et al. (1993) for instance do not consider examples as (i) as instantiations of ACs. Since this question has no impact for the present discussion, I will not delve any further into the matter.

- (i) Alexander, Khuenig zu Polln vnd Großfuerstn in Littn der mer rhue vnd
 Alexander, king of Poland and Grand.Duke of Lithuania who more quietness and
 fridens begierig ___/ hat das alles lassen hin / geen (1557: H s249)
 peace longing (was) has that everything let by go
 ‘Alexander, king of Poland and Grand Duke of Lithuania, who was longing for more
 quietness and peace, has everything let go by.’

⁷As Breitbarth (2005) points out, the auxiliary verbs *haben* ‘have’ and *sein* ‘be’ are dropped by far more frequently than the auxiliary *werden* ‘get’. Auxiliary ellipsis is therefore a quite common phenomenon with the present and past perfect and much less so with passive constructions, cf. Breitbarth (2005: 78) for the numbers in her corpus.

⁸Regarding the small number of instances, the role of ordering in the verbal complex, in particular the supposed position of the gap, cannot be addressed in this context, as suggested by one of the reviewers.

- (6) a. Vnd ist sich zu verwunderen/ daß sie in solchen Gewehren also
and is REFL to astonish that they in such weapons also
geübet/ daß sie ohne fahlen dieselbigen in jhre
practiced that they without missing the.very. same towards their
feind werffen/ vnd sonderlich mit den Messeren welche den
enemies throw and in.particular with the knives which the
breiten Schûmacher-messern zu *vergleichen* __, dem feind seinen
wide shoemaker-knives to compare (are) the enemy his
kopff mit werffen voneinander spalten. (1624: Brun s94)
head with throwing apart split
'It is astonishing that they are so skillful in using such weapons that
they can throw those towards their enemies without missing them, in
particular the knives – comparable to a shoemaker's knife – in order
to split the heads of their enemies apart.'
- b. hingegen sollen die Gelder so unsern Schiffen zu Ostende
however shall the means which our ships at Ostende
abgefordert worden __/ wieder erleget/ und die Abforderer zur
demanded been (have) again reimbursed and the demanders to
Straffe gezogen werden. (1667: M s186)
account called are
'The means, however, which have been demanded from our ships at
Ostende, are supposed to be reimbursed and the wrongdoers are
called to account for this.'

The particular distribution of ACs regarding the form of the non-finite verb will be taken up again in Section 4.

Dependent clauses without a finite auxiliary occur in all positions where dependent clauses can appear in ENHG: apart from the right periphery which is their most frequent position (7a), they occur at the left edge of the clause (8) and sometimes even in the middlefield (7b). At the left edge, the auxiliary is omitted especially when it is identical to the fronted auxiliary of the main clause, cf. (8b). As the example in (7a) illustrates, auxiliaries may be omitted more than once in a complex sentence. Both ACs are not related by a coordination relation.

- (7) a. Vmb den 20. diß/ ist bey Mödling in Oesterreich ein
around the 20. of.this is at Mödling in Austria a
erschrocklich Wetter abgangen/ welches so viel stein
terrible thunderstorm broken which so many rocks

geworffen ___/ daß sie in den Gräben eines Knie tieff gelegen
 thrown (has) that they in the trenches a knee's deep lain
 ___/ (1597: AC s423)
 (have)

'Around the 20th of May, a terrible storm has broken over Mödling in Austria such that many rocks fell down filling the trenches about knee-deep.'

- b. du hast mich Oliuiers/ den ich vnder allen menschen am
 you have me Olivier's whom I among all people the
 liebsten gehabt ___/ beraubt (1532: FB s488)
 best liked (have) bereaved

'You have bereaved me of Olivier whom I have liked the best among all people.'

- (8) a. Alß wir vns nun vñ Mittagszeiten zůruck nach dem Portu
 when we us now around noon back to the harbor
 wider gewendet ___/ ersahen wir zur lincken von ferne ain
 again turned (have) discovered we at the left from afar a
 Schiff (1582: RW s99)
 ship

'When we turned back to the harbor at noon, we discovered afar a ship to our left.'

- b. Hernach da die Kirchen die Gefahr gesehen ___/ hat sie diß
 thereafter when the church the danger recognized (has) has it this
 abstellen koennen. (1650: FP s318)
 stop can

'When the church recognized the danger eventually, it could have stopped it.'

ACs are particularly frequent in relative and adjunct clauses as witnessed by the preceding data, whilst ACs in object and subject clauses occur much less frequently. Two examples for the latter types of subordinate clauses are given below. Table 3 provides an overview of the instances occurring in the treebanks of ENHG depending on clause type, merging subject and object clauses into one type of subordinate clause (= complement).

- (9) a. was sie verricht ___ möchte in folgenden Monaten erzehlet
 what they fulfilled (have) wants in following months told

werden. (1597: AC s120)
 been

‘In a few months time, it might be told what they have fulfilled.’

- b. Jn disem Land haben die Holaender vor der zeit gewonnen,
 in this country have the Dutch before the time obtained
 was sie begert _____. (1624: Brun s555)
 what they wanted (have)

‘In this country, the Dutch have obtained some time ago whatever
 they wanted.’

Table 3: Afinite constructions depending on function of subclause

ENHG	RELATIVE	ADJUNCT	COMPLEMENT
1401–1500	20/1,856 (1%)	33/2,784 (2%)	12/1,277 (1%)
1501–1600	827/3,250 (25%)	701/3,184 (22%)	113/4,390 (3%)
1601–1700	488/2,919 (17%)	466/2,874 (16%)	110/10,160 (1%)
TOTAL	1,335/8,025 (17%)	1,200/8,842 (14%)	235/15,827 (1%)

Accounting for a similar distribution across functions of subclauses, Breitbarth (2005: 139–141) suggests to consider ACs as markers for pragmatic dependency. According to her, relative and adjunct clauses are pragmatically more dependent from their matrix clause than subject and object clauses and therefore tend to trigger auxiliary ellipsis. Demske-Neumann (1990) on the other hand argues in line with previous work by Admoni (1967) that ACs are markers of syntactic dependency. In her view, their preference for relative and adjunct clauses results from the ambiguity of adverbial and relative connectors: lexical items such as *so* ‘so’ may introduce verb-final relative clauses (10a) as well as verb-second clauses (10b), indicating that they do not signal syntactic dependency of a clause. Even the placement of the finite verb is not a reliable marker for syntactic dependency in ENHG, as argued by Demske (2018). Instead, the omission of the finite auxiliary may be taken as an unambiguous marker (10c).

- (10) a. vnd keret ich im Fundique der Frantzosen ein/ wie alle
 and stopped I in.the shelter of.the French off as all
 Teutschen so dahin kommen zuthon pflegen/ (1582: RW 68.3)
 Germans who there come to.do use
 ‘And I stopped off in the French’s shelter as all Germans do who come
 here.’

- b. So seind sie auch mit Rettich/ Knoblauch/ Zwybel zimlich wol
 so are they also with radish garlic onion very well
 versehen. (1582: RW 73.13)
 supplied
 ‘They are well supplied with radish, garlic and onions.’
- c. Dise seind aber in wenig Jaren von vngestüminen deß Möhrs
 those are however in few years by storms of.the ocean
 so gar verwüstet/ vnd mit dem sand/ so das Wasser darüber
 so very devastated and with the sand which the water over.it
 außgeworffen ___/ dermassen bedeckt worden/ das heütigs tags an
 casted (has) so covered been that today at
 denen orten sonderlichs nichts/ dann ain sandechter boden (wie
 these places else nothing but a sandy soil (as
 im wüsten Arabien) zûfinden ___. (1582: RW s167)
 in.the arid Arabia) to.find (is)
 ‘They have been devastated by stormy weather and so covered by
 sand which has been cast over by the water such that today one will
 find nothing but sand (as in the arid Arabia).’

Whatever the ultimate motivation of using ACs in ENHG, be it a pragmatic or a syntactic one, the question arises how to analyze this type of headless construction. This will be the topic of the following section. The probable motivation for using ACs in ENHG will be addressed in the final section of the paper.

3 Afinite Constructions as auxiliary ellipsis

3.1 Afinite Constructions are a type of ellipsis

According to Schröder (1985), ACs are not instantiations of ellipsis. He claims that any type of ellipsis requires the identity of a gap with a suitable antecedent, cf. also Biener (1925) for a similar argument. The following example shows that this condition need not hold for ACs in ENHG, going on the assumption that the auxiliary *sein* ‘be’ is omitted in the relative clause comprising a non-finite form of the motion verb *kommen* ‘come’, while the only other auxiliary in the present context is the auxiliary *haben* ‘have’ in the root clause.

- (11) Sein Schiff hat vom Feuer/ so in die Brandwein Fässer gekommen
 his boat has from fire which in the spirits barrels come
 ___/ grossen Schaden erlitten/ (1667: M s831)
 (is) major damage suffered
 'His boat has suffered major damage from the barrels filled with spirits
 which have been on the boat.'

Schröder (1985) therefore suggests treating ACs as a member of the class of non-finite clauses along with participial and infinitival clauses as illustrated in (12). The first clause involves a present participle heading a relative clause, the second one a ^{zu}-infinitive heading an adjunct clause.

- (12) a. Die Dünkircher Capers haben Königl. Ordre/ alle Ostender Schiffe
 the Dunkirk privateers have royal order all Ostende ships
 [mit Wahren von Contrebande nach England fahrend]/
 with goods of contraband to England going
 wegzunehmen. (1667: M s841)
 to.capture
 'The Dunkirk privateers have royal order to capture all ships heading
 for England with contraband.'
- b. Jch were zwar gern außgestigen/ [dise Jnsulen besser zu
 I were indeed with.pleasure got.off these islands better to
 besichtigen] (1624: Brun s22)
 visit
 'I would have loved to get off in order to better visit these islands.'

Even if the AC in (11) and the non-finite clauses in (12) have in common that they do not include a finite verb, they differ in three crucial respects: ACs are restricted to dependent clauses introduced by either a relative pronoun or a subordinating conjunction, and ACs include subjects in contrast to non-finite clauses as in (12).⁹ In addition, ACs differ from participial and infinitival clauses, because the omitted auxiliary obviously governs the status of the non-finite verb: the so-called 'infinitivus-pro-participio' effect (IPP-effect) provides strong support for the presence of an auxiliary at least at one point in the derivation. Pertinent examples include a modal verb that does not appear as a past participle as expected but as an infinitive as shown with the modal verb *müssen* 'must' governed by *haben* 'have' in (13a). The AC in (13b) involves two non-finite verbs, one being the

⁹English in contrast allows for subjects in non-finite clauses, as one reviewer adds, cf. *for ... to* infinitival clauses.

modal verb *müssen* ‘must’. An interpretation of the modal verb as finite is excluded because of the singular subject, i.e. *man* ‘one’. Obviously, the IPP-effect in (13b) is triggered by the omitted auxiliary verb. A further example for an AC exhibiting an IPP-effect is given in (13c) and involves the modal verb *sollen* ‘be supposed to’.

- (13) a. Vñ seind von 20. gewaltigen Türckischen Meer-^eräubern
and are by 20 powerful Turkish pirates
besprungen wordē/ haben aber weichen ^e*müssen*/ die Türcken
overrun been have however retreat must.INF the Turkish
weren sonst meister worden. (1624: Brun s671)
were otherwise victor been
‘They have been overrun by Turkish pirates and had to retreat.
Otherwise the Turkish would have beaten them.’
- b. Sie aber hat beschuetzt der enge Weg/ darauff man
them however has protected the small path where one
nacheinander gehen ^e*müssen* ___/ daß der Feind jhnen nicht
after.another go must.INF (have) that the enemy them not
zu komen kondte. (1624: Brun s645)
towards come could
‘The small path where one had to go one after another however
protected them, so that the enemy could not get to them.’
- c. die haben erstlich auf den Malkutsch Aga, der die Janitscharn
they have at.first upon the Malkutch Aga who the janissaries
herauff gen Raab führen *sollen* ___/ getroffen
up towards Rab lead should.INF (have) come
‘At first, they have come upon the Malkutch Aga, who was supposed
to lead the janissaries up towards Rab.’ (1597: AC s743)

ACs therefore do not pattern with non-finite clauses, but are rather a type of ellipsis. The following section will look into the analysis of ACs as elliptical variants of full clauses.

3.2 Dropping the finite auxiliary

ACs are subordinate clauses where a finite auxiliary is dropped. The missing information includes agreement features such as person and number as well as finiteness features, including tense, mood and assertion features according

to Klein (2006) and Repp (2009). On Repp (2009)'s approach, the latter bundle of features is needed to anchor a finite clause in the possible world where the proposition is evaluated. In contrast to syntactically independent clauses, the anchoring of a subordinate clause is supposed to happen indirectly by way of its subordinator which anchors the dependent clause in its matrix clause.¹⁰

In present-day German, the finite verb can be omitted in Gapping and Sluicing constructions. In Gapping constructions, the elliptical clause is part of a coordination structure – including embedded clauses – and the finite verb is absent in the second conjunct. The following examples illustrate the observation that parallelism and identity promote the elision of language material. They all display alternatives with the focus being set on the local PP. Gapping also allows for the omission of more than the finite verb, namely the verbal complex (14b), and is hence a type of non-constituent ellipsis.¹¹

- (14) a. dass Fred in München wohnt und Selma in Berlin ____.
 that Fred in Munich lives and Selma in Berlin (lives)
 ‘that Fred lives in Munich and Selma in Berlin.’
 b. dass Fred in München gewohnt hat und Selma in Berlin ____.
 that Fred in Munich lived has and Selma in Berlin (lived has)
 ‘that Fred has lived in Munich and Selma in Berlin.’

Both examples exhibit instances of ellipsis in conjoined subordinate clauses. Note that Gapping in subordinate clauses requires that the complementizer in the second conjunct is dropped as well. Following Repp (2009), I assume that anchoring of the proposition is due to the complementizer in the first conjunct, respectively.

Sluicing is another type of ellipsis in present-day German involving a finite verb. In contrast to Gapping, Sluicing is restricted to subordinate clauses with the anchoring implemented by the *wh*-phrase in a functional projection such as CP (Repp 2009). The omitted material always includes the whole subordinate clause

¹⁰Non-finite independent clauses are anchored through their modal interpretation as pointed out by Reis (2003) with respect to examples like the following:

- (i) a. Ich – (und) die Fenster putzen? Niemals!
 ‘I – (and) cleaning the windows? Never!’
 b. Wohin fahren?
 ‘Where to go?’
 c. Den Eierkuchen wenden.
 ‘Flip over the pancake.’

¹¹cf. Reich (2011) for a comprehensive typology of ellipsis (in German).

except the *wh*-element at the left periphery as shown by the following examples from Repp (2009). It does not matter whether the matrix clause is syntactically independent or dependent, cf. (15a) vs. (15b).

- (15) a. Max hat etwas gegessen, aber ich weiß nicht, was ____.
 Max has something eaten, but I know not what
 ‘Max ate something, but I don’t know what.’
 b. Max liebt diese Gruppe, obwohl ich nicht weiß, warum ____.
 Max adores this band, although I not know why
 ‘Max loves this band, although I don’t know why.’

Obviously none of these types of ellipsis patterns with ACs: Gapping does allow the omission of a finite auxiliary but is restricted to coordination structures, while Sluicing is restricted to subordinate clauses but does not allow the omission of just the finite (auxiliary) verb. Going on the assumption that ACs are a type of ellipsis, they instantiate a type no longer productive in German.

3.3 Resolving the missing information

Depending on the way missing information is resolved, two types of ellipsis are distinguished: antecedent-based ellipsis and situation-based ellipsis (Reich 2011). The latter type relies on the current situation as well as world knowledge to retrieve the omitted information, cf. (16a) for an example from present-day German. Antecedent-based ellipsis reconstructs the missing information from a suitable antecedent as illustrated by the Gapping construction in (16b) where the finite verb is omitted in the second conjunct.

- (16) a. Mit Senf, bitte.
 with mustard please
 ‘With mustard, please.’
 b. Selma arbeitet an ihrem neuen Roman und Wilma an ihrem Blog.
 Selma works at her new novel and Wilma at her blog
 ‘Selma works at her new novel and Wilma at her blog.’

How do ACs fit into this typology? The omitted finite auxiliary is certainly not resolved by the non-linguistic context and ACs cannot be considered instantiations of the situation-based type of ellipsis. But do they belong to the antecedent-based type of ellipsis? This type requires identity between the omitted information and a linguistic antecedent as in (16b): the finite verb of the first conjunct *arbeitet* ‘works’ is taken to fill the gap in the second conjunct. Even if ACs do not occur

in coordination but subordination structures, identity between gap and a possible antecedent might play a role as suggested by examples like (17). The finite auxiliary is dropped in a temporal clause preceding its matrix clause. Assuming that it is the auxiliary *haben* ‘have’ which is missing here, identity holds not only for the choice of the auxiliary verb but also for the grammatical features person and number.¹²

- (17) Als der 33 Jar geregiert ___/ hat er mit seinem fueß an seines
 when he 33 years governed (had) has he with his foot at his
 gestorbnen Roß khopf gestossen/ ist durch ain vergiffts thier
 dead horse’s head hit is by a poisonous animal
 gepissen worden/ vnd dauon gestorben. (1557: H s93)
 bitten been and thereof died
 ‘When he has ruled 33 years, he hit the head of his dead horse with his
 foot and was bitten by a poisonous animal whereof he died.’

There are, however, many attested examples for ACs where either identity between a possible antecedent and the dropped auxiliary is not given or where a suitable antecedent is entirely absent. The first case concerns examples like (18a) where the linguistic context displays another auxiliary verb or (18b) where auxiliaries do not agree with respect to the grammatical feature person (second-person vs. first-person).

- (18) a. Sein Schiff hat vom Feuer/ so in die Brandwein Fässer
 his boat has from fire which in the spirits barrels
 gekommen ___/ grossen Schaden erlitten/ (1667: M s831)
 come (is) major damage suffered
 ‘His boat has suffered major damage from the barrels filled with
 spirits which have been on the boat.’
 b. du hast mich Oliuiers/ den ich vnder allen menschen am
 you have me Olivier’s whom I among all people the
 liebsten gehabt ___/ beraubt (1532: FB s488)
 best liked (have) bereaved
 ‘You have bereaved me of Olivier whom I have liked the best among
 all people.’

¹²In contrast to present-day German, the verb *stoßen* ‘hit’ appears with the auxiliary *haben* ‘have’ instead of *sein* ‘be’, testifying to the change as regards the use of auxiliary verbs in the history of German Ebert et al. (1993: 387) and Sapp (2011).

Identity is not given in a trivial sense in examples without a possible antecedent altogether as in (19): the auxiliary *haben* ‘have’ is dropped in a relative clause, embedded in a clause with a finite form of the main verb *begleiten* ‘accompany’ but no finite auxiliary. Examples like the one below therefore suggest that ACs are not a type of antecedent-based ellipsis either, giving rise to the question how we reconstruct information in this type of ellipsis.

- (19) sie belaiten auch die jhenige/ vber welche der Cadi oder
 they accompany also those about whom the Cadi or
 Obrichter den sententz gesprochen ___/ zur Hauptstatt hinauß/
 judge the sentence pronounced (has) of.the capital out
 damit sie sehen/ das der execution gnügsame volziehung
 so.that they see that of.the execution sufficient performing
 geschehe: (1582: RW s284)
 happened
 ‘They also accompanied those out of the capital whose sentence has been
 pronounced by the Cadi or judge, in order to see whether the execution
 would be enforced in a sufficient manner.’

Let us turn back to the question what kind of information we drop when we drop the finite auxiliary. We have seen that finiteness comprises tense and mood features besides the agreement features person and number. As stated by Repp (2009), tense and mood features expressed by the finite verb in syntactically independent clauses are used to anchor the proposition in a possible world where the proposition is evaluated. As a consequence, Gapping in independent clauses is restricted to coordination structures exhibiting identity between gap and antecedent. As regards subordinate clauses, anchoring happens through the same functional projection in the C-domain as in independent clauses, hosting here either a subordinator or a pronominal element instead of the finite verb as in syntactically independent clauses. Repp (2009) observes that Gapping in subordinate clauses is only available when the complementizer is dropped in the second conjunct under identity, cf. the example below taken from Repp (2009). Gapping thus aims at elements anchoring the proposition in a possible world.

- (20) Ich denke, dass Max draußen spielt und (*dass) Pia drinnen.
 I think that Max outside plays and (that) Pia inside
 ‘I think that Max plays outside and Pia inside.’

In contrast to Gapping, ACs do not occur in coordination but subordination structures with the complementizer or relative particle present in all instances. This

is expected in view of the fact that the subordinator is required to anchor the proposition by way of connecting it to the tense and mood features of its matrix clause. Anchoring is done by the subordinating conjunction *dass* ‘that’ in (21a) and by the relative pronoun *davon* ‘thereof’ in (21b), while a finite verb is not necessary to anchor subordinate clauses. This is cross-linguistically reflected by the fact that many subordinate clauses do not include a finite verb (Repp 2009). Note that anchoring by a subordinator does not hinge on the fact that the subordinator itself carries temporal meaning, tense is rather contributed by the matrix predicate.¹³

- (21) a. Dem seye nun wie jm wöll/ so muß ich gleichwol bekennen/
 this.one be now as it may so must I nonetheless confess
das sie noch heütigs tages in dem Acker zûfinden ____.
 that they still nowadays in the field to.find (are)
 ‘Be it as it may, I have to confess nevertheless that they are to be
 found in the field still nowadays.’ (1582: RW s385)
- b. Die Holländer haben von unsrer Virginischen Floote nur 17.
 The Dutchmen have of our Virginia fleet only 17
 Kauff-Schiffe und die Fregat Elisabeth bekommen/ *davon* sie
 trading.vessels and the frigate Elisabeth got whereof they
 13. mitgenommen und 4. mit der Fregat verbrennt ____.
 13 captured and 4. with the frigate burnt (have)
 ‘The Dutchmen have got only 17 trading vessels and the frigate
 Elisabeth from our Virgina fleet whereof they captured 13 and burnt 4
 together with the frigate Elisabeth.’ (1667: M s4959)

Likewise, the subordinator anchors the embedded propositions in coordinated dependent clauses, appearing in the first conjunct. The finite auxiliary may be dropped in only one (22a) or both conjuncts (22b).

- (22) a. *Alß* sich nun das wetter für vns widerumb geschicket ____/ wir
 when REFL now the weather for us again befitted (has) we
 auch unser Schiff mit holtz vnnd frischem wasser gnuogsam
 also our boat with wood and fresh water sufficiently
 hetten versehen/ liessen wir die Segel fliegen/ vnnd fuohren daruon:
 had equipped let we the sails fly and went away
 ‘When the weather became suitable for us and we had our boat

¹³It is therefore not necessary, as claimed by Breitbarth (2005: 105), to establish a relationship between the rise of ACs and the unfolding of a system of temporal subordinators.

sufficiently equipped with wood and fresh water, we let the sails fly
and went away.’ (1582: RW s500)

- b. *Dieweil* wir aber bey 7. Monat allda gelegen — mit
while we however about 7 months there anchored (have) with
vnserem Schiff sampt einem Jacht-schiff/ vnd sie vnser
our boat along.with a hunting-boat and they our
gemueth genugsam erfahren vnd erkandt __/ haben sie vns
mind sufficiently understood and known (have) have they us
alles guts erzeugt/ (1624: Brun s211)
all good shown
‘While we anchored there with our boat along with a hunting boat
for about seven months and they had understood our mind well
enough, they showed us all interesting things.’

Unlike infinitival and participial clauses, the finite auxiliary is present in the syntactic structure of ACs, cf. arguments provided in Section 3.1. The agreement features carried by the auxiliary in T assign nominative case to the subject in question and the auxiliary *haben* ‘have’ governs the third status of the non-finite verb, cf. example (23). The strikethrough in Figure 1 indicates that the auxiliary is given a silent spellout in the phonological component of the grammar and testifies to the deletion approach adopted here.¹⁴

- (23) Da fieng es den Portugalesern am wasser zu manglen/ jnmassen sie
then started it the Portugese in water to lack such.that they
grossen durst gelitten __. (1624: Brun s416)
big thirst suffered (have)
‘Then there was a shortage of water, such that the Portugese severely
suffered from thirst.’

In line with Klein (2006) and Repp (2009), Figure 1 subscribes to the assumption that finiteness is rather a property of clauses than of VPs. Irish data – (24) is taken from Repp (2009) – show that finiteness markers can attach to complementizers, providing cross-linguistic evidence for this assumption.¹⁵ An analysis of ACs along the lines of Figure 1 further suggests that ACs are only superficially headless clauses, whereas they actually contain a silent head.

¹⁴Three approaches to ellipsis are distinguished: (i) the movement approach, (ii) the anaphora approach, and (iii) the deletion approach. cf. Reich (2011) for a detailed discussion.

¹⁵Weiß (1998) discusses a German dialect exhibiting a similar behavior as regards inflected complementizers.

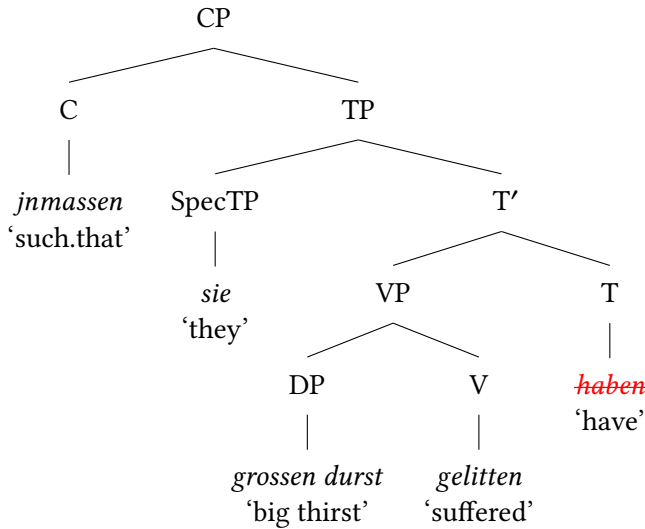


Figure 1: Afinite Construction *jnassen sie grossen durst gelitten*

- (24) D'éag sé sula-*r* thánig an sagart (Repp 2009)
 die.PST he before-PST come.PST the priest
 'He died, before the priest arrived.'

Like other types of ellipsis, ACs drop redundant information for economy reasons. In contrast to other types of ellipsis, however, redundancy in ACs does not arise because of identical material in the linguistic context. The finite auxiliary may rather be omitted because it carries grammatical features which are already contributed by the subordinator and the tense features of the matrix predicate. The example (25) with ACs in a sentence-initial temporal clause and a relative clause following the matrix clause illustrates how tense information is provided by the context: the event denoted by the temporal clause precedes the event expressed in the matrix clause. Since the latter uses narrative past tense, it is the past tense of the auxiliary *haben* 'have' which can be reconstructed. The missing finite verb in the relative clause has to be the past tense of *sein* 'be', because the proposition denotes an unalterable property of the small town (Rothstein 2008: 27).¹⁶

- (25) Als wir die gantze weite herumb gnuogsam besichtigt ___/
 when we the whole plateau around sufficiently visited (had)

¹⁶Regarding individual state predicates, Rothstein (2008: 27) presents a clear grammaticality contrast between past tense and present perfect.

giengen wir hinab zur stett des fleckens Bethphagae, welcher
 went we down to.the place of.the small.town B. which
 jhenseyt an der hoehe des oelberges gelegen ___/ vnd den
 beyond at the incline of.the mount.of.olives situated (was) and the
 Priestern zu Jerusalem hat zu gehoret: (1582: RW s348)
 priests of Jerusalem has to belonged

‘When we had sufficiently visited the whole plateau, we went down
 towards the small town of B. which was beyond, at the incline of the
 mount of olives and belonged to the priests of Jerusalem.’

The finite verb in a subordinate clause is rather not omitted when it carries information in addition to the finiteness features: according to Ebert et al. (1993: 442), the finite auxiliary tends to be present when it is marked for subjunctive, i.e. when there is grammatical information that cannot be provided otherwise. In (26), the perfect auxiliary *haben* ‘have’ is marked for subjunctive in a context favorable for auxiliary drop, i.e. an IPP-effect context (Härd 1981). Another case is provided by subordinate clauses with the finite verb being either a modal verb or a main verb accounting for the observation that modal verbs are rarely omitted from subordinate clauses (Behaghel 1928: 486–492). Here again, the finite verb conveys information that goes beyond finiteness information.¹⁷ This also holds for *sein* ‘be’ and *haben* ‘have’ when they trigger a modal meaning, building complex verbs with a ^{zu}infinitive.

- (26) vnd darmit jnen nit leichtlich hilff zukommen möchte/ ist der
 and so.that them not easily assistance provide may is the
 Rheinstromb/ mit den Außlägern dermassen verlegt worden/ das
 Rhine with the ships so dammed.up been that
 kein Schiff leichtlich hette vberkommen mögen. (1597: AC s804)
 no ship easily had pass may
 ‘And in order to prevent any assistance for them, the Rhine has been
 dammed up with ships such that no ship may easily have passed.’

¹⁷This does not hold for a contrast observed by Warner (1995) between full verbs and auxiliary verbs in English: while only full verbs may be dropped in the following context in present-day English, the auxiliary *be* lost this option at the beginning of the 19th century; cf. the examples taken from Warner (1995: 537):

- (i) a. If Paul comes in, then Mary will too. (sc. come in)
 b. ‘I wish our options were the same. But in time they will.’ (sc. be the same)
 (1816 Jane Austen, Emma)

According to Warner (1995), the auxiliary *be* loses this option due to a change affecting the possible decomposability of finite verbs into lexical information and tense information.

4 The larger picture: Early New High German

ACs are a type of ellipsis with a striking historical development as noted above: while they are frequently attested in the language of ENHG, they scarcely occur in present-day German. Taking into account the preceding discussion, I will come back to the question why ACs are a characteristic feature of ENHG grammar.

Dropping the finite auxiliary verb in a syntactically dependent clause is licensed by the subordinator linking the subordinate clause to its matrix clause and thus supplying its anchor to a possible world. But what kind of changes in the grammar of German trigger the rise and subsequent spreading of ACs just in the 15th century? The asymmetry of main and subclauses regarding verb position is reasonably well established by the end of Old High German, cf. Axel (2007) among others. The same holds for various types of coordinate ellipsis. The prerequisites are hence in place for some time already, before the first instances of ACs are attested. What is indeed new in ENHG, is the coincidence of two changes affecting the coding of past tense. On the one hand, we observe the increasing use of the present perfect at the expense of past tense forms which gained momentum throughout the 16th century according to Dentler (1997).¹⁸ An example from Amft (2018) is given in (27) where a perfect tense form is used in an otherwise all simple past context.

- (27) Jnn dißem allem weyß gott woll/ hab ich auß seynen gnaden mit
in this all knows God well have I from his mercy with
lachendem hertzen vnd muthun gethan als merckt ichs gar nicht
laughing heart and courage done as.if noticed I=it at.all not
(Korn; Amft (2018: 262))
'God knows very well that I acted by his mercy and courage with a
laughing heart as if I noticed nothing at all.'

On the other hand, we note the decline of finite forms of the simple past including the prefix *ge-*, which are available until the 16th century (Ebert et al. 1993: 386). As a consequence, verb forms including the prefix *ge-* are rather interpreted as non-finite rather than finite forms in syntactic contexts admitting both forms, i.e. the right sentence bracket in subordinate clauses.¹⁹ An interpretation as a non-

¹⁸Cf. Fischer (2018) for a comprehensive discussion of the increasing use of the present perfect at the expense of the simple past in the history of German. Amft (2018) informs on the development in a particular register.

¹⁹So far there are not enough data across dialects available to validate the suggested correlation between the loss of simple past forms and the increase of ACs in the history of German.

finite form is further supported by a prominent feature of ENHG syntax, the omnipresence of coordinate ellipsis in this variety of German, including instances of parallel and non-parallel coordination patterns in subordinate clauses (Behaghel 1928, Schröder 1985).²⁰ Note that auxiliary drop in parallel coordination patterns of subordinate clauses may be licensed either by a suitable antecedent or by a subordinator. Coordinate ellipsis is therefore promoting the spread of ACs, but not causing it, as claimed by Behaghel (1928) and Schröder (1985).

Other features of ENHG grammar support the spreading of ACs as well: as argued by Demske (2018), verb position may be pragmatically motivated as in (28) where the final position of the finite verb indicates background information rather than syntactic dependency. The clause introduced by *der selbig brack* ‘this tracker dog’ elaborates on a referent introduced earlier into the discourse, and the clause introduced by the pronominal connector *dardurch* ‘in this way’ in the second example provides a scribe’s comment on the reporting itself.

- (28) a. Do man geessen het, ward geschickt nach Wilhalems wappen unnd corperthur, desgeleichen nach seinem bracken, der im von der abentheüre hauptman gegeben was. *Der selbig brack* auff das mal nitt gefunden *ward*, dann er sich inn dem wald verlaufen het.
 ‘After dinner, they sent for Wilhelm’s coat of arms and armor, likewise for his tracker dog, that was given to him by the captain. This tracker dog was not found in time, because he got lost in the forest.’
 (1481: WvÖ 265.21)
- b. Do sprach auch maniger in der stat: „Wer mag der mit dem feür sein, er furt die bosten corperthur, die ye kein man gesach, unnd anders vil, das er an im het.“ *Dardurch* er gelopt *ward*, das nit alles zû schreiben ist.
 (1481: WvÖ 243.13)
 ‘Some men in town also said: “Who might be the one with the fire, he has the best armor ever seen by man, and other things more.” Thus he was praised in a way that refrains from any description.’

²⁰Both types of ellipsis are not restricted to subordinate clauses, but are also attested in syntactically independent clauses (Biener 1925). To account for non-parallel coordinate ellipsis, we therefore need an analysis allowing for non-identity of gap and antecedent. This problem does not arise for ACs, because licensing the gap works differently in coordination and subordination patterns. Non-parallel patterns of coordinate ellipsis in subordinate clauses may be instances of ACs with the gap licensed by a subordinator instead of an antecedent, cf. also Breitbarth (2005: 63) on this issue. But then we still have to account for non-parallel coordinate ellipsis in main clauses. And I have nothing to say in the present paper about coordinate ellipsis in ENHG.

At the same time verb position is a syntactic device in ENHG, used to discriminate between main clauses with verb-second and syntactically dependent clauses with the finite verb in final position just as in present-day German. As shown by Demske (2018), ambiguities arise with pronominal elements like *darauf* ‘afterwards’ which are attested with the finite verb either in second or in final position, cf. (29a) vs. (29b). In view of examples like (28), there is no way to indicate whether verb-final clauses like (29b) are syntactically dependent or independent.²¹ Since only subordinators license the omission of the finite auxiliary in dependent clauses, ACs provide a means to clearly mark syntactic dependency in ENHG (29c). Recall that ACs are particularly frequent in adverbial and relative clauses (cf. Table 3), often introduced by an ambiguous element such as *wann* ‘when’ or *so* ‘so’. The following examples display all three variants attested with the pronominal *darauf* ‘afterwards’, i.e., verb-second, verb-final and AC.

- (29) a. Den folgenden Morgen haben die Türcken im Schloß angefangen zu parlamentieren vnd mit jhren Gütern abzuziehen begert/ weil man dann verstanden/ das in 400. gefangner Christen in der Vöstung sein sollen/ ist jhnen der Abzug mit jhren Wöhren/ vmb die gefangne Christen desto ehe bey dem Leben zuerhalten/ bewilliget worden. *Darauff* hat man drey fürnemmer Türcken herauß/ vnd drey von den vnsern zu Geisel hinein gegeben. (1597: AC s658)
 ‘The next morning the Turkish people started to negotiate in the castle and desired to withdraw with their belongings, because there was an understanding that about 400 arrested Christian people are supposed to be in the fortress. The withdrawal with their stockpile of weapons has been granted to them in order to keep the arrested Christians alive. Afterwards there was an exchange of three noble Turkish men and three of our people.’
- b. König Agrant vonn Zisia reit von einem künig czû dem anderen unnd bate sy all unnd jecklichen in sunderheit, iren fleiß zû thûnde wider den künig vonn Maroch, ob sach wäre, das sy im abgesigen möchtent. *Darauff* sy im all czû sagtent, das sy all das böste thûn wöltent. (1481: WvÖ 249.31)
 ‘King Agrant of Zisia was riding from one king to the next and asked them all and each in person to fight with all power against the king of Morocco. Since they had to defeat him. They all promised him then to do their best.’

²¹ As Löttscher (2000) points out, clauses introduced by pronominal connectives like *darauf* ‘afterwards’ in ENHG are always pragmatically dependent – irrespective of their syntactic status.

- c. Zu Parma hat es ein erschrecklich Wetter gehabt/ so ein Tag vnd Nacht gewehrt/ welches viel Bäum vnd Schornstein nidergerissen/ *darauff* es auch 6. Tag vnd Nacht stets geregnet __ / (1609: R09 69.31)
 ‘There was an awful storm in Parma, which lasted day and night. Many trees and chimneys were destroyed, then it did rain for 6 days and nights incessantly.’

Probably, the ambiguity of examples like (29b) is another feature of ENHG grammar strongly promoting the rapid expansion of ACs in the 16th century. The marking of syntactic dependency does not, however, trigger the rise of ACs as claimed by Admoni (1967), Breitbarth (2005), Demske-Neumann (1990) and Senyuk (2014).²² Even if this assumption can explain the fact that this type of ellipsis is restricted to syntactically dependent clauses, it fails to account for its restriction to finite auxiliaries. The same goes for Breitbarth’s claim that ACs are markers for pragmatic dependency, cf. Section 2.2.

Obviously, there are good reasons for ACs to become a prominent feature of ENHG syntax. But why are ACs lost again throughout the 18th century? The general understanding is that the decrease is due to the growing conventionalization of syntactic means as part of the emergence of a written standard language in German. Verb position for instance is no longer a pragmatic device to distinguish between foreground and background information, but marks exclusively syntactic (in-)dependency, and coordinate ellipsis is much more constrained in present-day German than in ENHG. Even if the omission of a finite auxiliary in a dependent clause could be licensed by its subordinator, this option is less and less used in German. Late witnesses are examples from the 20th century, cf. (3) above and further examples in Blum (2018: 18).

5 Summary

ACs are a special type of ellipsis, rarely attested in present-day German. They resemble the antecedent-based type of ellipsis, because they drop grammatical information provided by their matrix clauses. The ellipsis is licensed by the respective subordinator which links the proposition of the dependent clause to

²² Apart from the ambiguity of verb position and pronominal connectors, Admoni (1967) adduces the increasing complexity of sentences throughout the period of ENHG to justify the necessity of an additional marker for syntactic dependency which is according to him most needed in chancery texts. The high frequency of ACs in this register may therefore be due to its complexity instead of Latin influence. Breitbarth (2005) refers to the decreasing use of the subjunctive as a marker. None of these proposals can however explain why this type of ellipsis is confined to finite auxiliaries.

the proposition of the matrix clause. ACs are, however, only superficially headless clauses. The finite auxiliary is present in the syntactic structure of ACs as indicated by the assignment of nominative case and verb status, but is given a silent spellout in the phonological component of the grammar. ACs result from ambiguous verb forms in past tense, their overwhelming numbers in sources of the 16th and 17th century is due to remarkably favorable conditions in the ENHG grammar, among others a strong bias towards ellipsis on all levels of language structure. ACs are lost again throughout the 18th century.

What do we learn from the history of ACs regarding the question of headedness? Obviously, syntactic changes concerning auxiliary ellipsis do not affect the hierarchical structure of the clause. The verbal head is at all times present in the finite subordinate clause, even if it may remain silent in the phonological component of the grammar during the period of ENHG. In my view, the rise of ACs is best understood against the background of a rising standard language with a great deal of variation not only in the lexicon but also in the grammar, fed by a large number of dialects. The increasing conventionalization of grammatical means in the history of German from the 17th century onwards constrains the occurrence of ellipsis considerably: the grammatical system requires the spellout of silent heads except for instances comprising complete identity.

Acknowledgements

I would like to thank the organizers Ulrike Freywald and Horst Simon as well as the audience at the Workshop ‘Köpfigkeit und/oder grammatische Anarchie?’ in May 2017 for interesting comments and questions on the topic of auxiliary ellipsis in German. In September 2018, I had the opportunity to present the present paper at the University of Tokyo. For an intense and fruitful discussion I owe many thanks to Manshu Ide, Jiro Inaba, Yoshiki Mori and Shin Tanaka in particular. Most appreciated comments to an earlier written version of the paper came from two anonymous reviewers.

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