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ALAPSZAKOS SZAKDOLGOZAT

*A főcímek mondattana az angol nyelvű
hírekben*

*The Syntax of English News Headlines:
A Truncation Approach*

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CERTIFICATE OF RESEARCH

By my signature below, I certify that my ELTE B.A. thesis, entitled

The Syntax of English News Headlines: A Truncation Approach

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Abstract

This thesis examines the phenomenon of article drop in English news headlines. It is argued that there are definite grammatical constraints on the distribution of article drop, which are syntactic in nature. Using a syntactic truncation analysis, I introduce a hypothesis that can provide an explanation of this phenomenon. This thesis also investigates how the third person singular *s* can occur in truncated structures. It is indicated that there are more than one inflectional projections outside the little vP therefore it is possible that the truncation of the IP layer does not cut off the entire inflectional domain. It is concluded that in English the cut is made between the number and the person probes.

Keywords: articles, English, headlines, number, person, truncation

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Note

Most of the headlines presented as examples in this thesis are genuine headlines, taken from the official webpage of BBC News. Some of the examples have been created in order to make a particular linguistic point. Neither the created examples nor the choice of the genuine headlines are intended to cast aspersions on real persons living or dead, or reflect any political opinion.

1. Introduction

English news headlines are well known to exhibit grammatical properties that make them differ substantially from regular full sentences of the language. I would like to begin by listing a few of the typical syntactic features of English headlines that demonstrate these differences.

Verbs in English headlines are usually in the simple present, while future is articulated by an infinitive, *to* followed by a verb.

(1) (a) Jones dominates Smith to retain title

(b) President to step down

The dropping of elements such as articles and copulas is a ubiquitous feature of English news headlines. When using the passive voice, copulas in most of the cases are absent.

(2) (a) US teen new Tetris word champion

(b) Boy, 17, killed in stab attack

Since headlines do not necessarily contain verbs, it is possible to drop one of the verbs or even have completely verbless headlines.

(3) (a) Ford to city: drop dead

(b) Egypt train crash: 15 dead

Individuals are generally referred to only by their surname, without any honorifics. Abbreviations and acronyms are also common.

(4) Trump cutting US aid over migrant caravan

In US headlines, commas often replace conjunctions, although this is not common among British headlines.

(5) 5-year-old girl fights wild dog, saves brother

In this thesis, I will be focusing on the phenomenon of article drop. I will argue that there are definite grammatical constraints on the distribution of articles in English news headlines, which are syntactic in nature; not every type of omission is permitted. It is important to note that native speakers of English have intuitions about the grammaticality and ungrammaticality of a headline, and some types of omissions are considered ungrammatical. Following Rizzi (1994), Haegeman (1997), and Weir (2012) using a syntactic truncation analysis, I will attempt to provide a full and sufficient explanation of the phenomenon of article drop in English news headlines. Although in this thesis I will be focusing on articles, the hypothesis introduced is able to provide a plausible perspective on the absence of tense marking and copula drop as well. I will also attempt to give a satisfactory explanation for how the third person singular *s* can occur in these truncated structures. I will provide two possible explanations for that and go along with one of them.

It has to be mentioned here that in various types of headlines we cannot observe the phenomenon of article drop. According to Mårdh's (1980) corpus study of headlines, subheads, and quotes functioning as a headline appear to show a lesser tendency to drop articles. The headlines for editorial and commentary pieces do not show article drop at all; in fact, none of the above listed dropping phenomena seems to be present in them, and they differ minimally from the 'standard' written English. Headlines for news articles alone seem to show the phenomenon of article drop, therefore the other types of headlines will be set aside here. There are also specific circumstances when articles are not at all or rarely dropped. Mårdh (1980:153) notes that when the articles *a/an* are used synonymously with *per*, for example in *ninety miles an hour*, they are never absent, and articles in apposition structures are rarely omitted.

2. Literature Review

2.1 Straumann (1935)

Straumann was the first to attempt to systematically analyse the language of English news headlines in his book *Newspaper headlines: A study in linguistic method*. This study indicates that the language of news headlines has its own syntax, and although this syntax is definitely related to the syntax of the core grammar of spoken English, at the same time, it differs from it in certain systematic ways. This book is an in-depth and detailed study of headlines and although it covers many aspects, it does not discuss the issue of article drop. The reason for this is that Straumann believes that articles are not worth studying, and he cannot find systematic patterns dominating their occurrence or absence. “[i]n headlines the treatment of the article is so absolutely arbitrary, i.e a matter of mere typographical caprice, that [...] it must be left out of consideration.” (p. 51). As I will show, this statement is not correct, there are grammatical conditions regarding the presence and absence of articles in news headlines, which cannot be reduced to a “mere typographical caprice”.

2.2 Mårdh (1980)

Mårdh’s corpus study uses headlines from the (London) *Times* and *Daily Mirror* to note the characteristics of headlines. In this study, no theoretical analysis of the phenomenon of article drop is presented, but several remarkable empirical observations are made. The most important of these in terms of this thesis is the statement that noun phrases with an article do not come to precede noun phrases without an article. The headlines in (6) are well-formed, but a version of (6b) with an article on *senior civil servant* but no article on *secretary* would be ill-formed.

(6) (a) Irish Cabinet meets as city is declared a disaster area

(b) Senior civil servant gave a secretary bribe

2.3 Stowell (1991)

Stowell also points out that noun phrases bearing an article do not precede noun phrases that do not bear an article. He indicates that article drop has grammatical conditioning and considers a number of syntactic constraints governing article omission in headlines. Unfortunately, I was not able to access the unpublished works on headlines written by Stowell, therefore I collected data about his works from secondary sources.

2.4 Weir (2012)

Weir attempts to identify the grammatical constraints governing article drop, considering the possibilities that these are pragmatic, semantic, phonological, or syntactic in nature. He concludes that the syntactic account is able to present an explanation and he introduces the syntactic truncation analysis. Truncation means building the syntactic structure only part of the way. In the truncation analysis higher branches of the syntactic tree are not projected. As indicated by Weir the truncation analysis can provide a way of unifying the case of headlines with cases of dropped elements in other reduced written registers. He proposes an explanation for article drop in English news headlines based on the truncation analysis. He suggests that determiners can only be realized, if they are in an Agree relationship with a functional head. In the reduced written register, elements in the CP layer do not establish Agree relations with elements below. Weir uses an existential quantifier to bind the determiners of the subject and the object. If Agree is not active, the existential quantifier cannot transmit down features, and cannot grant the pronunciation *a* to determiners in DPs. Although this hypothesis is problematic on several points, which will be listed later, I used this as a starting point when creating my hypothesis.

3. The Grammatical Conditioning of Article Drop

As observed in Mårdh's (1980) corpus study and indicated by Stowell (1991) and Weir (2009), the phenomenon of article drop shows a peculiar asymmetry. There are restrictions in a headline on the co-occurrence of noun phrases having an article with noun phrases that do not have an article. By comparing the imaginary headlines below, created by Andrew Weir (2009), a contrast can be found that demonstrates that article drop has grammatical conditioning.

- (7) (a) A man bites a dog
 (b) Man bites dog
 (c) Man bites a dog
 (d) *A man bites dog

As can be seen, (a), (b), and (c) are well-formed headlines, but (d) is ungrammatical both in 'standard' written English and in terms of the grammar of English news headlines. As I have already mentioned before, native speakers of a language have intuitions about the grammaticality or ungrammaticality of headlines, and the headline **A man bites dog* is considered ungrammatical.

I reject the suggestion made by Weir (2009) that this constraint does not seem to extend to the definite article *the*. I argue that the pattern works the same way with the definite article.

- (8) (a) The President shocks the media
 (b) President shocks media
 (c) President shocks the media
 (d) *The President shocks media

Headlines (a), (b), and (c) are grammatically correct, but headline (d) is ungrammatical. In this thesis, one of my aims is to try to offer an explanation for why (a), (b), and (c) are grammatical news headlines, whereas (d) is not permitted.

4. The Pragmatic Account of Article Drop

To come back to what Straumann said about article drop (“typographical caprice”), headlines frequently have to fit into a limited space, sometimes only a few characters long. Because of this fact, it may seem quite logical to say that articles, and other elements such as copulas and conjunctions, whose semantic content is low and can easily be recovered from the context, are dropped to provide a certain flexibility to the editors. If these elements are optional, the length of the headlines can be reduced quite easily. This argument is somewhat similar to note-taking, when, as a result of the speed, elements that are considered unnecessary are dropped.

Although it is certainly true that the optional dropping of elements gives flexibility to the editors, according to Weir (2009) this view ‘puts the cart before the horse’. The linguistic possibility of article drop comes first, which happens to be helping the editors, but flexibility was not the motivation for dropping articles. Using the same example as before, this statement can be confirmed.

(9) (a) Man bites a dog

(b) *A man bites dog

Both imaginary headlines (a) and (b) are the same length, but whereas (a) is grammatical, (b) is not permitted. If the explanation for the phenomenon of article drop were merely typographical, we should not see a contrast between (a) and (b). The fact that we do see a contrast proves that the grammatical conditions regarding the presence and absence of articles in news headlines indeed cannot be attributed to a “typographical caprice”. A pragmatic account cannot provide an explanation for the phenomenon of article drop in news headlines.

5. The Semantic Account of Article Drop

A semantic account of article drop would appeal to the interaction between meaning and structural position. Let us introduce a study conducted by Bauw et al. (2002) that examined the speech of Dutch-speaking infants and agrammatics. At first it may seem strange to draw a parallel between the speech of infants and headlines but actually it is a well-known fact that children omit articles in their early speech production. As also stated in de Lange (2004), not only children, adults too omit articles and we can find these omissions in the so-called reduced written registers, such as diary style and headlines. De Lange demonstrates that Dutch and Italian headlines show the same differences in article omission as observed in child speech. He also claims that articles are absent more often in sentence initial position, both in child speech and in headlines. De Lange notes that in spite of the similarities, article drop in child speech is optional, whereas in headlines it is linguistically constrained, not every type of omission is permitted. I personally think that this statement is debatable, because once studied in sufficient detail, it may turn out that article drop in child speech is likewise linguistically constrained. It is of course possible that the linguistic constraints governing article omission in child speech and those governing article omission in headlines are not entirely parallel. However, it would be inappropriate to claim that article drop in child speech is not linguistically constrained at all, since it has been already found that child speech is actually very faithful to general restrictions imposed by Universal Grammar. If we compare the phenomenon of article drop in headlines and in child speech in Dutch and Italian we would find that in both there are more omissions in Dutch. This observation of cross-linguistic differences may suggest that children and headline writers are both sensitive to a language specific property that controls the production of articles. After talking about the connection between child speech and headlines, I would also like to say a few words about agrammatics. People with agrammatism use a special speech pattern. They

usually create simplified sentences, in which mostly functional words are absent, just like in headlines.

Knowing these facts may make it more logical to search for the solution in the research carried out by Bauw et al. According to this study there is a correlation between the use of articles and the use of tenses, because they are both links between NPs and VPs and the entities or events they denote. For instance, if we say the word *man*, this NP is only semantically linked to the concept of MAN, but if we say *a man*, then this DP marks a specific man. The same happens when using tenses; if we say *bite a dog*, it is only semantically linked to the concept of dog-biting, but *bit a dog* refers to a specific event of dog-biting in the past.

Following Heim (1982), the notion that Bauw et al. use is ‘file cards’. Articles and tenses act as indicators to a specific ‘file card’ designating an individual or event. It is possible to introduce these ‘file cards’ extra-syntactically, and that is the reason why Bauw et al. claims that this phenomenon can provide an explanation for determiner drop and non-tensed sentences in the adult language. Let us consider the following examples.

- (10) (a) *Deur dicht!*
 door shut
 ‘Shut the door!’
- (b) *Ik een huis kopen? Nooit!*
 Me a house buy-INF never

Bauw et al. (2002) argues that it is not the lack of ability to produce the functional structure that results in article drop and tenseless sentences in infant and agrammatic speech, but the overgeneralisation of the capability of discourse to introduce ‘file cards’. In their linguistic development, infants learn only later how to introduce these ‘file cards’ intra-syntactically, and start to consistently introduce articles and tenses.

According to Weir (2009) these ‘file cards’ can help in the analysis of article drop in English news headlines. Of course, English is not Dutch, but Dutch headlines are similar enough in article use to English headlines to make an extension from Dutch to English legitimate. Both Dutch and English have only a very small amount of articles compared for example to Italian. Italian has a full paradigm of articles: definite, indefinite, and partitive articles varying in gender and number. According to the study conducted by de Lange (2004) because of this wide range of articles in Italian, article selection in this language costs more effort, since more information is needed to select the article, therefore articles in Italian are more often preserved in headlines. In Dutch and in English articles bear a much lower information load than in Italian and articles in these languages are dropped more often. Statistics also show that both in Dutch and in English headlines, sentence initial articles are omitted more often than sentence internal articles.

If we suppose that the grammar of headlines allows the extra-syntactic introduction of ‘file cards’, then we could get a grammar that allows a free drop of articles. This proposal can provide an explanation for why article drop happens in headlines at all, but unfortunately, it does not provide an explanation for why a noun phrase bearing an article is not allowed to precede a noun phrase that bears an article within a headline. A semantic account cannot explain the grammatical conditioning governing article drop. This leads us to the point where I can introduce the syntactic account and the truncation analysis.

6. The Syntactic Truncation Analysis

Truncation means building the syntactic structure only part of the way, building some, but not all of the structure. In the truncation analysis, higher branches of the syntactic tree are not projected. In addition, truncation is about the root of the tree, so once one chooses not to include a certain functional projection, all higher functional projections will be absent too. In Rizzi's (1994) original model of the truncation analysis, the highest projections in a clause are truncated, CP or other layers of functional structure are not projected.¹

The absence of certain grammatical markers in headlines such as determiners, copulas, and tense can be explained by assuming that headlines have truncated structures. According to Paul (2017), in Malagasy headlines the omission of copulas and the absence of tense cannot be observed. Malagasy is an Austronesian language with VOS word order. What makes Malagasy headlines different from the 'standard' written Malagasy is not the absence of copulas or tense marking, it is the change in word order from VOS to SVO where subjects obligatorily lack determiners.

- (11) (a) Lehilahy nangalatra kisikileta
 man PST.AT.steal bicycle
 'Man stole bicycle'
- (b) Aretin-kibo mamily olona maro
 sickness stomach AT.hit person many
 'Stomach illnesses strike many people'

Paul argues that the truncated syntactic structure and the absence of certain functional projections lead to the change in word order in these headlines. Reduced structure accounts for

¹ In Haegeman (1997), truncation is not modelled as a failure to project the high regions of the tree, but rather as a failure to spell them out.

the absence of tense and copulas in some languages for instance in English and in French. In Malagasy all tense is retained, instead, as a result of truncation, predicate fronting is blocked, giving rise to SVO word order. What is especially important in terms of article drop in news headlines is that Paul notes as a point of similarity that the absence of higher functional projections leads to the absence of articles in both Malagasy and English.

As a native speaker of Hungarian, I also need to mention that Hungarian headlines, though lacking tense and copula drop, can also show article drop. Hungarian headlines resemble “ordinary” spoken Hungarian more closely than English headlines resemble spoken English. This makes me assume that Hungarian does not really have a special headline register, like English does.

7. Failure of CP-level Agree

Weir (2012) proposes an alternative explanation for article drop in English news headlines based on the truncation analysis. He suggests that in the reduced written register, elements in the CP layer do not establish Agree relations with elements below. To make Weir's proposal entirely understandable I need to introduce the notion of choice functions. According to Heusinger&Kempson (2004), semantically, a choice function is a function that assigns to a non-empty set one of its elements. Because of this very general characterization, the choice function is a flexible semantic tool. Weir argues that the spell-out of the choice function component of an indefinite DP is controlled by the Principle of Full Interpretation (Chomsky 1995). This principle claims that every element of any interface must receive an appropriate interpretation. Weir makes the assumption that choice function variables are not designated for pronunciation, and still the Principle of Full Interpretation requires them to receive one. The grammar is able to solve this problem by using Agree. Weir introduces the \exists operator, an existential quantifier and he argues that between the existential quantifier and a choice function in its scope an Agree relation can be established. This Agree relation transmits certain features to the choice function and this way it can provide a pronunciation of it. The \exists operator is considered to be an unselective binder, which means that it can bind many variables, not just one.

Weir places the existential quantifier in the spec of the CP and he has that existential quantifier bind the determiners of the subject and the object. This is only possible in structures that contain the CP layer, so here we are not talking about truncated structures yet. In the structure of the sentence with two indefinites, like *A man bites a dog*, where the Agree relationship between the existential quantifier and the choice function variable is represented, we get two overt articles.

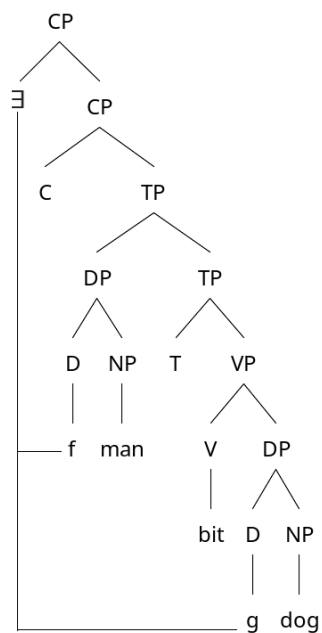


Figure 1.

However, if Agree is not active, then the existential quantifier is not able to transmit down the [indef] features, and cannot provide the pronunciation *a* to determiners in DPs. Weir outlines the hypothesis that articles and pronouns are born without the features that determine their phonological spell-out and they get them only later on with the help of an Agree relation between them and the higher operators.

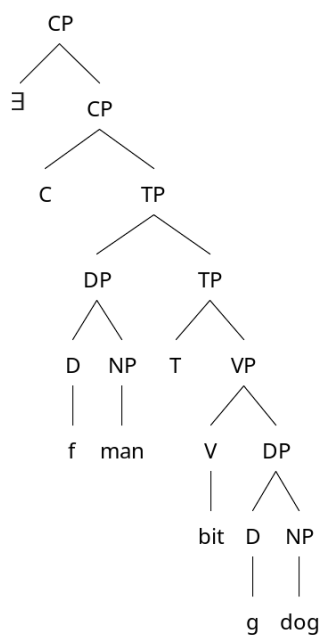


Figure 2.

Weir also proposes that we should be able to generate the pronunciation of *Man bites a dog*, which is a grammatical headline too. This is possible by placing another existential quantifier lower in the syntactic tree, in the spec of the VP, and this way having two of them. If the lower quantifier engages in an Agree relationship and the higher one does not, this gives the pronunciation of *Man bites a dog*.

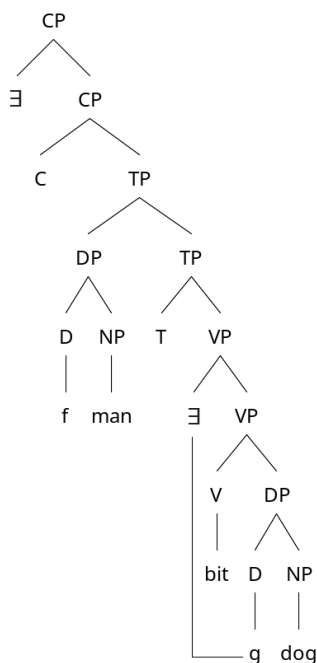


Figure 3.

Weir states that the existential quantifier is an unselective binder and Agreeer, meaning it obligatorily binds all variables free in its scope. Therefore, what is not possible to do is the insertion of the existential quantifier in such a way that it grants an *a* pronunciation only to the choice function variable in the definite subject. Any place at which the \exists operator could be introduced above the subject would either bind both the subject and the object or would fail to bind any determiners in its scope. There is no way in which the \exists operator could Agree with the subject alone, therefore there is no way of getting the pronunciation of a headline line **A man bites dog*. To summarize the hypothesis that is proposed by Weir, when the existential quantifier is above the subject, it necessarily unselectively binds and agrees with both of the

determiners in its scope or it agrees with neither of them, but it cannot pick only one. This way it is possible to get the pattern we were looking for.

Although this hypothesis seems adequate at first, some potential problems have to be pointed in connection with it. First, as we already know, the observed pattern is not just about indefinite articles: the pattern works the same with the definite article. This raises the problem that definite articles are not existentially bound. In the previously mentioned example *The president shocks the media* – *the* is an entity that has already been established in the extralinguistic universe, it does not introduce a new discourse participant. The fact that article distribution is not just about indefinite articles means that it is not just a matter of the existential quantifier.

Secondly, the idea that Agree relationships “piggyback” on semantic binding relationships is not standard, in fact, this is very unusual. Those Agree relations that have Phonological Form (PF) consequences, that is consequences for spell-out or pronunciation, should be established in the narrow syntax. Semantic binding relationships are established at Logical Form (LF), which does not feed PF. Because of this Agree relations “piggy-backing” on semantic binding relationships cannot have PF consequences. I am not saying that what Weir proposes is completely impossible, I am saying that this assumption is unconventional.

Finally, Agree is not usually unselective. For example, the expression *he hit me* is not ungrammatical, which tells us that when T is specified as third person singular, there are no person or number matching constraints placed on the object. If things were that way, we would only be able to say things like *he hit him* or *himself* but not something like *he hit me*. So generally, we cannot state that Agree is unselective.

8. Introducing a New Hypothesis

After pointing out the weaknesses of Weir's theory, I would like to propose a new hypothesis that can provide an explanation for the phenomenon of article drop in English news headlines. I will use Weir's proposal as a starting point, but I will not work with the existential quantifier because of the reasons I mentioned before. We already know that the facts are not restricted to the indefinite articles alone. There is an operator for indefinite articles because they are being introduced to the stage and are in a binding relationship with a quantifier, but there is no corresponding operator for definite articles. At the same time, I would like to work with Agree, and borrow the hypothesis from Weir (2012) that determiners can only be realized, if they are in an Agree relationship with a functional head.

Let us say that we have a constituent, a little vP which contains the subject and the object, and we introduce functional heads outside of this little vP that establish Agree relationships with the subject and the object. In fact, this is in line with what Chomsky (1995: Ch. 3) suggests. He works with two agreement heads AgrO and AgrS and he argues that AgrO is structurally lower than AgrS, therefore you can decide not to have AgrS and only have AgrO, one article on the object. This hypothesis can be applied to the distribution of article drop in news headlines.

$$(12) \quad [\text{AgrS} \ [\text{AgrO} \ [\text{vP} \ \text{SubjDP} \ \text{ObjDP}]]]$$

Although using the labels AgrO and AgrS would be convenient and transparent, these labels are no longer used in the literature. Because this kind of labelling is not current, I am going to call the functional head that agrees with the subject T and I am going to call the functional head that agrees with the object Asp so that I can line up with the recent literature. I am not going to go into a discussion about why these heads should be called like this or anything else.

This way we can have four options. The first option is when everything is present, T and Asp are present, the little vP with the subject and the object is present. T Agrees with the subject-DP and Asp Agrees with the object-DP. This will give us two overt articles, one on the subject and one on the object. This is the headline *A man bites a dog*, or *The president shocks the media*. It is the nature of the feature for which the Agree relationship is established that determines whether D is spelled out as a definite or indefinite article. It has to be noted here that headlines of this type in principle are able to give rise to tense inflection on the verb.

(13) [T [Asp [vP SubjDP ObjDP]]]

The second option is when we have the subject and the object in the little vP and that is all we have, a bare predication. That is the simplest headline that can be imagined. That is going to give no articles, and so the pronunciation of the headline *Man bites dog* or *President shocks media*. It also have to be mentioned that this kind of structure also gives us no tense and arguably no copulas. With the bare predication structure, regardless of the choice of predicate (not just verbal predicates but nominal, adjectival, and prepositional predicates as well), it is possible to account for three already well-established properties of English headlines: the absence of articles, copulas, and tense marking.

(14) [vP SubjDP ObjDP]

The third option is when we have one functional head, the Asp, and we have the little vP. This option is grammatical and gives an overt article on the object but not on the subject. This will give us the headline *Man bites a dog* or *President shocks the media*.

(15) [Asp [vP SubjDP ObjDP]]

Finally, let us consider what happens when we have the little vP and T but we do not have Asp. That is non-existent because by hypothesis it is not possible to have T directly select a vP. The fourth option is non-existent because of the way functional heads combine with vPs

and with one another. By hypothesis, the “extended projection” of lexical categories works the following way: functional heads combine with a lexical core in a particular order. Asp can be merged with the little vP and T can be merged with AspP, but it is not possible for T to merge directly with the little vP. Therefore, the headlines **A man bites dog* and **The president shocks media* are ungrammatical.

(16) * $[T \quad [_{vP} \text{SubjDP} \quad \text{ObjDP}]]$

As we can see, this hypothesis gives us the desired pattern, therefore it can provide a sufficient explanation for the phenomenon of article drop. This proposal is based on the hypothesis that a D-head is realizable as an article only when it is an Agree-goal, when it has an agree relationship with a functional head higher up the tree. This is similar to what Weir says, except that this is purely a matter of Agree and it does not implicate unselective binding. Thus, we do not have to worry about Agree piggybacking on variable binding anymore. We do not have unselective binding, what we have here is a one to one relationship, namely T agrees with the subject and Asp agrees with the object. What I have stated is in line with what Weir said but it is now entirely a morphosyntactic affair, without any semantic parts.

Moreover, this proposal also assimilates to what Sportiche (2005) posits in his analysis of determiners. According to the standard approach, determiners are not independent functional projections but rather determiners are the head of DP, taking their associated NP as a complement. DPs are also believed to act as one unit for syntactic purposes. In this framework it is quite difficult to imagine how determiners could be truncated while preserving the overall structure of the rest of the clause. Sportiche suggests that determiners are not generated inside the verb phrase with NPs. Determiners are generated high in the clause and the NPs become associated with them only later by movement. To be precise, the determiner of the sentential object is generated in one of the high Larsonian shells of a VP, while the determiner of the sentential subject is generated high up in the clause, outside the VP. Sportiche does not specify

the position in which the determiner of the sentential subject is generated. The reason for this is that Sportiche argues on semantic grounds for a high positioning of determiners and not on syntactic grounds. The hypothesis I proposed is a kind of reworking of Sportiche's analysis. The idea is that the D-head gets an overt exponent (as an article) only at PF, after the establishment of a syntactic Agree relationship between D and a functional head in the extended projection of vP. There are DPs but there are no determiner in them at the point at which selection takes place. This is very much alike to what was indicated by Sportiche, although in my proposal D does form a constituent with NP but because by hypothesis D does not have lexico-semantic content in it, I manage to derive the same desired results as Sportiche's proposal does. Verbs select noun phrases, not determiners, and determiners only get activated outside of the predication structure by functional heads.

9. The Appearance of the Third Person Singular *s*

In the truncation analysis, higher branches of the syntactic tree are not projected. On one hand, the truncation analysis can provide a satisfactory explanation for the phenomenon of article drop in English news headlines, but on the other hand it raises the question of how it is possible, if the inflectional layer is absent, to get the third singular *s* for instance in the headline *Man bites dog*. One possible answer to this could be that the *s* we see in the structure *Man bites dog* is not the same that we can see for example in the sentence *this man bites dogs all the time*. However, this assumption cannot provide a solution, because the two *s* morphemes are exactly the same. This can be easily proven by the fact that if we have a plural subject then we never get an *s*, even in a headline. The *s* that occurs on verbs is always an agreement morpheme related to the subject. The problem is that the *s* occurs in the headline *Man bites dog* despite the fact that there is no IP layer.

According to the standard approach, when the I head is finite, then nominative case is assigned to the subject, and agreement occurs on the verb, if these are in a specifier-head relationship. Therefore, two things are needed for the third person singular *s* to appear:

- A) I is the head that controls the occurrence of *s*
- B) specifier-head configuration

The occurrence of the third person singular *s* depends on the I being present and a spec head configuration. It depends on both of them, A and B together. However, it is possible to say that the occurrence of the third person singular *s* is primarily dependent on B, the specifier-head configuration. This seems a good solution, but it raises the problem of overgeneralization. It has been argued for certain objects, especially weak pronominal objects, that they establish a specifier-head relationship with a functional head in the extended projection of the verb in syntax. An example for this is the so-called object shift phenomenon, which is a well known

form of Scandinavian languages. According to Honoso (2013) in almost all of the Scandinavian language varieties, a weak, unstressed object pronoun moves across a sentential adverb. For English, it has also been argued that it has object shift (see esp. Johnson 1991). For all shifted objects in English, the above described hypothesis that *s* is a mere reflex of specifier-head relation, would result in overgeneralizing. If B were a sufficient condition for the emergence of third person singular *s* in English, we would expect *s* to show up on the finite verb whenever a third person singular DP establishes a specifier-head relation with the verb – so not just in *it pleases me* but also in **I likes it*.

It is important to tie the occurrence of *s* to the cases when the subject is nominative. Unfortunately, it is not possible to test what case we have in headlines, because you never get pronouns in headlines. Pronouns are the only constituents that explicitly do expose case in English, but since pronouns need a discourse antecedent, and headlines are out of the blue statements, we do not get pronouns in them. Considering this, a more proper wording would be the following: *s* occurs when there is a relationship of specifier-head agreement between the subject and the verb, and the subject is not non-nominative. This looks better, but is still problematic for several reasons. It is questionable whether the term “non-nominative” can be interpreted in terms of the syntax of English news headlines since it is not possible to have explicit cases in headlines. If the second half of the statement is uninterpretable, then the problem of overgeneralizing remains unsolved. Because of these reasons, I would like to propose another possible explanation.

Outside of the verbal domain, let us call it the little vP, there is an IP layer. In this thesis, I argued that this IP layer in headlines is absent, but perhaps there is not just a single inflectional projection outside the little vP. It is possible that the IP should be split into several functional heads. According to Preminger (2011), there is exactly one person probe and one number probe for VP internal arguments of active verbs. Outside the little vP domain first there is a head

projecting person and outside that there is another projection head for number. Preminger uses the π^0 as the label for the head that probes for person features, and $\#^0$ for the head that probes for number features.

$$(17) \quad [\dots[_{\#P} \#^0 [_{\pi P} \pi^0 [\dots DP_T \dots]]] \dots]$$

(where DP_T is a putative agreement target)

Preminger also argues that if agreement with the full range φ -features borne by a given nominal is excluded, it may be possible to have only partial agreement, agreement in number but not in person.

Let us assume that this hypothesis is correct, and that the truncation of the IP layer in English headlines comes down not to completely cutting off the entire inflectional domain but cutting off only the number phrase. It is this number phrase that is responsible for the explicit nominative case. The third person singular *s* is a person marker therefore it belongs to the person head and is preserved. To summarize the hypothesis outlined, there is not only one inflectional projection outside of the domain of the little vP but there are more, namely person and number. In headlines, the IP layer can be truncated in such a way that the head projecting person is preserved but functional projections above person can remain unprojected. This way it is possible to have the third person singular marker in headlines but at the same time, it remains impossible to have tense, explicit cases, and pronouns. The only thing that the head projecting person will bring in is the third person singular *s*, and that is exactly what was needed.

It also has to be pointed out that this hypothesis is not entirely perfect either, because it is not completely clear that the third person singular *s* is truly and strictly a person marker. It shows up only in present-tense contexts; in the past tense, even third person singular subjects fail to give rise to *s*-inflection on the verb. It certainly does not belong to the head projecting number, for if it were a number marker it would be expected to show in all finite clauses with

a singular subject, including first person singular *I*, as in **I writes*, but this is obviously not the case. Taking everything into account, I argue that this hypothesis offers a more satisfactory explanation for why the third person singular marker can appear in truncated structures, like headlines than the previous one.

10. Conclusion

I argued that there are definite grammatical constraints on the distribution of article drop in English news headlines, which are syntactic in nature. I used a syntactic truncation analysis to introduce a hypothesis that can provide a full and sufficient explanation of the phenomenon of article drop for which I used Weir's (2012) hypothesis as a starting point. Although I was focusing on articles drop, the hypothesis proposed is able to provide a plausible perspective on the absence of tense marking and copula drop as well. I also attempted to give a satisfactory explanation for how the third person singular *s* can occur in truncated structures and I concluded that the hypothesis proposed by Preminger (2011) can offer a solution. There is not just a single inflectional projection outside the little vP but there is more than one head that projects a phrase, therefore it is possible that the truncation of the IP layer comes down not to completely cutting off the entire inflectional domain. I argued that in English headlines the cut is made between the number and the person probes. The truncation analysis may have the right flexibility and can be considered as a pair of scissors that in principle can make the incision at any point. Based on this assumption it can be argued that the truncation analysis of news headlines is language specific. In English the cut is made between number and person but in other languages the cut may be made somewhere else. Dutch headlines, for instance, have overt number inflections, which may indicate that in Dutch headlines the number probe also has to be present.

- (18) EU-leiders bereiken oplossing
 EU-leaders reach PL solution
 EU leaders reach solution

This Dutch headline would be ungrammatical without the plural inflection on the verb; it can be assumed that Dutch makes the cut above number. There are languages such as Malagasy that preserve tense but do not show evidence for higher functional structure because there is no verb movement. Truncation in Malagasy headlines prevents the verb from fronting

so instead of the usual VOS order we get the underlying SVO order. In other languages, for example in Hungarian, the cut is probably made even higher. Some languages may make the cut lower than English, in those languages we would always find the bare stem of the verbs, never any inflection on them. These further perspectives of the truncation analysis I would like to leave to future work.

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