

Does German Satisfy the Subject Condition?

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Abstract

In this paper I argue that German satisfies the Subject Condition even if it has clauses without a (c-structure) subject-constituent. In particular, I argue that expletive subjects are provided by the verbal agreement morphology; from this it follows that the insertion of an expletive subject in c-structure is not necessary to satisfy the Subject Condition and therefore by Economy of Expression is prohibited.

1 Subject Condition

In this paper I will address the question whether German is a language that satisfies the Subject Condition (cf. Baker 1983), i.e., put informally, whether every sentence in German has a subject.

A definition of the Subject Condition is given in Alsina (1996:20):

(1) Subject Condition

An f-structure with propositional content must include a subject (as one of its grammatical functions) and no f-structure may include more than one subject.

The Subject Condition is a condition on f-structures, but since the f-structure is constructed by the mapping function ϕ from c-structure, the first question is how the subject is identified in c-structure in German. We will see that German has clauses without a phonologically realized subject, hence without a representation in c-structure. However since the function ϕ is not onto, a second question arises: Does the Subject Condition hold in German when there is no phonologically realized subject, and if so, how is it satisfied?

It is still controversial whether the Subject Condition in LFG should be a universal or not.¹ In the following an analysis will be presented which shows that German is consistent with the universal status of the Subject Condition and it will be shown that this follows without further stipulation from the analysis of agreement in LFG.

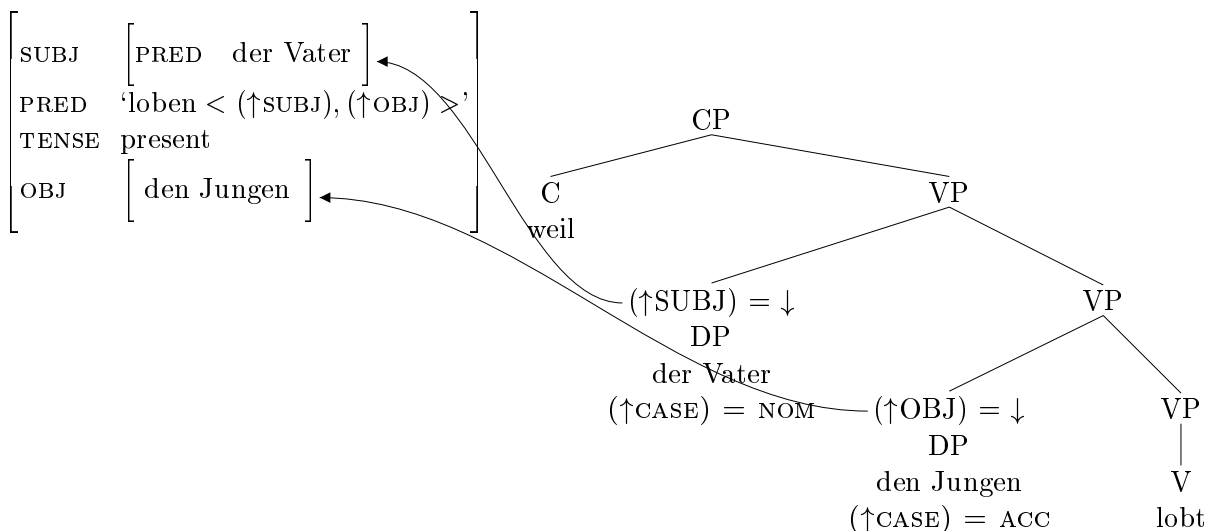
2 Function specification in German

Languages use different kinds of function specification; in particular a distinction is made between structural and morphological function specification (e.g. Bresnan 1982, 1998,

¹According to Alsina (1996:20) the Subject Condition is “if not an absolute universal, at least the unmarked parameter setting”. Mohanan (1994:191) concludes “The status of the Subject Condition (...) as an inviolable universal is thereby called into question by this construction. Given that the motivation for the Subject Condition is cross-linguistically robust, the condition can by no means be abandoned. The only conclusion open to us then is that the Subject Condition may be violated under certain special circumstances.” Bresnan/Zaenen (1991:51, footnote 10) remark that “this condition may need to be parameterized so as to hold only for some types of languages”, Bresnan/Kanerva (1989:28) point out “the generality of the subject condition (due to Baker (1983)) is open to question, because many languages have constructions in which there is no overt subject [...]. It remains unclear whether these cases involve an empty nonlogical subject, as proposed by Baker (1983) or whether the subject condition itself is language-dependent”.

Haider 1990, 1993). Following Haider (1990, 1993) I assume that in German grammatical functions are identified morphologically and not by structural position. It follows that the subject and the object do not have to occupy distinct, unambiguous positions and there needs to be only one functional projection, namely the CP. Consequently, German has no distinguished subject position. The assumed sentence structure (cf. Haider 1993, Frey/Tappe 1991) and its corresponding f-structure are given in (2):

- (2) ... weil der Vater den Jungen lobt
 because the father (nom) the boy (acc) praises



2.1 Types of morphological function specification

Based on Nichols (1986), Bresnan (1998) schematized two general types of morphological function specifications, namely dependent-marking and head-marking:

(3) Types of morphological function specification:

a. dependent marking:

$$(\downarrow\text{CASE}) = k \Rightarrow (\uparrow\text{GF}) = \downarrow$$

b. head-marking:

$$(\downarrow\text{AGR}) = (\uparrow\text{AF AGR}) \Rightarrow (\uparrow\text{AF}) = \downarrow$$

In German both types of morphological function specification can be observed with the subject: it is marked nominative (which is an instance of dependent-marking) and it has to agree in number and person with the finite verb (which is an instance of head-marking). The sentences in (4) illustrate the morphological function specification of the subject, exemplified by the subject of the verb *lachen*:

- (4) a. Der Junge lacht
The boy (nom) laugh (3.pers.sg/2.pers.pl)
- b. *Den/dem/des Jungen/s lacht
The boy (acc)/(dat)/(gen) laugh (3.pers.sg/2.pers.pl)
- c. *Der Junge lachst
The boy (nom) laugh (2.pers.sg)
- d. *Der Junge lachen
The boy (nom) laugh (1./3.pers.pl)

In (4a) the DP is marked nominative and has the same person and number features as the finite verb. (4b) shows that the subject must be marked nominative, no other case-marking is possible. In (4c) there is number agreement, but no person agreement, in (4d) there is person agreement, but no number agreement.

Hence, for the subject in German the schema can be specified as in (5):

$$(5) (\downarrow \text{CASE}) = \text{NOM} \Rightarrow (\uparrow \text{SUBJ}) = \downarrow \wedge (\downarrow \text{AGR}) = (\uparrow \text{SUBJ AGR}) \Rightarrow (\uparrow \text{SUBJ}) = \downarrow$$

Consequently, the Subject Condition is always satisfied if there is a nominative marked DP in c-structure that agrees with the verb.

There are, however, certain types of sentences in German which lack a nominative-marked, agreeing DP. In the following it will be argued that even in these cases the Subject Condition is satisfied; I claim that this pattern results from the interaction of case-marking and verbal agreement morphology in German.

3 Clauses without a nominative DP

3.1 Default vs. Lexical case-marking

In German there is a distinction between default case-marking and lexical case-marking. As was shown by Zaenen/Maling/Thrainsson (1985:465), default case marking is sensitive to surface grammatical relations and results in nominative subjects and accusative objects, while lexical case-marking is an idiosyncratic property of the lexical item and is associated with a particular thematic role. In German lexically case-marked arguments are obligatorily mapped onto OBJ_θ (Zaenen/Maling/Thrainsson 1985:479).

Consider the contrast between the verbs *loben* (to praise) and *helfen* (to help): *Loben* is a verb which has no lexically case-marked arguments. According to the mapping principles formulated in Bresnan/Zaenen (1990) (see (6)) the agent, which is intrinsically marked $[-o]$, is mapped onto the subject, and the theme, which is intrinsically marked $[-r]$, is mapped onto the object:²

²Grammatical functions are defined by the features $[\pm r]$ (thematically restricted or not) and $[\pm o]$ (objective or not). A subject corresponds to $[-o, -r]$, an object to $[+o, -r]$, object_θ to $[+o, +r]$ and oblique_θ to $[-o, +r]$.

(6) **Mapping Principles:**

Bresnan/Zaenen (1990:51)

a. Subject roles:

- (i) $\hat{\theta}$ is mapped onto SUBJ; otherwise:
 [-o]
- (ii) θ is mapped onto the SUBJ.
 [-r]

b. Other roles are mapped onto the lowest compatible function on the markedness hierarchy (SUBJ < OBJ, OBL_{θ} < OBJ_{θ}).

(7)	loben	⟨agent,	theme⟩
		[-o]	[-r]
	SUBJ		OBJ

The subject is associated by default with nominative case; the object is associated by default with accusative case:

- (8) ... weil **der** Vater **den** Jungen lobt
 because the father (nom) the boy (acc) praises

In the passive construction the agent is suppressed, so the theme argument, being intrinsically marked [-r], is mapped onto the subject and satisfies the Subject Condition, as shown in (9):

(9)	loben	⟨agent,	theme⟩
		[-o]	[-r]
	\emptyset		SUBJ

Hence in the passive the theme must be realized as a nominative DP:

- (10) ... weil **der** Junge/ ***den** Jungen gelobt wird
 because the boy (nom)/ the boy (acc) praised is

In contrast, lexical case is associated with a specific thematic role. In German case-marked thematic roles are obligatorily mapped onto OBJ_{θ} .³ So in the passive voice *helfen* does not subcategorize for a SUBJ but for an OBJ_{θ} :

³There are no 'quirky' subjects in German; see Zaenen/Maling/Thrainsson (1985) for a comparison of Icelandic non-nominative marked subjects and German dative marked DPs, which can not function as a subject.

- (11) helfen \langle agent, beneficiary \rangle
 [-o] [+o]/DAT
-
- \emptyset OBJ $_{\theta}$

Lexical case does not change when the clause is passivized. In (12) it is shown that the dative is also retained in the passive voice:

- (12) a. ... weil der Vater **dem** Mädchen hilft
 because the father the girl (dat) helps
- b. ... weil **dem** Mädchen geholfen wird
 because the girl (dat) helped is

So in sentences like (12b) there is no nominative marked DP.

The same thing is seen with certain verbs in the active voice which have only one lexically case-marked argument and oblique functions:

- (13) a. [cf. Reis 1982:185]
 ... weil mir an einer schnellen Lösung liegt
 because me (dat) at a quick solution lies
 ‘... because I am interested in a quick solution’
- b. ... weil mir (davor) graut
 because me (dat) of it dreads
 ‘... because I dread it’
- c. ... weil mich friert
 because me (acc) cold-is
 ‘... because I am cold’

Again, due to lexical case-marking these verbs do not subcategorize for a SUBJ, but an OBJ $_{\theta}$. Therefore sentences with such verbs, as in (12b) and (13), violate the Subject Condition, unless there is an alternative way to provide a subject.

3.2 Impersonal Passive

Another case where the Subject Condition seems to be violated is the impersonal passive of intransitive verbs, where no argument is left, as in (14).

- (14) ... weil (gestern) (im Wald) getanzt wurde
 because yesterday in the woods danced was
 ‘... because there was dancing (in the woods) (yesterday)’

When intransitive verbs are passivized, the only argument is suppressed and the verb does not subcategorize for any function at all. This results in sentences containing only the predicate (and, optionally, adjuncts).

In contrast to German, in many languages with impersonal passive, an expletive subject must be inserted. For example in Danish, Swedish, and Norwegian the subject position must be filled by an expletive subject, as shown in (15).

- (15) [Sten Vikner p.c.]
- a. Vielleicht wird getanzt — German
perhaps is danced
 - b. Måske bliver **der** danset — Danish
perhaps is there danced
 - c. Kanskje blir **det** danset — Norwegian
perhaps is it danced
 - d. Kanske dansas **det** — Swedish
perhaps danced-is it

In the following it will be argued that this difference is due to the role of verbal morphology in the different languages.

4 The role of the verbal agreement morphology

We have seen that in German the subject agrees with the finite verb in person and number. Following the analysis of subject-verb-agreement in Kaplan/Bresnan (1982:205) and Bresnan (1998, chap.8), the subject-verb agreement is encoded on the verbal affix:

The verbal affix contains, on the one hand, information about tense and mood, and on the other hand, it specifies that its subject must have certain number and person values. The verb is able to specify features of the subject because it is the f-structure head of the clause. The entry of a verbal affix is given in (16):

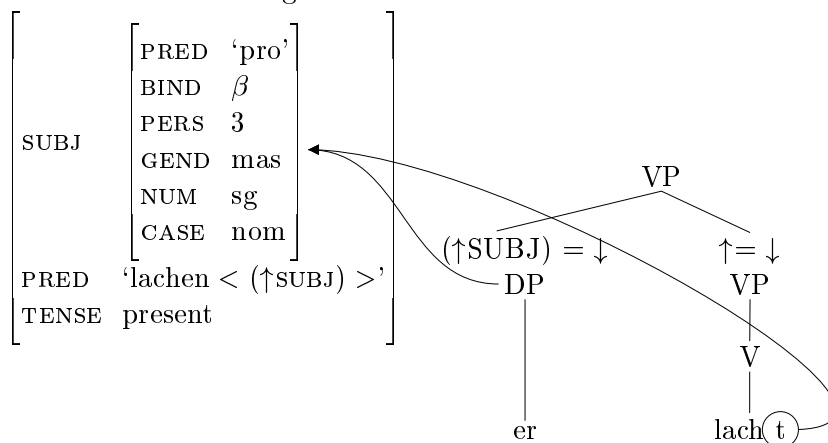
- (16) $-t: V_{infl}$ (\uparrow TENSE) = present
 (\uparrow MOOD) = indicative
 (\uparrow SUBJ) = \downarrow
 (\downarrow PERS) = 3
 (\downarrow NUM) = sg
 (\downarrow CASE) = nom

The person, number and case features of the subject, provided by the verbal agreement morphology, are unified with the features of the subject DP and guarantee subject-verb agreement. For example, the agreement features of the verbal affix $-t$ are compatible with the agreement features of the pronoun er . The lexical entry of er is given in (17):

- (17) er: N (\uparrow PRED) = 'pro'
 (\uparrow BIND) = β
 (\uparrow NUM) = sg
 (\uparrow PERS) = 3
 (\uparrow GEND) = mas
 (\uparrow CASE) = nom

Hence the information of the affix *-t* and the pronoun *er* can be unified as shown in (18).

- (18) ... weil er lacht
 because he laughs



Subject-verb-agreement is an instance of head-marking. The subject is specified on the head of the clause, the verb. But since the verbal affix specifies only person, number and case features of the subject, a corresponding DP is usually obligatory. But then the question is: What happens in sentences like (12b), (13) or (14) when no subject DP is present and thus no unification can take place?

There are languages in which arguments do not have to be represented in c-structure. For example, Bresnan/Mchombo (1987) claim that in Chicheŵa, the optional absence of the subject NP can be analyzed as an instance of pro-drop. The object in Chicheŵa, however, is specified only by the verbal morphology and is an example of pronoun incorporation. Hence, in this case, no object NP can occur. To see whether clauses without a c-structure subject in German can be analysed along these lines, I will briefly summarize the analysis of pro-drop and pronoun incorporation given in Bresnan/Mchombo (1987) and Bresnan (1998).⁴

4.1 Pronoun incorporation and pro-drop

Bresnan (1998, chap.8:206) suggests that “*pronoun incorporation* or *pronominal inflection* can be analyzed in this way: an incorporated pronoun or pronominal inflection is a bound morpheme that specifies a complete pronominal f-structure. The functional specification

⁴On pronominal incorporation and pro-drop, see also Mereu (1997) and Börjars/Chapman (1998).

of a pronoun is incorporated with the functional specifications of the stem to which the morpheme is bound.”

In Chichewa the affix *-wá* specifies an object f-structure, containing semantic and agreement features. This is illustrated by the following example:

- (19) Bresnan (1998:chap.8:214(11b))
 Njũchi zi-ná·wá lum-a
 10.bee 10.S-PST-2.O-bite-FV
 ‘The bees bit them’

The object marker *-wá* carries the following information:

- (20) OM-: V_{infl} (\uparrow OBJ) = \downarrow
 (\downarrow PRED) = ‘pro’
 (\downarrow AGR) = α

Since *-wá* specifies the PRED-feature of the object and since PRED-features are treated as instantiated symbols which can’t be unified, even if they are identical (Kaplan/Bresnan 1982:225), no object DP can occur.

The subject in Chichewa is also specified by the verbal morphology, with the difference that in this case the semantic feature is optional.

- (21) SM-: V_{infl} (\uparrow SUBJ) = \downarrow
 ((\downarrow PRED) = ‘pro’)
 (\downarrow AGR) = α

This gives us two possibilities: If the semantic feature is present, the subject is specified by the morphology. If the semantic feature is absent, it is provided by the corresponding DP and we have subject-verb-agreement.

In German, pro-drop and pronoun incorporation are not possible, since a thematic subject can never be omitted,⁵ as shown in (22):

- (22) ... weil *(er) lacht
 because he laughs

This indicates that in German, the verbal agreement morphology does not provide a PRED-feature either optionally or obligatorily. Hence, in (22) the subject DP, providing the semantic feature, has to be present and we have subject-verb-agreement.

However, it was shown that there are verbs in German which do not subcategorize for a subject, namely certain verbs with lexically-case-marked arguments, and impersonal passives. In the following I will argue that in these cases the verbal morphology can specify a subject, more precisely an expletive subject.

⁵Except in the case of topic-drop, where a subject or an object in sentence-initial position may be omitted under certain pragmatic conditions; cf. Huang (1984).

4.2 The expletive subject provided by the morphology

We have seen that in German the verbal morphology does not provide a semantic feature. Notice, however, that the verbal agreement morphology nevertheless specifies a subject containing only person, number and case information, as shown in (23):

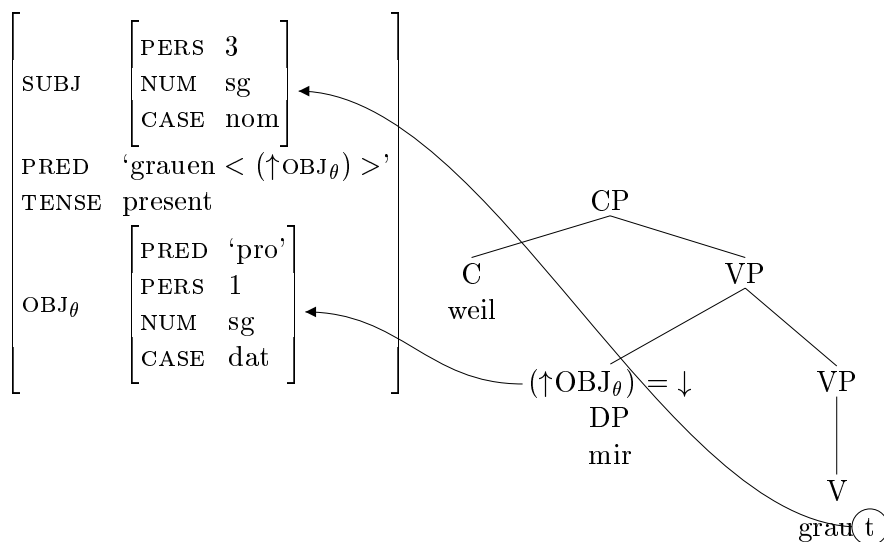
$$(23) \left[\begin{array}{l} \text{SUBJ} \left[\begin{array}{l} \text{PERS } 3 \\ \text{NUM } \text{sg} \\ \text{CASE } \text{nom} \end{array} \right] \\ \text{TENSE } \text{present} \end{array} \right] \quad \text{-t: } V_{infl} \quad \begin{array}{l} (\uparrow\text{TENSE}) = \text{present} \\ (\uparrow\text{SUBJ}) = \downarrow \\ (\downarrow\text{PERS}) = 3 \\ (\downarrow\text{NUM}) = \text{sg} \\ (\downarrow\text{CASE}) = \text{nom} \end{array}$$

Normally this information is unified with the features of the subject DP. But what happens now if no subject DP is present?⁶ In this case too, the verbal agreement morphology introduces a subject in the f-structure, namely a subject without a semantic feature. A subject which has no semantic feature, but only agreement features, is an expletive subject. If a verb subcategorizes for a thematic, semantically contentful subject, like the verb *lachen*, the subject provided by the morphology does not satisfy Completeness, since it has no semantic feature. However, if the verb does not subcategorize for a thematic subject, the specification of an expletive subject is fine and furthermore required to satisfy the Subject Condition. Notice that the insertion of the expletive subject by the verbal morphology is just a consequence of subject-verb agreement and does not need to be stipulated. On the contrary, further constraints would be necessary in order to prevent the insertion of the expletive subject.

The mapping from c- to f-structure of a sentence without a subject DP is illustrated in (24). *Grauen* has a lexically case-marked argument which is mapped onto OBJ_θ . The Subject Condition is satisfied by the verbal agreement morphology:

$$(24) \dots \text{weil} \quad \text{mir} \quad \text{graut} \\ \text{because me (dat) dreads}$$

⁶I put aside the question whether sentences may have the subject function or not, since this would take me too far afield.



On this analysis every finite clause satisfies the Subject Condition, since either the subject, specified by the agreement morphology, is unified with a subject DP or the agreement morphology specifies an expletive subject.

Notice that sentences like

- (25) a. *... weil lacht
 because laughs
 b. *... weil sieht das Haus
 because sees the house

do satisfy the Subject Condition under this analysis, but violate Completeness, since *lachen* and *sehen* subcategorize for a thematic subject.

However, there is a restriction: an expletive subject can only be introduced by the affix which is marked 3rd person singular. All the other morphological forms lead to ungrammaticality:

- (26) a. ... weil getanzt wird (3.pers.sg)
 b. *... weil getanzt wirst (2.pers.sg)
 c. *... weil getanzt werde (1.pers.sg)
 d. *... weil getanzt werden (1./3 pers.pl)
 e. *... weil getanzt werdet (2.pers.pl)

But this is in accordance with the observation that the expletive DP in other languages is also 3rd person singular, as for example Swedish or Norwegian *det* or Icelandic *það*. It seems that this is the only specification that allows an interpretation without semantic content. This observation can be captured by the following wellformedness condition on f-structures:

- (27) All f-structures must have a PRED-feature, unless they are specified for 3rd person singular.

$$(\forall f) [\neg (f \text{ PRED}) \Rightarrow [(f \text{ NUM}) = \text{sg}, (f \text{ PERS}) = 3]]$$

Another question which arises is why the subject introduced by the verbal morphology does not violate Coherence, since the verb does not subcategorize for a subject. Compare (24) where *grauen* subcategorizes only an OBJ_θ , or the passive of an intransitive verb as in (28), where *tanzen* in the passive voice does not subcategorize for any function at all.

- (28) ... weil getanzt wird
 because danced is
 ‘... because people dance/are dancing’

$$\left[\begin{array}{l} \text{SUBJ} \quad \left[\begin{array}{l} \text{PERS} \quad 3 \\ \text{NUM} \quad \text{sg} \\ \text{CASE} \quad \text{nom} \end{array} \right] \\ \text{PRED} \quad \text{‘tanzen < >’} \\ \text{PASSIVE} \quad + \\ \text{TENSE} \quad \text{present} \end{array} \right]$$

Alsina (1996) claims that grammatical functions can be licensed in three different ways:

- (29) *Coherence*: (Alsina 1996:71, (59))
- a. [...]
 - b. a direct function must be licensed either (i) by a mapping principle (...), (ii) by a general principle such as the Subject Condition (...), or (iii) by a lexical stipulation.

Following Alsina’s claim that non-thematic functions are not represented in a-structure (pp. 57/58), an expletive subject cannot be licensed by a mapping principle, but being a subject it is licensed by the Subject Condition itself. This is the case for expletive subjects introduced by the morphology, as in German, as well as for the expletive subject DP, as for example in Norwegian:

- (30) Kanskje blir **det** danset
 perhaps is it danced

Also in the Norwegian case, the expletive subject DP *det* is not subcategorized by the verb, but it is licensed by the Subject Condition.

4.3 Predictions of the analysis

The analysis presented here makes a prediction for other languages: a language which does not have subject-verb-agreement can't introduce an expletive subject via the verbal morphology. In order for such languages to satisfy the Subject Condition, the expletive subject must be introduced in another way.

This is the case for languages like Danish, Norwegian and Swedish. Danish, Norwegian and Swedish do not have subject-verb agreement. Hence, the verbal morphology does not specify an expletive subject, rather the subject must be identified structurally in IP-Spec.⁷ The examples are repeated for convenience:

- (31) a. Måske bliver *(der) danset — Danish
 perhaps is there danced
- b. Kanskje blir *(det) danset — Norwegian
 perhaps is it danced
- c. Kanske dansas *(det) — Swedish
 perhaps danced-is it

Yiddish and Icelandic do have subject-verb-agreement. So the expletive subject can be introduced by the verbal agreement morphology. The prediction of the analysis presented here, that no expletive DP occurs, is borne out. The examples are given in (32).

- (32) [Sten Vikner p.c.]
- a. Efsher vert (*es) getantst — Yiddish
 perhaps is it danced
- b. Kannski er (*það) dansað — Icelandic
 perhaps is it danced

An apparent counterexample is English which has both subject-verb-agreement and a structural expletive subject.

- (33) Perhaps *(there) dances a man

⁷In case there is a sentence-initial locative PP or a locative adverb the expletive subject is optional (cf. Vikner 1995:47 for Danish, Falk 1987:2ff and Kersti Börjars (p.c.) for Swedish; Helge Dyvik pointed out to me that it also holds in Norwegian). For example (Sten Vikner p.c.):

- (i) I huset bliver (der) danset (in house is there danced) – Danish
 (ii) I huset blir (det) danset (in house is it danced) — Norwegian
 (iii) I huset dansas (det) (in house danced-is it) — Swedish

However in this case the PP functions as a subject and is an instance of locative inversion which has a specific discourse function (cf. Bresnan 1994:85ff).

However, English has only partial subject-verb-agreement, mainly in the present tense, 3rd person singular, so we can assume that in English the verbal morphology is too weak (cf. Rohrbacher (1994), Vikner (1997)) to introduce a subject by itself. Weakness of the morphology can be expressed by constraining equations on the agreement features. This is illustrated by the English verbal affix *-s*:

$$(34) \quad -s: V_{infl} \quad (\uparrow TENSE) = \text{present} \\
(\uparrow SUBJ) = \downarrow \\
(\downarrow PERS) =_c 3 \\
(\downarrow NUM) =_c \text{sg} \\
(\downarrow CASE) = \text{nom}$$

Thus, in English the agreement features of the verbal morphology must be licensed by a cooccurring DP.⁸ Consequently, in English impersonal passive is ungrammatical:⁹

$$(35) \quad * \text{Perhaps there was danced}$$

5 German as a semi-pro-drop-language

The proposal that German has a phonologically unrealized expletive subject recalls the claim made by e.g. Safir (1985), Cardinaletti (1990), Grewendorf (1989), Vikner (1995) that German is a semi-pro-drop-language, disallowing an argumental null subject ‘pro’, but licensing an expletive ‘pro’. The expletive ‘pro’ occupies the IP-Spec-position and the Extended Projection Principle (Chomsky 1982) is fulfilled.

However, the analysis presented here and the semi-pro-drop analysis are different in several aspects:

First, the proponents of the semi-pro-drop analysis claim that the expletive is represented in phrase-structure by the empty category ‘pro’, as shown in (36):

$$(36) \quad \dots \text{ weil} \quad [\text{IP pro} [\text{VP getanzt worden ist}]] \quad [\text{Vikner (1995:153, 209)}] \\
\text{because} \quad \text{danced been} \quad \text{is} \\
\text{‘... because there has been dancing’}$$

⁸On the analysis of agreement in sentences like (33) see e.g. Alsina (1996:72ff.), Baker (1983:6), Bresnan (1994:107)

⁹Dutch is more problematic under this analysis: Dutch has subject-verb-agreement and a structural subject expletive *er* (there). But in contrast to English, in Dutch impersonal passive is grammatical:

(i) Misschien wordt *(er) gedanst (perhaps is there danced).

Constraining equations on the verbal agreement morphology wouldn’t capture the Dutch data, since the expletive *er* could not license them. However, notice that there is a difference between the ‘weakness’ of the English and the Dutch morphology. While English has neither person- nor number agreement in all tenses, Dutch has number agreement, but no person-agreement in all tenses (cf. Vikner 1997). This might suggest that the analysis of the Dutch morphology must be captured in a different way from the English morphology. There are also consequences for the formulation of (27). However I leave these issues for future research.

But since the claim defended here is that the functions in German are identified morphologically, an empty category, lacking any morphology, couldn't be identified as the subject at all. Note that even if one assumed that German has structural function specification in addition to morphological function specification (cf. Choi 1999), an empty category in the subject position would be ruled out by 'Economy of Expression' (see below). So, in contrast to the analysis proposed by Vikner and others, on the present analysis the expletive subject is not represented in c-structure by an empty element, but is introduced in f-structure by the verbal agreement morphology.

Second, the proponents of the semi-pro-drop-analysis assume that in the case of an ergative or passivized verb, the argument is base-generated in the object position and the subject position has to be occupied by the expletive 'pro'. Grewendorf (1989:147) proposes structures as in (37):

- (37) a. ... weil [S pro_i [VP dem Hans ein Fehler_i unterlaufen ist] INFL]
 because the Hans (dat) a mistake (nom) happened is
- b. ... weil [S pro_i [VP dem Hans der Arm_i verbunden wurde] INFL]
 because the Hans (dat) the arm (nom) bandaged was

However, on the analysis being presented here, a nominative marked, agreeing DP is identified as the subject independent of its thematic role and its structural position. Therefore also in sentences like (37) the nominative marked DP is identified as the subject and agrees with the finite verb.

6 Is there an expletive subject DP in German?

We have seen that with impersonal passive and with a few verbs in the active voice, the Subject Condition is satisfied by the verbal agreement morphology. Notice that the additional insertion of the expletive DP *es* with impersonal passive is ungrammatical:

- (38) ... weil (*es) getanzt wurde
 because it danced was

This follows from the present analysis straightforwardly:

The subject is already specified by the verbal agreement morphology. Hence the occurrence of an additional structural expletive subject would give only redundant information and therefore violate 'Economy of Expression':

- (39) **Economy of Expression** (Bresnan 1998, chap.6)
 All syntactic phrase structure nodes are optional and are not used unless required by independent principles (completeness, coherence, semantic expressivity)

The same is true for some verbs in the active voice:

- (40) ... weil (*es) mir an einer schnellen Lösung liegt
 because it me (dat) at a quick solution lies
 ‘... because I am interested in a quick solution’

Again, a structural subject expletive can’t occur, since in contrast to the subject provided by the morphology, the expletive DP would require additional phrase structure nodes.

This means that according to the analysis presented here, we expect that German has no expletive subject DP at all, since every finite verb potentially specifies an expletive subject and hence the expletive *es* would always violate ‘Economy of Expression’.¹⁰

The prediction of the analysis that *es* in the middle field¹¹ can’t be an expletive is in agreement with the view taken by Cardinaletti (1990), Vikner (1995) and Fortmann (1998) — following Hoekstra (1983) — who claim that *es* in the middle field is always a (quasi)-argument. However, in the following I will present some examples where the status of *es* as a quasi-arguments is questionable and it will be shown how an expletive subject DP could be handled by the present analysis.

6.1 Evidence for *es* as a (quasi)-argument?

Es can occur in the middle field either obligatorily ((41a) and (41b)) or optionally ((41c) and (41d)):

- (41) a. ... weil es regnet
 because it rains
- b. ... weil es keine Hoffnung gab
 because it no hope gave
 ‘... because there was no hope’
- c. ... weil (es) mich friert
 because it me cold-is
 ‘... because I am cold’
- d. ... weil (es) mir graut
 because it me is dreadful
 ‘... because I dread it’

¹⁰Note that *es* in CP-Spec is grammatical:

- (i) Es wird getanzt (there is dancing)
 (ii) Es kamen viele Linguisten (there came a lot of linguists)

However, in this case *es* is required to fill CP-Spec which may not remain empty in a declarative sentence. Following Grewendorf (1989), Fortmann (1998) and the analysis of the traditional grammar, I assume that *es* in sentences like (i) and (ii) does not have subject function.

¹¹In traditional grammar the German sentence is divided into three fields, the *Vorfeld*, the *Mittelfeld* and the *Nachfeld*. The *Mittelfeld* (middle field) is that part of a main (verb-second) clause between the finite verb and any nonfinite verbal forms or a separable verb prefix, or that part of an embedded (verb-final) clause between the complementizer and the verb complex. A constituent that precedes the finite verb in a main clause occupies the *Vorfeld* (prefield), those following the verbal complex occupy the *Nachfeld* (postfield).

Following Bennis (1986), Cardinaletti, Vikner and Fortmann support their claim that *es* here is an argument by showing that *es* can occur in control constructions:

- (42) a. [Fortmann (1998:14 (26a))]
 gestern hat es geblitzt, ohne zu donnern
 yesterday has it flashed=lightning without to thunder
 ‘yesterday there was lightning without thundering’
- b. [Fortmann (1998:14 (26b))]
 gestern hat es geregnet, anstatt zu schneien
 yesterday has it rained instead to snow
 ‘yesterday it rained instead of snowing’

However, with other verbs than weather verbs, it is more doubtful whether control is possible:

- (43) [Christine Czinglar, handout GGS Stuttgart 1999 example (46a)]
 ?Es gibt in dieser Gegend viele Tümpel, ohne jemals richtig zu regnen
 It gives in this area a lot of ponds without ever really to rain
 ‘There are lots of ponds in this area without ever really raining’

It is beyond the scope of this paper to discuss the interpretation of these data in detail. We have seen that the analysis presented here supports the claim that there is no structural expletive in German. However, if it turned out that German had an expletive subject DP in cases like (41) the expletive does not have to be inserted to satisfy the Subject Condition, because this could be done by the verbal agreement morphology. So I assume that if there is an expletive subject DP the verb has to subcategorize for it and the verb has special requirements on the realization of its subject — namely it requires a non-thematic subject and the subject must be realized by *es*. In this regard they act like an idiomatic expressions. Formally this could be captured by a constraining equation:

- (44) geben: V (\uparrow PRED) = ‘geben <(\uparrow OBJ)> (\uparrow SUBJ)
 (\uparrow SUBJ FORM) =_c es

7 The subject in non-finite clauses

Finally, non-finite verbs provide further evidence for the claim that the agreement morphology specifies an expletive subject. Compare the following examples:

- (45) a. die Möglichkeit, dass getanzt wird
 the possibility that danced is
 ‘the possibility that there is dancing’
- b. *die Möglichkeit, getanzt zu werden
 the possibility danced to be

The impersonal passive is only possible in finite clauses but not in non-finite clauses. The non-finite clause in (45b) would be an example of arbitrary control. With arbitrary control the subject is introduced by the following rule:

- (46) Rule of Functional Anaphora: (Bresnan 1982:326)
 For all lexical entries L, assign the optional pair of equations ((↑SUBJ PRED) = ‘pro’), (↑FIN) =_c – to L. (Bresnan 1982:326)

In German we can assume that the equation (↑SUBJ PRED) = ‘pro’ is optionally associated with the affix *zu*, as shown in (47):

- (47) *zu*: V_{infl} ((↑SUBJ PRED) = ‘pro’)
 ...

The non-finite clause *zu tanzen* therefore has the f-structure given in (48):

- (48) *zu tanzen*
 to dance

$$\left[\begin{array}{l} \text{SUBJ} \left[\begin{array}{l} \text{PRED} \text{ 'pro'} \end{array} \right] \\ \text{PRED} \text{ 'tanzen} < (\uparrow\text{SUBJ}) >' \end{array} \right]$$

The optional insertion of a thematic subject (it contains a PRED-feature) by the affix *zu* explains why the examples in (49) are grammatical, although in c-structure no subject is realized. (49b) shows further that a passive of a transitive verb is grammatical.

- (49) a. die Möglichkeit, zu tanzen
 ‘the possibility of dancing’
 b. die Möglichkeit, verstanden zu werden
 the possibility understood to be
 ‘the possibility of being understood’

The impersonal passive, where an expletive subject would have to be inserted to satisfy the Subject Condition is, however, ungrammatical, as we have seen in (45b).¹² This follows from the present analysis straightforwardly:

Since non-finite verbs do not show agreement with the subject, the verbal morphology can’t specify an expletive subject. So a non-finite verb never introduces an expletive subject in the f-structure. Hence in example (45b) the Subject Condition is violated.

¹²It could be objected that the controlled subject of a non-finite clause must always be thematic. Haider (1990:126, footnote 4) points out in the framework of GB that it is only a stipulation that PRO has be theta-marked and there is no explanation provided. In LFG the introduction of the subject by the affix *zu* must be optional, to account for functional control and coherent infinitives with *zu*. So the insertion of an expletive subject must be impossible for other reasons.

8 Conclusion

It was argued that German is a language which, despite having clauses without a structural subject, does satisfy the Subject Condition and is therefore consistent with the claim that the Subject Condition is universal. In particular, I argued that the expletive subject is provided by the verbal agreement morphology, which follows from the analysis of subject verb-agreement without further assumptions.

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