

Agreement with predicative adjectives, with non-finite verbs and with predicate nominals

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Abstract

Among the Germanic and Romance languages, the languages that lack predicative adjective agreement without lacking attributive adjective agreement are all SOV-languages (including Yiddish). I propose to link this to the OV/VO-difference by suggesting that languages with head-final VPs (i.e. OV-languages) also have head-final Adjective Phrases (AdjPs).

I will start out by noting how unexpected it is that a language with so much agreement morphology as German completely lacks predicative adjective agreement, (1a) when predicative adjective agreement is found in languages with very little agreement morphology, like Danish or French, (1b,c). My analysis resolves this paradox, setting the lack of predicative adjective agreement in the OV-languages apart from other kinds of lack of (or loss of) agreement, by attributing it to a particular structural cause, head-finality in the AdjP.

- (1) a. Ge. Die Häuser sind grün__
 b. Da. Husene er grønne
 c. Fr. Les maisons sont vertes
 The houses are green

I will then draw some parallels from adjectival agreement to verbal and nominal agreement.

Distinguishing between finite and non-finite verb agreement, I assume finite verb agreement to take place not in the VP but in IP, and therefore I will focus on non-finite verb agreement, examining to which extent it is parallel to predicative adjective agreement.

Agreement with nominals is a completely different story, and I will argue that the only agreement found here is agreement with a predicative DP. This is very different from the agreement types described above, in that it is agreement between phrases, not inside a phrase, and therefore it is not surprising that predicative nominal agreement is very different from predicative adjective agreement in that the former is also found in the Germanic SOV-languages, (2a), whereas the latter is not, (1a).

- (2) a. Ge. Die Häuser sind dänische Ferienhäuser
 b. Da. Husene er danske sommerhuse
 c. Fr. Les maisons sont des maisons de campagne danoises
 The houses are Danish holiday cottages

The adjectival part of this talk is based on Vikner (2001a,b), but with a somewhat different analysis.

1. Introduction

German would seem to have much more morphology than e.g. French or Danish. However, there is one area where German agreement morphology could not possibly be simpler, and where German is much easier for non-native speakers than e.g. French or even Danish: predicative adjectives. Both gender and number distinctions, (3a-b), disappear when adjectives are used predicatively, (3c-f):

- (3) Ge. a. ein grüner Bus / zwei grüne Busse
a.M.NOM green.M.SG.NOM bus two green.PL.NOM buses
b. ein grünes Haus / zwei grüne Häuser
a.N.NOM green.N.SG.NOM house two green.PL.NOM houses
- c. Ein Bus ist grün_, (die anderen sind gelb)
One.M.NOM bus is green, (the others are yellow)
d. Zwei Busse sind grün_, (die anderen sind gelb)
Two buses are green, (the others are yellow)
- e. Ein Haus ist grün_, (die anderen sind gelb)
One.N.NOM house is green, (the others are yellow)
f. Zwei Häuser sind grün_, (die anderen sind gelb)
Two houses are green, (the others are yellow)

Compare this to the situation in French (and all other Romance languages), where the inflectional differences found in the attributive construction are also found in the predicative construction:

- (4) Fr. a. un autobus vert_ / deux autobus verts
a.M bus green.M.SG two buses green.M.PL
b. une maison verte / deux maisons vertes
a.F house green.F.SG two houses green.F.PL
- c. Un autobus est vert_ , (tous les autres sont jaunes)
One.M bus is green.M.SG, (all the others are yellow)
d. Deux autobus sont verts, (tous les autres sont jaunes)
Two buses are green.M.PL, (all the others are yellow)
- e. Une maison est verte, (toutes les autres sont jaunes)
One.F house is green.F.SG, (all the others are yellow)
f. Deux maisons sont vertes, (toutes les autres sont jaunes)
Two houses are green.F.PL, (all the others are yellow)

In the following sections, the situation in the other Germanic languages will be examined.

2. Scandinavian

Danish (and also Norwegian and Swedish) are like French, exactly the same inflectional differences are found in the attributive construction and in the predicative construction :

- (5) Da. a. en grøn_ bus / to grønne busser
 a.M/F green.M/F.SG bus two green.PL buses
 b. et grønt hus / to grønne huse
 a.N green.N.SG house two green.PL houses
- c. En bus er grøn_, (de andre er gule)
 One.M/F bus is green.M/F.SG, (the others are yellow)
 d. To busser er grønne, (de andre er gule)
 Two buses are green.PL, (the others are yellow)
- e. Et hus er grønt, (de andre er gule)
 One.N house is green.N.SG, (the others are yellow)
 f. To huse er grønne, (de andre er gule)
 Two houses are green.PL (the others are yellow)

(These inflectional endings are only found in indefinite DPs. In definite DPs, attributive adjectives display no number or gender differences, cf. the form *grønne* in (31) below).

The situation is no simpler in those Scandinavian languages which have retained a rich inflectional system, Faroese and Icelandic:

- (6) Fa. a. ein grønur bussur / tveir grøñir bussar
 a.M green.M.NOM.SG bus two.M green.M.NOM.PL buses
 b. eitt grønt hús / tvey grøn_ hús
 a.N green.N.NOM.SG house two.N green.N.NOM.PL houses
- c. Ein bussur er grønur
 One.M bus is green.M.NOM.SG
 d. Tveir bussar eru grøñir
 Two.M buses are green.M.NOM.PL
- e. Eitt hús er grønt
 One.N house is green.N.NOM.SG
 f. Tvey hús eru grøn_
 Two.N houses are green.N.NOM.PL
- (7) Ic. a. grønn strætisvagn / tveir grøñir strætisvagnar
 (a) green.M.NOM.SG bus two.M green.M.NOM.PL buses
 b. grønt hús / tvö græn_ hús
 (a) green.N.NOM.SG house two.N green.N.NOM.PL houses
- c. Einn strætisvagn er grønn
 One.M bus is green.M.NOM.SG
 d. Tveir strætisvagnar eru grøñir
 Two.M buses are green.M.NOM.PL
- e. Eitt hús er grønt
 One.N house is green.N.NOM.SG
 f. Tvö hús eru græn_
 Two.N houses are green.N.NOM.PL

Agreement is thus found in predicative adjective constructions in all the Romance and all the Scandinavian languages, irrespective of whether these have a rich inflectional system (like Icelandic, Faroese, or French) or a relatively poor one (like Danish, Norwegian, and Swedish).

3. West Germanic

Is German unique in not having agreement in predicative adjective constructions? No.

Two situations have to be kept apart: Languages which trivially lack predicative adjective inflection, because they do not have any adjectival inflection at all, and languages which only lack adjectival inflection in predicative adjective constructions, but have adjectival inflection in attributive constructions.

Two Germanic languages lack adjectival inflection completely, English and Afrikaans:

- (8) En. a. a green_ bus / two green_ buses
b. a green_ house / two green_ houses

c. One bus is green_
d. Two buses are green_

e. One house is green_
f. Two houses are green_

(9) Af. a. 'n groen_ bus / twee groen_ busse
a green bus two green buses
b. 'n groen_ huis / twee groen_ huise
a green house two green houses

c. Een bus is groen_
One bus is green
d. Twee busse is groen_
Two buses are green

e. Een huis is groen_
One house is green
f. Twee huise is groen_
Two houses are green

The other West Germanic languages all lack adjectival inflection **ONLY** in predicative adjective constructions, and **NOT** in attributive adjective constructions. We have already seen the German data in (3) above, and the following examples show that the situation is completely parallel in Dutch, West Flemish, Frisian, Swabian, three types of Swiss German (from Sankt Gallen, Zürich, Bern), and finally Yiddish:

- (10) Du. a. een groene bus / twee groene bussen
a green.M/F bus two green.PL buses
b. een groen_ huis / twee groene huizen
a green.N.SG house two green.PL houses

c. Een bus is groen_
One bus is green
d. Twee bussen zijn groen_
Two buses are green

e. Een huis is groen_
One house is green
f. Twee huizen zijn groen_
Two houses are green

- (11) WF. a. nen groene bus / twee groene bussen
a.M/F green.M/F bus two green.PL buses
 b. een groen_ us / twee groene uzen
a.N green.N.SG house two green.PL houses
 c. T' is eenen bus groen_
There is one bus green
 d. T zyn twee bussen groen_
There are two buses green
 e. T' is een us groen_
There is one house green
 f. T zyn twee uzen groen_
There are two houses green
- (12) Fs. a. in griene bus / twa griene bussen
a green.M/F bus two green.PL buses
 b. in grien_ hûs / twa griene huzen
a green.N.SG house two green.PL houses
 c. Ien bus is grien_
One bus is green
 d. Twa bussen binne grien_
Two buses are green
 e. Ien hûs is grien_
One house is green
 f. Twa huzen binne grien_
Two houses are green
- (13) St. a. an grinr Bus / zwoi grine Bus
a.M.NOM green.M.SG.NOM bus two green.PL.NOM buses
 b. a grins Haus / zwoi grine Heisr
a.N.NOM green.N.SG.NOM house two green.PL.NOM houses
 c. Oin Bus isch grin_
One.M.NOM bus is green
 d. Zwoi Bus sen grin_
Two buses are green
 e. Oi Haus isch grin_
One.N.NOM house is green
 f. Zwoi Heisr sen grin_
Two houses are green
- (14) SG. a. än grüene Bus / zwei grüeni Büs
a.M.NOM green.M.SG.NOM bus two green.PL.NOM buses
 b. äs grües Huus / zwei grüeni Hüser
a.N.NOM green.N.SG.NOM house two green.PL.NOM houses
 c. Ain Bus isch grüe_
One.M.NOM bus is green
 d. Zwei Büs sind grüe_
Two buses are green
 e. Ais Huus isch grüe_
One.N.NOM house is green
 f. Zwei Hüser sind grüe_
Two houses are green

- (15) Zü. a. en grünee Bus / zwäi grünei Büs
a.M.NOM green.M.SG.NOM bus two green.PL.NOM buses
b. es grünes Huus / zwäi grünei Hüscher
a.N.NOM green.N.SG.NOM house two green.PL.NOM houses
c. Äin Bus isch grüne_
One.M.NOM bus is green
d. Zwäi Büs sind grüne_
Two buses are green
e. Äis Huus isch grüne_
One.N.NOM house is green
f. Zwäi Hüscher sind grüne_
Two houses are green
- (16) Be. a. ei grünee Böss / zwe grünei Bösse
a.M.NOM green.M.SG.NOM bus two.M.NOM green.PL.NOM buses
b. eis grünes Huus / zwöi grünei Hüser
a.N.NOM green.N.SG.NOM house two.N.NOM green.PL.NOM houses
c. Ei Böss isch grüne_
One.M.NOM bus is green
d. Zwe Bösse si grüne_
Two.M.NOM buses are green
e. Eis Huus isch grüne_
One.N.NOM house is green
f. Zwöi Hüser si grüne_
Two.N.NOM houses are green
- (17) Yi. a. a griner oytobus / tsvey grinee oytobusn
a green.M.SG.NOM bus two green.PL buses
b. a grin_ hoyz / tsvey grinee hayzer
a green.N.SG house two green.PL houses
c. Eyn oytobus iz grin_
One bus is green
d. Tsvey oytobusn zaynen grin_
Two buses are green
e. Eyn hoyz iz grin_
One house is green
f. Tsvey hayzer zaynen grin_
Two houses are green

At least for Afrikaans and Yiddish, the possibilities given in (9) and (17) above do not give the complete picture. In the plural, Afrikaans and Yiddish predicative adjectives might seem to also be possible with agreement:

- (18) a. Af. Twee busse is groenes
b. Yi. Tsvey oytobusn zaynen grine
Two buses are green.PL

However, I shall follow the analysis suggested for Yiddish by e.g. Weinreich (1971:308), Katz (1987:87), and Lockwood (1995:112) in taking the agreeing form in (18) to be a nominalisation. Lockwood (1995:112): "Exceptionally frequently, [Yiddish] adjectives (including participles) in predicative position are nominalisations". In other words, (18) would correspond to English "two buses are green ones" (see Olsen 1988:345 and Delsing 1993:86 on nominalised attributive adjectives). This analysis is based on the fact that the possibilities for inflected predicative adjectives in the singular are:

- (19) Af. a. *Een bus is groene
b. Een bus is a groene
One bus is (a) green.SG
- (20) Yi. a. *Eyn oytobus iz griner
b. Eyn oytobus iz a griner
One bus is (a) green.M.SG.NOM

which makes it clear that the Afrikaans and the Yiddish for "one bus is green" must use an uninflected adjective, cf. (9c) and (17c), and that the only way to have an inflected adjective in a predicative construction is to use the expression corresponding to "one bus is a green one", namely (19b) and (20b).

The "exceptionally high frequency" of nominalisations in Yiddish cited above might be connected with the existence of a parallel structure, the so-called long-form adjectives in the Slavic languages (see Matushansky 2008:44-48 and references there for arguments in favour of analysing these as attributive adjectives followed by a zero noun). According to Weinrich (1958:383), cited in Eggers (1998:314), there is a difference in interpretation between nominalisations (with an inflected adjective) and a normal uninflected predicative adjective, and a similar difference is found between short and long forms of predicative adjectives in Russian: *ikh bin a kranker*, 'I am an ill (one)' means that the speaker is chronically ill, whereas *ikh bin krank*, 'I am ill' means that the speaker is only temporarily ill. This does not carry over to all other constructions, though, it is not the case that the colour of the bus is less temporary in (20b) than in (17c). Also in the Russian counterparts of these two examples, there would be no such difference.

A further remark on Afrikaans is also in order, concerning attributive adjectives in Afrikaans.

Like predicative adjectives, attributive adjectives show no agreement in Afrikaans. Some polysyllabic attributive adjectives (Lass 1990:88-95, Donaldson 1993:163, Ponelis 1993:366), and also a few monosyllabic ones, e.g. *vred* 'cruel', or *vreemd* 'foreign' or 'strange', have an affix (-e), which is diachronically derived from an agreement ending (Lass 1990:88-90, Ponelis 1993:364), but shows no distinctions of number, gender, or case:

- (21) Af. a. 'n reusagtig_e bus / twee reusagtig_e busse
 a huge.ATT bus two huge.ATT buses
 b. 'n reusagtig_e huis / twee reusagtig_e huise
 a huge.ATT house two huge.ATT houses
- c. Een bus is reusagtig_
 One bus is huge
 d. Twee busse is reusagtig_
 Two buses are huge
- e. Een huis is reusagtig_
 One house is huge
 f. Twee huise is reusagtig_
 Two houses are huge

Furthermore, in some cases this ending is only possible in a figurative, (22a), and not in a literal reading, (22d) (Theresa Biberauer, p.c.):

- (22) Af. a. 'n swaare slag c. *'n swaare sak
 b. *'n swaar_ slag d. 'n swaar_ sak
 a heavy blow a heavy bag

The analysis to be suggested below will only be able to account for this in so far as it will account for why earlier stages of Afrikaans (like modern Dutch, modern German, ...) had agreement on attributive adjectives and not on predicative ones. In other words, whereas it will not explain why some attributive adjectives in Afrikaans have kept a residue of agreement morphology (i.e. they might as well all have lost the endings completely, as in English), the analysis does predict that if such a residue should be found anywhere in the Afrikaans adjective system, it would be in the attributive forms, not in the predicative ones.

Summing up, the overall picture is as follows: Of all the Romance and Germanic languages, only the West Germanic ones lack predicative adjective agreement. English and Afrikaans lack both attributive and predicative adjective agreement, the other West Germanic languages lack only predicative adjective agreement.

- (23)
- | | | | |
|----|---|---|----------------------------------------------------|
| | | | Attributive adjective agreement |
| | | | Predicative adjective agreement |
| | ↓ | ↓ | |
| a. | + | + | Romance, Scandinavian |
| b. | + | - | Dutch, German, Frisian, Yiddish (& their dialects) |
| c. | - | + | ----- (no languages) |
| d. | - | - | Afrikaans, English |

4. Explaining the differences

The observations made in the preceding sections are not completely new. They have also been made, at least partially, in e.g. Haugen (1982:173), Abraham (1995:245), and Kester (1996:89, 92), although these works merely note the difference and do not try to relate them to other differences between the languages in question.

The goal of an account of the adjective agreement facts should be to explain why the West Germanic languages lack predicative adjective agreement, why the Scandinavian and the Romance languages have it, and why it is not the other way around. This is only possible if the adjective agreement facts are related to other properties of the languages in question.

In the following, I would like to suggest an analysis which relates the facts discussed to other properties of the languages in question. So far we have seen that the two groups could be described as

- | | | |
|------|----------------------------------------|-----------------------|
| (24) | 1. Predicative adjective agreement: | Romance, Scandinavian |
| | 2. No predicative adjective agreement: | West Germanic |

but unless this is related to other differences, it remains as descriptive as the treatments cited above. I shall suggest that the crucial property is whether verb phrases and adjective phrases are head-initial or head-final, making a slightly different division between the languages:

- | | | |
|------|-------------------------------------|--------------------------------------------|
| (25) | 1. Head-initial VPs and AdjPs (VO): | English, Romance, Scandinavian |
| | 2. Head-final VPs and AdjPs (OV): | All West Germanic languages except English |

It is not always possible simply to take the surface word order as an indication of head-finality (or the opposite). Cases where surface word order seem to conflict with the above classification include the assumption that Yiddish has a head-final VP. As in Vikner (2001b, 2003), I shall follow e.g. Hall (1979), Geilfuß (1991) and Haider & Rosengren (1998:78-81, 2003:253-255), against e.g. Santorini (1993), Diesing (1997), in assuming Yiddish to be an OV-language.

Now English belongs to group (25.1) where it before belonged to group (24.2). This regrouping of English has no empirical consequences, however, as it merely says that English **could** have predicative adjective agreement, not that it **has to** have it. To be more precise, given the predictions spelled out in (30) below, the prediction for a VO-language is that it either has agreement with both attributive and predicative adjectives (e.g. Danish) or with neither (English). The prediction for an OV-language is that it either has agreement only with attributive adjectives (e.g. German) or with neither (Afrikaans).

5. The subject originates inside the predicative AdjP

According to Delsing (1993:84), "normally, linguists assume, implicitly or explicitly, that predicative adjectival agreement is an instance of Spec-Head agreement where the XP subject is base generated as the specifier of AP and raised to SpecIP, to get Case". This analysis is also found in, among others, Couquaux (1981), Stowell (1981:262), Burzio (1986:154), Vikner & Sprouse (1988:19), and to some extent even in Bach (1967:467).

Chomsky (1995) also belongs in this group, as he gives the following analysis of predicative adjectives (1995:(184), 354, 356):

(26) En. John is [_{AdjP} t_1 [_{Adj} t_2 intelligent]]

The subject *John* is base-generated in the position marked t_2 , i.e. in the "inner specifier" of the AdjP whose head is the Adj° *intelligent*. It then moves to the position marked t_1 , i.e. (the "outer") AdjP-spec, where adjectival agreement is "checked". Finally it moves out of the AdjP into the subject position of the clause.

I shall follow this to the extent that I assume

- a) that the subject of a predicative adjective construction has to be linked (presumably by movement) to an empty category inside AdjP (which represents an empty argument slot in the argument structure of the adjective), and
- b) that this link includes AdjP-spec.

Whether the empty category inside AdjP is the specifier or the complement presumably depends on the adjective in question, cf. e.g. Cinque (1990).

This also means that the copula in a predicative adjective construction does not assign any thematic role to its subject. This assumption is supported by the fact that in the syntax of English, the copula *be* falls into the same group as auxiliary *be*, *have*, and *do* (they do not assign any thematic roles, they may occur to the left of sentential adverbs, and they do not require *do*-insertion in negated sentences) and not into the same group as all other main verbs, including main verb *have* and *do* (they assign thematic roles, they occur only to the right of sentential adverbs, and they require *do*-insertion in negated sentences).

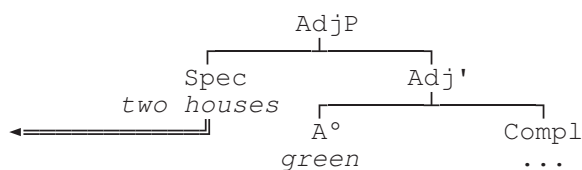
6. Predicative adjective agreement is spec-head agreement inside AdjP

Regardless of whether the subject DP is linked to the empty specifier of AdjP or to the empty complement of Adj°, I will assume the link to take the form of a chain that includes AdjP-spec. I will further follow Chomsky (1995:353-354) in assuming that the result of AdjP-spec being part of the chain is predicative adjective agreement (even though below I shall limit this to head-initial AdjPs, i.e. to AdjPs in the VO-languages). If AdjP-spec would not be part of such a chain, there would be no adjective agreement.

I thus assume that in languages with a head-initial AdjP, the subject DP of a predicative adjective construction is base-generated either in AdjP-spec, (27a) or inside the complement of Adj°, (27b,c), or. It does not matter for the purposes of this analysis whether a given DP is base-generated in one or the other of these two positions, as long as any DP that is moved out of the AdjP (by means of A-movement) has to move via AdjP-spec, i.e. as long as (27c) is ruled out.

This is trivially the case for DPs base-generated in AdjP-spec, and I will also assume that it holds for DPs base-generated inside the complement of Adj°. If the movement in question is taken to be A-movement, this would follow from e.g. Relativised Minimality (Rizzi 1990:93), which basically says that any particular type of movement may not skip any specifiers of the same type (this can be reformulated in terms of e.g. the Minimal Link Condition, Chomsky 1995:294). As both IP-spec and AdjP-spec are potential argument positions, i.e. A-positions, any movement to IP-spec which skips AdjP-spec violates Relativised Minimality, cf. the impossible (27c), in which an attempt is made to skip the specifier:

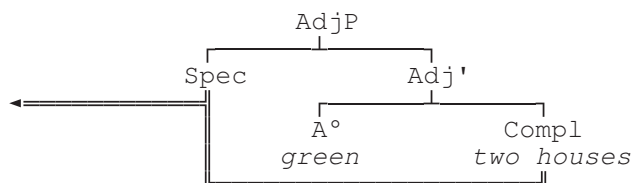
(27) a.



The result is adjective agreement

(AdjP-spec is part of the chain)

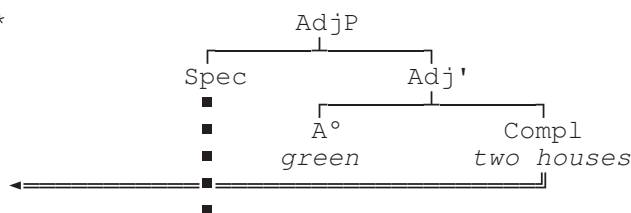
b.



The result is adjective agreement

(AdjP-spec is part of the chain)

c. *



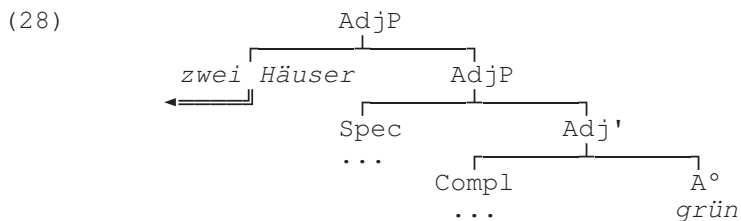
The result would have been no adjective agreement

(AdjP-spec is not part of the chain)

7. Spec-head agreement is a property of head-initial phrases

As in Vikner (2001b), I will adopt (parts of) the analysis of head-final VPs in Haider & Rosengren (1998:48-51, 2003:207-211). The basic idea there is that languages vary with respect to the licensing direction of verbs (and by extension adjectives), and that therefore VP-spec (and AdjP-spec) is exceptional in VO-languages (where it is on the "wrong" side of the verb, since the verb in VO-languages licenses to the right), whereas VP-spec/AdjP-spec is not exceptional in OV-languages (where it is on the "normal" side of the verb, since the verb in OV-languages licenses to the left).

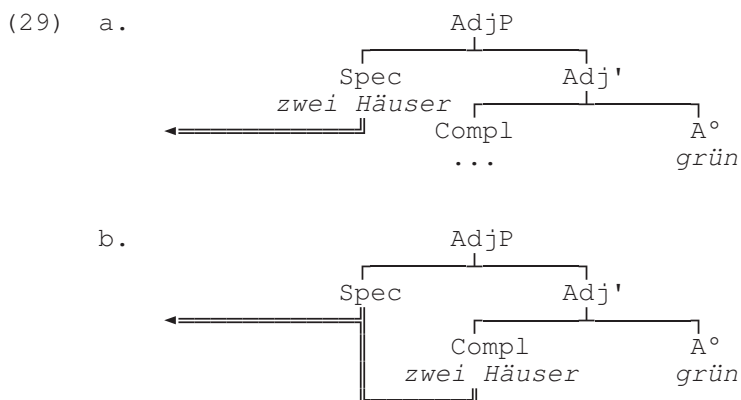
In earlier versions of this work (Vikner 2001a,b), I also followed Haider & Rosengren's idea (e.g. 2003:208) that in OV-languages arguments of the verb may be base-generated adjoined to VP. Applying this to AdjP meant that arguments could be moved out of AdjP (into the subject position of a clause with a predicative adjective) without moving through AdjP-spec, as AdjP-spec would not intervene in the chain (it would not c-command any part of it):



Although the result of this was that predicative adjective agreement could only be avoided in the OV-languages, it did not straightforwardly predict that it was downright impossible in these languages.

Consider now a somewhat different adaptation of the suggestions in Haider & Rosengren (1998:48-51, 2003:207-211). The idea is that spec- X° agreement is a last resort, only found in those projections where the specifier (which I take to be to the left of X' universally) cannot be licensed in the licensing direction of the head, i.e. only found in head-initial projections. This is less radical than it may sound, as I take functional projections to be head-initial universally, so that only lexical elements may vary (and only within narrow limits, see Vikner 2001b:143-146). In brief, there is no spec- X° agreement in VP and AdjP in German and the other OV-languages.

This means that the possibilities in the OV-languages are completely parallel to the VO ones in (27) above. Extraction has to go via AdjP-spec, regardless of whether the base-generated position is the specifier, (29a), or the complement, (29b), of AdjP. The difference between OV- and VO-languages is simply that in OV-languages, movement via AdjP-spec does not trigger overt morphological agreement.



8. Predictions

- A **phonetic / morphological** reason for lack of predicative adjective agreement:
the erosion of endings found throughout the Germanic and Romance languages.
- A **syntactic** reason for lack of predicative adjective agreement:
That head-final AdjPs do not have spec-X° agreement, cf. the preceding sections.

This particular syntactic reason does not apply to attributive adjectives. Presupposing that there are no other reasons why adjectives should lack agreement, the following predictions are made:

- (30)
1. Languages with head-final AdjPs do not have agreement on predicative adjectives.
 2. Languages with head-initial AdjPs do not have agreement only on attributive adjectives.
 3. No languages have agreement only on predicative adjectives.

The prediction (30.3) is borne out, at least for the Germanic and the Romance languages. The predictions (30.1), that languages with head-final AdjPs never have predicative adjective agreement, and (30.2), that languages with head-initial AdjPs never have adjective agreement only with attributive adjectives, are almost borne out, but not quite.

There is not much agreement in the literature as to what might count as reliable independent evidence of whether a given language has head-final or head-initial AdjPs, and therefore this prediction is difficult to test (cf. e.g. that Haider & Rosengren 1998:27 take the German AdjP to be head-final, whereas Corver 1997 takes the Dutch AdjP to be head-initial).

If the additional assumption is made, as in section 4 above, that head-finality in the AdjP co-varies with head-finality in the VP (at least in the Germanic and Romance languages), the two predictions become much easier to test: (30.1), that OV-languages never have predicative adjective agreement, and (30.2), that VO-languages never have adjective agreement only with attributive adjectives. As outlined in section 4 above, both turn out to be correct for all the Germanic languages, that is, for all the Germanic languages spoken today¹.

For one of these languages, namely **Yiddish**, the situation with respect to head-finality in the VP and in the AdjP is not uncontroversial. In so far as this analysis of predicative adjectives is on the right track, the fact that Yiddish has agreement only with attributive adjectives lends some support to the grouping of Yiddish with the Germanic OV-languages, as also suggested by e.g. Hall (1979), Geilfuß (1991) and Haider & Rosengren (1998:78-81,

¹As Jürg Fleischer (p.c.) has pointed out, this is actually not quite true: In the very southernmost varieties of Swiss German, e.g. in the German-speaking part of the canton Valais (German: *Wallis*), predicative adjective agreement occurs, although not obligatorily:

- (i)
- | | | | |
|--------|--------------|--------------|--------------------------------|
| Wa. a. | Är isch altä | He is old.M | |
| b. | Si isch alti | She is old.F | |
| c. | Es isch alts | It is old.N | (from Hotzenköcherle 1961:214) |

Fuchs (1993:77) finds predicative adjective agreement to have applied only in 40% of the possible cases. She also reports that only adjectives used in their literal sense may inflect:

- (ii)
- | | | | |
|--------|-------------------|---------------|----------------------|
| Wa. a. | Das isch schweer_ | It is heavy | |
| b. | Das isch schweers | It is heavy.N | (from Fuchs 1993:76) |

The German adjective *schwer* corresponds to both *heavy* and *difficult* in English. When something is heavy, either (iia) or (iib) can be used, whereas when something is difficult, only (iia) can be used.

For more information, see Fleischer (2007a,b) and references there.

2003:253-255), cf. the discussion of (25) at the end of section 4 above. Notice that under this analysis, we expect head-final AdjPs to be the only option in Yiddish, head-initial AdjPs are not possible at all, as otherwise Yiddish should have optional predicative adjective agreement.

8.1 Historical predictions

Testing the two predictions for earlier stages of the Germanic languages is made difficult both by the scarcity of evidence and by the fact that the evidence that does exist is not always unambiguous. It seems that the older languages fall into three groups:

Languages with no predicative adjective agreement, e.g. **Middle Dutch** (Burridge 1993:248) and **Old Frisian** (Markey 1981:169). As these languages are always taken to be OV-languages, this is as expected.

Languages where predicative adjectives do not show any agreement in the majority of the cases, e.g. **Old English** (Brunner 1965:236, Mitchell 1985:62), **Old High German** (Paul 1917:164, Penzl 1986:55), and **Middle High German** (Paul 1998:360, Penzl 1989:82). If this is taken as evidence that predicative adjectives do not agree, then this is as expected, as these languages are commonly taken to be OV-languages. If, however, this is taken to show that some varieties/dialects of the three languages did have predicative adjective agreement, then this is unexpected.

And finally, the third group of older Germanic languages is languages where predicative adjectives do show agreement, e.g. **Old Norse** (Nygaard 1905:68) and **Gothic** (Braune 1956:74). This is not unexpected for Old Norse, if e.g. Nygaard (1905:357-358) and Hróarsdóttir (1999:318-319) are right that Old Norse was a VO-language, like the modern Scandinavian languages (contra Faarlund 1990:110, who takes Old Norse to be non-configurational). It is, however, rather unexpected for Gothic, at least if Eythórsson (1995:22), Ferraresi (1997:7, 34) and references cited there are right that Gothic was an OV-language (This last remark also goes for **Latin**: Like Gothic, it has predicative adjective agreement but it is most commonly assumed to be an OV-language).

Summing up, the data that go against the predictions made are that Old and Middle High German show predicative adjective agreement in some cases, and that Gothic (and Latin) always shows predicative adjective agreement.

A(nother) potential weakness could be that the analysis has nothing to say about why there are languages where predicative adjectives in the superlative lack agreement, even though predicative adjectives in the base form show agreement. Predicative superlative adjectives lack agreement not only in the languages where all adjectives lack agreement (English, Afrikaans) and in the languages where all predicative adjectives lack agreement (Dutch, Frisian, German, ...), but also in some of the languages where all other predicative adjectives show agreement, namely Danish, Norwegian and Swedish. Only in Icelandic (and conservative Faroese) is there agreement:

- (31) Da. a. Den grønne bus er størst_
The.M/F.SG green bus is biggest
 b. De grønne busser er størst_
The.PL green buses are biggest
 c. Det grønne hus er størst_
The.N.SG green house is biggest
 d. De grønne huse er størst_
The.PL green houses are biggest
- (32) Ic. a. Græni strætisvagninn er stærstur_
Green.M.NOM.SG bus-the.M.NOM/AKK.SG is biggest.M.NOM.SG
 b. Grænu strætisvagnanir eru stærstir_
Green.PL buses-the.M.NOM.PL are biggest.M.NOM.PL
 c. Græna húsið er stærst_
Green.N.SG house-the.N.NOM/AKK.SG is biggest.N.NOM/AKK
 d. Grænu húsin eru stærst_
Green.PL houses-the.N.NOM/AKK.PL are biggest.N.NOM/AKK

Notice that Matushansky (2008), who proposes a comprehensive account of superlatives across many languages, also has to leave unexplained the lack of agreement on Danish, Norwegian and Swedish superlatives (Matushansky 2008:81-84).

8.2 Adjective agreement in causatives

The analysis also predicts that adjective agreement in causative constructions (e.g. *make someone nervous* or *paint something green*) should co-vary with predicative adjective agreement, which it does:

- (33) Da. a. Barnets opførsel gjorde faderen nervøs_
Child-the's behaviour made father-the nervous.M/F.SG
 b. Barnets opførsel gjorde forældrene nervøse_
Child-the's behaviour made parents-the nervous.PL
- (34) Ge. a. Das Benehmen des Kindes hat den Vater nervös_ gemacht
The behaviour of-the child has the father nervous made
 b. Das Benehmen des Kindes hat die Eltern nervös_ gemacht
The behaviour of-the child has the parents nervous made
- (35) Da. a. De malede væggen grøn_
They painted wall-the green.M/F.SG
 b. De malede væggene grønne_
They painted walls-the green.PL
- (36) Ge. a. Sie haben die Wand grün_ gestrichen
They have the wall green painted
 b. Sie haben die Wände grün_ gestrichen
They have the wall green painted

The reason is that also here the argument DP (*father*, *parents*, *wall*, or *walls*) has a trace inside AdjP. It is even possible that the DP is actually in AdjP-spec, but this is unlikely, as a quantifier like *very* would occur between the DP and the adjective.

9. Verbal (participial) agreement

The analysis also makes a further prediction, under the assumption that head-finality in the AdjP and head-finality in the VP cooccur. In the languages where VPs and AdjPs are head-final, we would not only expect there to be no agreement with Adj° when an argument is extracted under A-movement from AdjP (i.e. in predicative adjective constructions), we would also expect there to be no agreement with V° when an argument is extracted under A-movement from VP. The relevant question is whether a non-finite verb in V° shows agreement with an argument extracted to the subject position, e.g. in passive and unaccusative (ergative) constructions. The following examples show how this looks in VO-languages like French and Italian where agreement is possible:

- (37) Fr. a. Ce bureau_i a été [_{VP} t_i repeint_u t_i]
This desk has been repainted.M.SG
- b. Cette table_i a été [_{VP} t_i repeinte_u t_i]
This table has been repainted.F.SG
- (based on Kayne 1985:77, (31))

- (38) It. a. I bambini_i erano [_{VP} t_i fotografati t_i insieme]
The children were photographed.M.PL together
 b. Le donne_i erano [_{VP} t_i fotografate t_i insieme]
The women were photographed.F.PL together

The subjects are base-generated in the object position, i.e. following the main verb, then moved to VP-spec, and from there to the subject position in IP-spec. Agreement with the participles is triggered when the subjects move through VP-spec.

- (39)
- The diagram shows a syntax tree for the sentence "The children photographed the table". The root node is VP, which branches into Spec and V'. Spec branches to the left, indicated by an arrow. V' branches into V° and Compl. V° branches into the verb phrase "painted photographed". Compl branches into the object "table children".

The result is verbal/participial agreement

(VP-spec is part of the chain, and the language is VO, i.e. the specifier requires spec-X° agreement.)

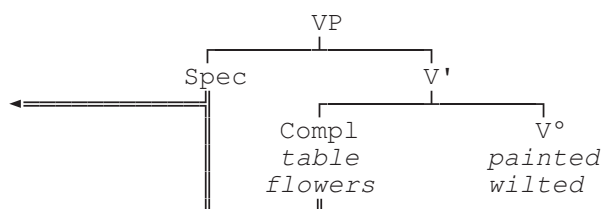
Under the present analysis, such agreement should never occur in the OV-languages, as here there would be no spec- X° agreement inside the (head-final) VPs, as it would not be necessary, as the specifier is on the "right" side of the head (verb/adjective), i.e. on the same side as the complement .

This prediction seems to be correct, at least for the Germanic OV-languages spoken today, which never show agreement with the participles in constructions like (37) and (38), even though the same participles might show agreement used in other constructions, e.g. used attributively.

- (40) Ge. a. Dieser Schreibtisch ist wieder gestrichen_ worden
This desk is again painted been
- b. Diese Schreibtische sind wieder gestrichen_ worden
These desks are again painted been
- c. Ein gestrichener Schreibtisch
One.M.NOM painted.M.SG.NOM desk
- d. Zwei gestrichene Schreibtische
Two painted.PL.NOM desks

- (41) Ge. a. Dieser Blumenstrauß ist verwelkt_
 This flower-bouquet is wilted
- b. Diese Blumen sind verwelkt_
 These flowers are wilted
- c. Ein verwelkter Blumenstrauß
 One.M.NOM wilted.M.SG.NOM flower-bouquet
- d. Vier verwelkte Blumen
 Four wilted.PL.NOM flowers

(42)



The result is
no verbal/participial agreement

(Although VP-spec is part of the chain,
the language is OV, i.e. the specifier
does not spec-X° agreement.

Notice that no predictions are made about subject-verb agreement, since this is agreement between the subject and not the lexical head, V°, but a functional one, I°/AgrS°/Tense°/Person°.

A potential problem here is that unexpectedly, Danish (and also Norwegian) participles in such constructions do not show agreement:

- (43) Da. a. Hver kamp blev overstået på godt en halv time
 Each match was overstood in about a half hour
 (They got through each match in about half an hour)
- b. Alle kampe blev overstået på et par dage
 All matches were overstood in a couple days
 (They got through all matches in a couple of days)

although past participles have to show agreement e.g. in attributive constructions:

- (44) Da. a. en overstået kamp
 an overstood.SG match
- b. to overståede kampe
 an overstood.PL match

This lack of agreement in passive constructions is apparently not at all new, cf.

- (45) MD. Breffue bleffue them røffuet oc tagne fra
 Letters were them stolen.SG and taken.PL from

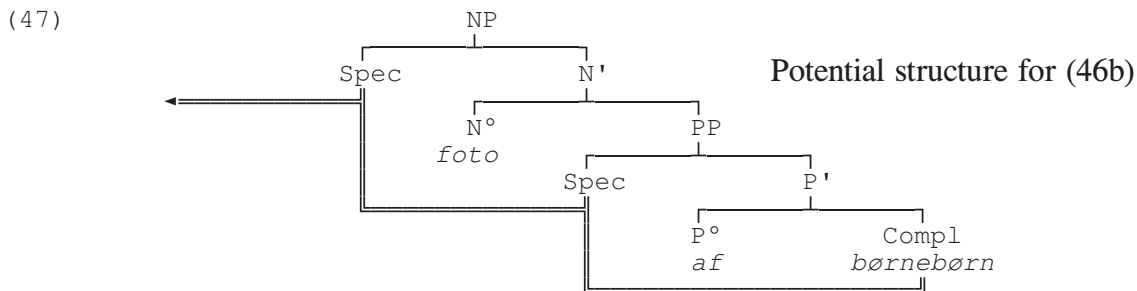
(1497, Falk & Torp 1900:168)

10. Nominal (predicate) agreement

Looking for similar extractions in the nominal domain, we run into the problem that the complement of an N° is never a DP but a PP. Therefore we can either extract the PP, (46a), (in which case it would be impossible to tell whether there is agreement), or we can extract the DP inside this PP, (46b):

- (46) a. It. Di quali nipoti hai una foto _ sulla tua scrivania?
Of which grandchildren have-you a photo on your desk ?
 (adapted from Giusti 1997:111, (44a))

- b. Da. Hvilke børnebørn har du et foto af _ på dit skrivebord?
Which grandchildren have you a photo of on your desk ?

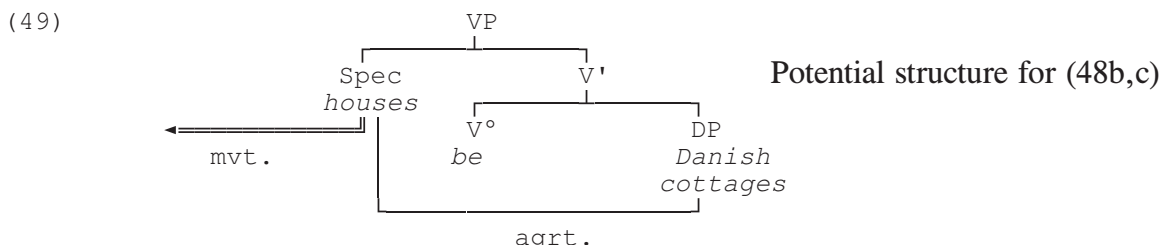


But even in the latter case, where the DP *hvilke børnebørn* 'which grandchildren' may have been extracted via the NP-spec of *foto*, it would be completely impossible for *foto* to show agreement with *hvilke børnebørn*, simply because *foto* has its own gender and number features, namely neuter and singular, and therefore it could not possibly also display agreement with the features common gender and plural of *hvilke børnebørn*.

There is one situation, however, where agreement is found in the nominal domain: Agreement with a predicate DP. This is very different from the agreement types described so far, in that it is agreement between phrases, not between a head and a phrase, and therefore it is not surprising that such predicative nominal agreement is very different from predicative adjective agreement and verbal participial agreement in that it is also found in the Germanic SOV-languages, (48a) (Examples repeated from (2) above):

- (48) a. Ge. Die Häuser sind dänische Ferienhäuser
 b. Da. Husene er danske sommerhuse
 c. Fr. Les maisons sont des maisons de campagne danoises
The houses are Danish holiday cottages

The structure here is presumably something like



11. Conclusion

In this talk, I have tried to argue that languages with head-final AdjPs and VPs do not show predicative adjective agreement (nor any other kind of agreement with Adj° or V° under A-extraction), because in these languages such extraction may not go via AdjP-spec or VP-spec. The following predictions are made:

- (50)
1. Languages with head-final AdjPs do not have agreement on predicative adjectives.
 2. Languages with head-initial AdjPs do not have agreement only on attributive adjectives.
 3. No languages have agreement only on predicative adjectives.

These predictions seem to hold for the modern languages (with the exception noted above of the southernmost varieties of Swiss German, none of the present-day OV-languages have predicative adjective agreement), even if the predictions made for the older languages are less impressive (here the main problem case would seem to be Gothic).

The talk started out by noting a paradox, namely how unexpected it is that a language with so much agreement morphology as German lacks predicative adjective agreement, when predicative adjective agreement is found in languages with so little agreement morphology as Danish or French. The analysis presented resolves this paradox by setting the lack of predicative adjective agreement in the OV-languages apart from other kinds of lack (or loss) of agreement, in attributing it to a particular structural cause, head-finality in AdjP.

This allows us to keep the general view that both German and Icelandic are languages which tend to express agreement with respect to many categories (person, number, gender, case, ...) , whenever they have the chance, whereas e.g. Danish, Dutch, and English are languages which tend to either not express agreement at all or only express agreement with respect to very few categories.

I also very briefly considered the possibility of similar kinds of agreement in the nominal domain, and reached the conclusion that it was not possible, and that in so far as agreement is found here, it is between two DPs, and thus very different from the adjectival and verbal agreement which is between a phrase (DP) and a head (Adj°/V°).

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