

Generalized x-to-C in Germanic*

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Abstract

The view that the clause and the noun phrase are parallel in interesting ways has a strong tradition. This paper goes a step further, making an aspect of this idea more concrete by identifying a shared morpheme, German *d-*. But more importantly, and here lies the focus of the paper, it extends the parallelism to include the adjectival domain. The morpheme *d-* is argued to spell out a certain left peripheral head indiscriminately of the nature of the lexical category head of its containing extended projection, i.e. across V, N, and A.

The study discusses primarily two grammatical alternations in Germanic. The first is that between a low and a left peripheral (V2) position of the finite verb. The second is that between definite (weak) and indefinite (strong) adjectival agreement. I argue that the two alternations are instantiations of the same underlying dichotomy, and therefore must receive analogous analyses. Notably, given that verb placement is derived by syntactic movement, sensitive to the presence of a complementizer, the adjectival inflection alternation is also analyzed as derived by syntactic movement, and is also shown to be sensitive to the presence of a “complementizer.”

The generalization that ensues from adjectival, verbal, nominal, comparative, and historical considerations, is that there is a left peripheral head, F, in Germanic which either attracts a low category, containing the lexical category-head of the extended projection (the verb, the adjective, or the noun), or is realized as *d-*. This proposal is strongly supported by the typological generalization within Germanic that embedded V2 in the presence of an overt complementizer is readily available exactly in those languages whose complementizer is not a *d*-word.

Keywords: Germanic - verb second - adjectival agreement - complementizer - definite article - extended projection - syntax/morphology

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1 Introduction

The V2/V-low alternation and the strong/weak adjectival agreement alternation are two distinctly Germanic properties, in that, historically they are Germanic innovations, and synchronically they are a component of the grammatical profile of all Germanic languages (setting aside English) (Harbert, 2007).¹ Given this state of affairs, a unified account of the two properties may a priori appear desirable. On the other hand, one of the properties concerns verbs and their position, whereas the other concerns adjectives and their form, from a traditional perspective two entirely separate domains of grammatical description. Hence it is not surprising that, while each of the two properties figures rather prominently in the literature on Germanic morphology / syntax, the two discussions have been led entirely disjointly, as far as I am aware.

It is the primary goal of this paper to argue that the V2/V-low alternation and the strong/weak adjectival agreement alternation are manifestations of the same underlying dichotomy, and to propose a unified account of the basic pattern. The unification I propose rests on identifying a syntactic head that is a possible head in the left periphery of an extended projection, indiscriminately of the categorial affiliation (V, A, N) of the extended projection. This head is associated with certain properties including features that are syntactically active and morphologically interpreted. The abstract proposal is stated in (1).²

- (1) F hosts *d*- OR attracts *x*

(1) essentially says that a certain head F (perhaps characterizeable in terms of a certain F-value (Grimshaw, 1991, 2005)), agrees with a lower head (related to the lexical category V, A, or N) and either attracts it, or else, is realized as *d*-.³

(1), I claim, underlies the V-low/V2-alternation in the extended verb phrase (section 2), the definite/non-definite adjectival agreement alternation in the extended adjective phrase (section 3), and the parametric contrast between a free initial definite article (West Germanic) and the so-called suffixed article (Scandinavian) in the extended noun phrase (section 4.5). If correct, this will support a view of adjectival inflection as involving phrasal movement of the adjective to the left of the strong agreement morpheme. The alternation is abstractly represented in (2).⁴



¹English is set aside for the entirety of this paper.

²I will set aside, in this paper, the important questions regarding the semantics of this head.

³This is reminiscent of Koopman's (1997) notion of *Projection activation*: A projection is interpretable iff it has lexical material at some stage in the derivation. (Koopman and Szabolcsi, 2000, p.3) and Vangsnes's (1999) notion of *Identification*: A functional category F in an extended projection P is identified iff a constituent of P that contains at least one feature relevant for F is merged in either the head or the specifier position of F. (Vangsnes, 2002, p.211)

⁴While the literature agrees on the idea that V2 involves leftward movement of the verb, the traditional contention that this is an instance of head movement has been rivaled in recent years by proposals of (remnant) phrasal movement of the verb (Hallmann, 2000; Nilsen, 2002; Müller, 2004; Wiklund et al., 2007). This is closely related to the more general rethinking of verb movement in terms of phrasal movement as in Massam (2000); Mahajan (2003). The present proposal is a priori compatible with either view, and is suggestively supportive of an XP-fronting approach, given the evidence from adjectival agreement discussed in section 3.3.

It will become clear that F is a slightly more fine-tuned correspondence of the traditional C and D (and their counterpart in the extended projection of the adjective). Morphological contrasts (such as that between complementizers with and without *d-*, e.g. German *d-ass* versus Danish *att*) are interpreted as syntactic. Concretely, *d-* and *-ass* of German *dass* ‘that’ correspond to different left-peripheral heads. This is strongly supported by the typological complementarity of the presence of *d-* in the complementizer and the co-occurrence of an overt complementizer with embedded V2, as discussed in section 4.2.

2 V2

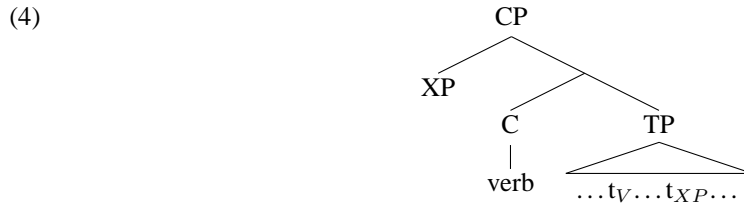
The finite verb in Germanic is subject to a positional alternation that consists of the contrast between occupying the second position in the clause (3b) and occupying a lower position (3a).⁵ The former placement is referred to as V2 (verb second).

- (3) a. *dass* Niko heute abend ein neues Globi-Buch **liest**. German
 that Niko today evening a new Globi-book reads
 b. Heute abend **liest** Niko ein neues Globi-Buch.
 today evening reads Niko a new Globi-book

The choice of position of the finite verb is not syntactically vacuous, but correlates with other factors. Notably, (3a) is an embedded clause, while (3b) is a matrix clause, a contrast which in turn correlates with the presence in (3a) and absence in (3b) of a subordinator/complementizer *dass*.

2.1 Verb placement and complementizer

There is a large literature on V2 (Koster, 1975; Den Besten, 1977; Haider and Prinzhorn, 1985; Travis, 1991; Zwart, 1993, 2001; Holmberg and Platzack, 1995, among many others). One aspect of the analysis that the literature agrees on is the idea that the position of the verb in (3b) is derived by means of leftward movement.⁶ I take (4) to be a fair representation of the standard analysis of V2: the finite verb is in the highest head position of the clause, C, with one XP to its left, in Spec,CP.



Adopting the basic idea of the standard view, I assume that the empirical observation to be taken seriously is that there is an alternation between merger of a complementizer *dass*, on the one hand, and leftward movement of the verb, on the other.⁷

As will be discussed, in Scandinavian languages, contrary to German, embedded V2 co-occurs with an overt complementizer, which has been analyzed in terms of CP-recursion by some authors (DeHaan

⁵This is a pervasive and robust pattern. See Zwart (2008) for an insightful short history of the analysis of V2 in Dutch (in Dutch). I will address embedded V2 later in the paper.

⁶Strictly speaking this includes even Chomsky’s (2001) proposal to delegate head movement to the post-syntactic PF-component. However, there is a literature that discusses arguments that V-to-C movement is related to illocutionary force, and hence must be visible at LF see Truckenbrodt (2006, and the literature cited there).

⁷Many aspects of the derivation of such a structure have been debated (cf. the papers in Haider and Prinzhorn (1985), for a diachronic discussion see Haerberli (2002); Fuss (2008); Speyer (2010)). These controversies are not in the focus of the present paper.

and Weerman, 1985; Iatridou and Kroch, 1992; Holmberg and Platzack, 1995; Vikner, 1995). The proposal in 4.2-4.4 is, in a sense, a refinement of the CP-recursion approach.

2.2 Verb placement and verbal agreement

Apart from the presence versus absence of a complementizer *dass*, there is, in some varieties of Germanic, yet another alternation that correlates with verb placement, namely an alternation in verbal inflection. This is not visible in Standard German, where the form of verbal inflection on the finite verb remains unaffected by the position of the finite verb. However, consider example (5) from Lower Bavarian (Bayer, 1984; Fuss, 2004; Gruber, 2008).

- (5) a. ... das-**ma** mir noch Minga fahr-n/*-**ma**. Lower Bavarian
 that-AGRC we to Munich go-1.PL/-AGRC
 b. Mir fahr *-n/-**ma** noch Minga.
 we go -1.PL/-AGRC to Munich

In final position the finite verb follows one conjugation (5a). In V2 position, the verb has a different inflectional suffix (5b). The latter is identical to that of the agreeing complementizer (5a).

I adopt a view partly similar to that put forward in Shlonsky (1994) (on West-Flemish complementizer agreement), that the agreement suffix is the spell-out of an agreement head in the C-domain of the clause. The contrast in (5) can be characterized as involving attraction of V by C (5b), and (postsyntactic) leftward affixation of AgrC. Merger of the complementizer bleeds verb movement to the C-domain (5a).⁸

- (6) a. das -ma ... [... fahr -n]
 b. [_V fahr] -ma ... t_V ...

This contrast is a concrete instantiation of (2), represented in bracket notation in (7).

- (7) a. Embedded: [_{xVP} d- ... AgrC ... verb ...]
 b. Root: [_{xVP} verb ... AgrC ... t_{verb} ...]

With this in mind, let us turn to adjectival inflection, where we will find an analogous alternation.

3 Adjectival inflection

In German, prenominal adjectives are inflected.⁹ The form of the inflection is sensitive to the gender and number features associated with the modifyee nominal, as it is in e.g. Romance. In addition, the inflection is sensitive to Case, distinguishing nominative and accusative.¹⁰ An intriguing feature of Germanic adjectival inflection is that it is also sensitive to definiteness (see Bierwisch (1967); Milner and Milner (1972); Zwicky (1986); Kester (1996); Schlenker (1999); Müller (2002); Hughes (2003); Gallmann (2004); Sternefeld (2004); Roehrs (2006, 2009a); Leu (2008) among others for discussion of German adjectival inflection). It is in essence this trait, exemplified in (8), that I will focus on.

⁸Notice that the verbal inflection of Standard German suggests that the *-n* moves along with V, assuming that in the presence of the outer inflectional suffix, as in (5b), this lower/inner suffix remains silent.

⁹Adnominal adjectives in German are typically prenominal. Postnominal adjectives have a special status and are non-inflected. There are a few lexical exceptions of adjectives that do not inflect anywhere, e.g. *lila* 'purple', the status of which vis-a-vis the present discussion remains to be clarified in future work. Thanks to Michael Wagner and Bernhard Schwarz for raising issues in that regard.

¹⁰On standard assumptions there are also dative and genitive forms. This assumption complicates the analysis of adjectival inflection significantly, a complication that is not warranted. See Leu (2008, chapter 7), where it is argued that dative and genitive morphology have a different source. See also section 3.1.

- (8) a. d-er sehr gut-e Wein German
 the-INFL very good-WK wine
 b. sehr gut-er Wein
 very good-AGRA wine

In (8a) the adjective *gut* precedes the adjective ending *-e*, which is pronounced as schwa. In (8b) on the other hand, the adjective precedes a different ending, *-er*. These are instances of the so-called weak (WK) and strong (AGRA) agreement, respectively.

The weak/strong (or definite/indefinite) adjectival inflection distinction is “one of the characteristic innovations of early Germanic” (Harbert, 2007, p.130). On the way from Proto-Indo-European to Proto-Germanic, adjectives began to inflect differently depending on definiteness (cf. also McFadden (2004)). The distinction is, to this day, reflected in the grammar of all of Germanic (other than English).

There is an important confounding factor in the picture of the weak/strong adjectival agreement alternation in German, concerning the distribution of dative and genitive morphology. I maintain that dative and genitive morphology have a different source. Their presence interacts with the overt realization of inflectional morphology in a way that obscures the pattern that underlies the weak/strong adjectival agreement alternation. Therefore dative and genitive environments should and will be abstracted away from in the present discussion. However, in section 3.1, I present a short rationale for doing so. The discussion draws on Leu (2008, ch. 7) where the arguments are laid out in more detail. Subsequently, I will briefly present what I take to be the relevant standard characteristics of the current view(s) on the alternation 3.2, before proceeding to my proposal 3.3.

3.1 Dative and genitive morphology: a confounding factor

In the dative and in the genitive, the weak / strong (i.e. definite / non-definite) adjectival agreement alternation is obscured. In fact, the distribution of the dative and genitive suffixes (*s*, *m*, *r*) superficially resembles that of the strong agreement. E.g. in (9a) and (9b), the dative suffix *-m* linearly occupies the same position as the strong agreement morpheme in nominative contexts. This fact has led to its being categorized as the dative form of the strong agreement (in masculine and neuter singular environments, and similarly for the feminine dative and genitive *-r*). And such is the view that is generally held in the literature.

- (9) a. mit de-m gut-en Wein German
 with the-DAT good-INFL wine
 b. mit gut-em Wein
 with good-DAT wine

But this contention comes with a high cost. First of all, it drastically complicates the distribution of “strong agreement.” Consider (10). In (10b), the dative marker suffixes onto the indefinite article, unlike the (nominative) strong agreement, whose position remains untouched by the presence of the indefinite article (10a).

- (10) a. ein gut-er Wein German
 a good-STR wine
 b. mit ein-em gut-en Wein
 with a-DAT good-INFL wine

Secondly, the genitive marker *-s* (11a) behaves like the dative marker in contexts analogous to (9a) and (10b), but it never suffixes to an adjective (cf. the modified bare noun phrase (11b)), unlike dative *-m* (9b).

- (11) a. wegen de-s / ein-es Mannes German
because.of the-GEN / a-GEN man.GEN
b. wegen gut-en / *-es Wetters
because.of good-INFL / GEN weather.GEN

Third, the dative marker *-m* is the only suffix that can violate *Parallel Inflection* (Müller, 2002; Gallmann, 2004; Roehrs, 2009b), the (possibly universal, cf. Milner and Milner (1972, p.42)) constraint that in an un-interrupted sequence of attributive adjectives, all adjectives inflect the same way (if they can).¹¹

- (12) a. mit gut-em frisch-en /-em Wein German
with good-DAT.M fresh-INFL /-DAT.M wine
b. mit gut-er frisch-*en /-er Milch
with good-DAT.F fresh-INFL /-DAT.F milk

While the individual judgments vary, it is the general sense in the literature that either variant in (12a) is significantly better than the non-parallel variant in (12b).

Fourth, the distinct behavior of (masculine and neuter) dative *-m* and feminine dative *-r* is brought out in the form of the indefinite article in Swiss German. In nominative and (non-prepositional) accusative contexts the overt representation of the indefinite article is rather simple (13a), presumably only consisting of an inflectional marker. In dative environments, by contrast, it is (overtly) at least tri-morphemic (13b,c).

- (13) a. ä tisch Swiss German
a table
b. mit əm ən ä tisch
with DAT.M STEM INFL table
'with a table'
c. mit ən ər ä rosä
with STEM DAT.F INFL rose
'with a rose'

But not only is the "indefinite article" considerably more complex in dative environments, the relative order of the components is not identical in masculine (13b) and in feminine contexts (13c). The masculine (and neuter) dative marker *-m* precedes the STEM. The feminine dative marker *-r* follows the STEM.¹²

Fifth, it is precisely in the featural environments that exhibit this confusing behavior (i.e. in masculine/neuter dative and genitive contexts) that a case suffix is also sometimes possible on the head noun.

- (14) wegen des Wein-s German
because.of the.GEN wine-GEN

Finally, strong adjectival inflection is restricted to occurring in the presence of an adjective. This is illustrated in (15a,b), with the Swiss German *d/di*-alternation, where the strong adjectival agreement morpheme in nominative/accusative feminine or plural environments is *-i*, while the agreement morpheme on the non-adjectival definite article in these contexts is null (15c).

¹¹The *if they can*-proviso sets aside instances of modifiers that refuse to inflect in the first place.

¹²This contrast may be related to the contrast between masculine/neuter and feminine with regard to PD contraction Van Riemsdijk (1998), where under certain prepositions the definite marker *d-* is dropped and the preposition and the dative suffix contract. This is significantly more common in masculine/neuter contexts than in feminine contexts.

- c. Ø gut-**er** Wein
good-STR wine

The proposals differ with regard to the way in which this is achieved. On one view, determiners possess selectional features, subcategorizing for declension class in their scope (Zwicky, 1986; Sternefeld, 2004). On another view, adjectives have a feature [-Determiner] whose value changes to [+Determiner] if no inflected determiner precedes them (Bierwisch, 1967). On a third view, a number of grammatical constraints interact such that, roughly speaking, the strong feature bundle (i.e. the feature bundle giving rise to strong agreement) is realized only once within a noun phrase (with at most one adjective) and as far to the left as possible. This may be understood in terms of OT constraints (Hughes, 2003), or as an effect of a (greedy) top-down morphological spell-out mechanism (Schlenker, 1999), or a bottom-up impoverishment mechanism (Roehrs, 2009a).

3.3 Present approach

As mentioned above, there seems to be general agreement on the idea that the *-er* ending on the definite marker in (17a) and the *-er* ending on the adjective in (17b,c) are the same **morphological** element.

In distinction to (most) previous approaches, I take the stronger position, proposed by Milner and Milner (1972), that the three instances of *-er* in (17) are in fact the same **syntactic** element, and that the difference in relative order of *-er* and the adjective in the examples is the result of syntactic movement.

The syntactic identity of the inflectional suffix on the pre-adjectival definite marker and the inflectional suffix on the adjective in the absence of a pre-adjectival definite marker is particularly clear in Swiss German in feminine and in plural contexts, (18), repeated from above, where we observe what I called the *d/di-alternation* (Weber, 1964; Leu, 2007).

- | | | | |
|------|----|---------------------------|--------------|
| (18) | a. | d- i rot-ä rosä | Swiss German |
| | | the-AGRA red-WK roses | |
| | b. | rot- i rosä | |
| | | red-AGRA roses | |
| | c. | d rosä | |
| | | the roses | |

The examples show that the inflectional suffix on the pre-adjectival article (18a) is not only formally identical to the strong adjectival agreement suffix (18b), but in addition it is dependent on the presence of the adjective (18c).

I adopt the idea that the extended projection of the adjective features an Agr head (Corver, 1997) and propose that the relative linear order of adjective and AgrA in (17b,c) and (18b) is derived by movement. Unlike Milner and Milner, who propose an affix-hopping account with *-er* hopping rightward in certain contexts, I propose that it is the adjective that moves leftward in certain contexts (Leu, 2007, 2009). Observing that the moved element comprises both the adjective and the degree modifier, if present, (and similarly PP complements and in the case of adjectivally used participles all of the participle's dependents and modifiers) I conclude that this is an instance of phrasal movement, i.e. in (19) *sehr gut-* moves to the left of *-er*.

- (19) [_{aP} sehr gut-(e)] -er t_{aP} Wein
very good AGRA wine

The question arises of why aP moves in (17b,c)/(18b) but not in (17a)/(18a). A partial answer that suggests itself is that this is correlated with the absence versus presence of the pre-adjectival definite marker. The picture that emerges is the following (adopted from Leu (2009)).

- (20) a. Def: $[_{xAP} d- \dots AgrA \dots aP \dots]$
 b. Non-def: $[_{xAP} aP \dots AgrA \dots t_{aP} \dots]$

An important aspect of (20) is the idea that the pre-adjectival definite marker is a head in the extended projection of the adjective. Related proposals have been made for Greek (Alexiadou and Wilder, 1998) and Colloquial Slovenian (Marušič and Žaucer, 2006). For German the claim is strongly supported by the fact that it is necessary for an immediate unification of the weak / strong adjectival agreement alternation and the alternation in verb placement between the V-low and V2 position in the clause, as discussed in the next section.

4 Generalized x-to-C

4.1 Unifying xVP and xAP

In the preceding sections, we have discussed the following minimal pairs (21)-(22).

- (21) V-final / V2 alternation:
- a. ... das-**ma** mir noch Minga fahr-n/*-**ma**. Lower Bavarian
 that-AGRC we to Munich go-1.PL/-AGRC
- b. Mir fahr-**ma**/*-n noch Minga.
 we go-AGRC/-1.PL to Munich
- (22) Weak / strong adjectival agreement alternation:
- a. **d-er** sehr gut-e/*-**er** Wein German
 the-AGRA very good-WK/-AGRA wine
- b. sehr gut-**er**/*-e Wein
 very good-AGRA/WK wine

The two pairs in (21) and (22) can both be described as an alternation between two clusters of properties. The (a) examples have a *d*-element in the left periphery preceding an agreement morpheme AGR, and the lexical head of the extended projection remains right-peripheral, with a different agreement suffix (AGR'). The (b) examples do not have a *d*-element in the left periphery, instead the lexical head of the extended projection occurs in the left periphery and to the immediate left of the agreement element AGR (and AGR' is lacking).

So, (21) and (22), and more generally the grammatical alternations they represent ((20) and (7)), are parallel. But beyond noting this superficial morphosyntactic alignment, I would like to suggest that the parallelism is not accidental, but principled. I.e., the two pairs must receive an analogous analysis.

Abstracting over the lexical material (and categories) of examples (21) and (22), I propose that there is a single grammatical dichotomy (23) underlying these two surface alternation.¹⁵

- (23) a. $[_{xXP} d- \dots AGR \dots xP \dots]$
 b. $[_{xXP} x(P) \dots AGR \dots t_{x(P)} \dots]$

¹⁵An interesting asymmetry (pointed out to me also by Dorian Roehrs) between the verbal and the adjectival inflection patterns is that in the rise of the weak / strong adjectival agreement alternation in Proto Germanic, it was the weak (i.e. definite and syntactically lower) agreement form that constituted the innovation (Heinrichs, 1954) and Jost Gippert p.c., whereas in the development of new agreement formatives in Bavarian verb agreement, as discussed in Fuss (2008, p.309) “[f]inite verbs fronted to second position (and complementizers) systematically carry the new ending [...], while verbs in clause-final position still exhibit the older ending.” If the present proposal is on the right track, then the fact that these cases of agreement formative innovation proceed in opposite directions suggests that the relevant grammaticalization processes are not inherently unidirectional, i.e. that they could in theory go either way.

In words, there is a grammatical alternation between merger of a *d-* element in the left periphery of the generalized extended projection, xXP, and attraction of a low head, *x*, into the left periphery of its extended projection, which corresponds to my proposal in 3.3. The proposal unifies remarkable aspects of the syntax of xVP and xAP.

Notice that the analysis is unified only on the assumption that the pre-adjectival article is indeed a head in the extended adjectival projection xAP, rather than in the extended nominal projection xNP. I will come back to xNP in section 4.5.

4.2 Embedded V2

The unification of the verb placement alternation and the adjectival agreement alternation as instances of (23) is not quite perfect yet, considering the fact that the pre-adjectival article, i.e. the left peripheral morpheme in the xAP variant of (23a) is simply a *d-*, whereas the complementizer in German is *dass*.¹⁶ If the relevant left peripheral head F is really identical in xVP and in xAP (i.e. if the alternation between x(P) movement and the presence of a left peripheral *d-* is indeed non-accidental), we would expect the complementizer to be *d-* only. This is a tension which needs resolving. The resolution of this tension, in fact, closely relates to an interesting challenge for the V-to-C view of V2, namely the co-occurrence of embedded V2 with an overt complementizer, which I will call eCV2. The availability of eCV2 has an interesting cross-Germanic distribution.

Vikner (1995, ch.4) presents the relevant contrast between German, on the one hand, and Danish (Norwegian, Swedish, Faroese), on the other. While both languages allow embedded V2 under so-called bridge verbs, they crucially differ in whether or not they have a co-occurring complementizer.¹⁷ (Examples adapted from Vikner p.66ff.)

- (24) a. Wir wissen (*dass) dieses Buch hat Bo nicht gelesen
 Vi ved *(at) denne bog har Bo ikke lest
 we know that this book has Bo not read
- b. Wir wissen dass Bo dieses Buch nicht gelesen hat
 Vi ved at Bo ikke har lest denne bog

Similarly, Holmberg and Platzack (1995, p.79) note that West Germanic “avoids all complementizer-introduced subordinate clauses with root phenomena.”¹⁸ Bentzen (2007, p.154) writes that, in contrast to Scandinavian, “in German, Dutch, Frisian, and Afrikaans, embedded V2 and overt complementizers tend to be in complementary distribution.” In Scandinavian “the complementizer is obligatory in [embedded] non-subject-initial V2 clauses and preferred in subject-initial V2 clauses” (Bentzen, 2007, p.154). (The per se availability of embedded V2 is a separate issue, which I will not address in this paper.)

Hence the ready availability of eCV2 is one property with respect to which Germanic languages can be grouped. Another property according to which the languages can be grouped concerns the morphological shape of the complementizer, concretely whether or not that complementizer begins with a *d-*

¹⁶Michael Wagner points out that the neuter definite article in German *das* also features a vowel that is, on the present view, unaccounted for. Indeed, this vowel presumably corresponds to another syntactic element, either another agreement head, or a resumptive element related to the modifyee noun.

¹⁷The correlation with *bridge verbs* is an approximation. Also the class of verbs that (can) embed V2 clauses is subject to some crosslinguistic variation. For recent discussion see Bentzen (2007) and the literature cited there.

¹⁸Holmberg and Platzack (1995) mention the possible exception of Frisian, which appears to have sequences of complementizer-V2. However, DeHaan (2001) argues, for West Frisian, that these are not instances of subordination, but rather of a sort of parataxis. For interesting discussion with a similar conclusion for German see Freywald (2008, 2009). For further relevant discussion on embedded V2 see also DeHaan and Weerman (1985); Santorini (1988, 1992); Iatridou and Kroch (1992); Biberauer (2002); Wiklund et al. (2007); Julien (2009).

(e.g. German *dass*) or not (e.g. Danish *at*). This second property has not received much attention in the literature on verb placement. But it seems to me that it is of great interest. It is remarkable that the two properties cluster together, i.e. the grouping based on the availability of eCV2 is identical to the grouping based on the shape of the complementizer. This is illustrated in table 1.

Table 1: eCV2 and complementizer shape across Germanic

language	eCV2	complementizer
Afrikaans	no	d-at
Dutch	no	d-at
Frisian	no	d-at
German	no	d-ass
Yiddish	yes	-az
Danish	yes	-at
Faroese	yes	-at
Icelandic	yes	-að
Norwegian	yes	-at
Swedish	yes	-att

The clustering of these two properties suggests that (at least one aspect of) the complementarity of V-to-C and complementizer in C, in West Germanic, is due to the *d-* part of *dat/dass*. This suggests that the complementizer *dass* ‘that’ is syntactically complex consisting of a head *d-* and a head *-ass*. This is, of course, expected if indeed the V-low/V2 alternation and the weak/strong adjectival agreement alternation should receive a unified account, as stated in (23).

4.3 Yiddish: typological shift

The correlation between the availability of eCV2 and the non-*d* nature of the complementizer receives diachronic support from Yiddish. Yiddish is, historically, a West-Germanic language, but with regard to the two properties in table 1 it patterns with the North-Germanic languages. This is exemplified in (25).

- (25) ... az morgn vet dos yingl oyfn veg zen a kats Yiddish
that tomorrow will the boy on.the way see a cat
(example taken from Vikner (1995, p.68))

In earlier stages of the language, Yiddish patterned with West-Germanic. For most of the second millennium A.D. there existed two varieties of Yiddish: West Yiddish and East Yiddish. East Yiddish (the predecessor of contemporary Yiddish) saw the disappearance of the complementizer *dz* (sometimes also spelled *daz*), and its replacement by the *d*-less form *az* between the early 17th century and the late 18th century (Kühnert and Wagner, 2004). Also in East Yiddish the availability of eCV2 emerged, starting in the 17th century (Santorini, 1988). West Yiddish, on the other hand, never developed *az* as its complementizer (Kühnert and Wagner, 2004), and it never developed eCV2 (Santorini, 1988). This supports an analysis that bonds the two properties.

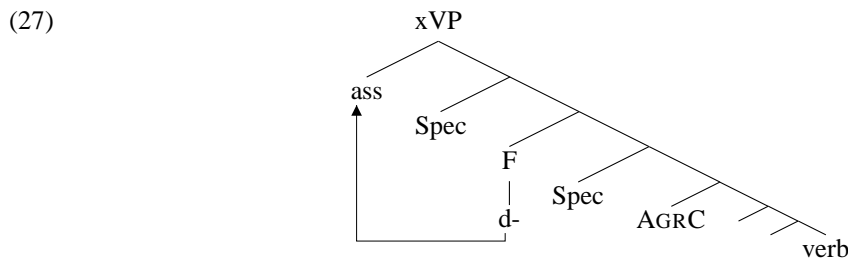
4.4 Movement and linear order

If *d-ass* is indeed syntactically complex, consisting of two heads the question arises of which head is merged first. Considering the widely observed tendency that the linear order of morphemes in a word

mirrors the hierarchical order of the corresponding heads in the syntax (Baker, 1985; Brody, 2000), I propose that *-ass* is a higher head than *d-* and (following a suggestion by Marcel Den Dikken) that *d-* moves to *-ass* in the syntax. Now recall that *d-* is the West-Germanic spell out of the head which attracts the verb in the Scandinavian counterpart examples with eCV2.

- (26) Vi ved at denne bog har Bo ikke lest Danish
 we know that this book has Bo not read

In these examples the verb indeed follows the complementizer *-at*, supporting the idea that the correct representation of German *d-ass* is analogous to (27).¹⁹



4.5 /d-/ in xNP

The postulate that the extended projection of the adjective features a functional head “identical” to C and with the morphological shape of a definite article, raises the expectation that the same head is also present in the extended projection of the noun. Especially in the light of the tradition that analogizes CP and DP (Szabolcsi, 1994), it is no surprise that the German xNP has a left-peripheral head *d-*, usually analyzed as D. But if the relevant properties of that head are indeed category neutral, we expect to find the alternation represented in (23) and rephrased in (28)=(1) also in the extended projection of the noun, xNP.

- (28) F hosts *d-* OR attracts *x*

This expectation is borne out. In fact, I claim that (28) captures the well-known parametric contrast in the noun phrase between languages with a DP-initial definite article and languages with a so-called suffixed definite article of the Scandinavian sort.

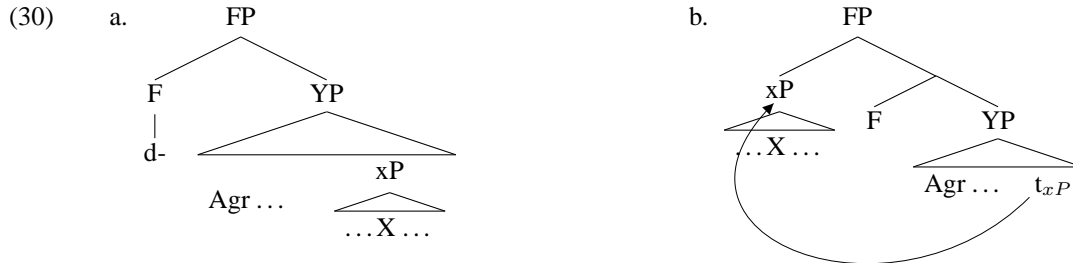
Consider (29). In German, plain definite noun phrases consist of a left peripheral *d-*, followed by inflectional morphology and the right peripheral noun (29a). The Mainland Scandinavian counterpart (29b) lacks *d-* and the noun precedes the piece of inflectional morphology.²⁰

- (29) a. **d-as** Haus German
 the-AGR_N house
 b. hus-**et** Danish
 house-AGR_N

¹⁹This also argues for the idea that suffixation of the agreement morpheme and head movement apply at separate levels.

²⁰I purposely glossed the examples in a non-standard way. The nominal suffix in (29b) is usually glossed DEF (Delsing, 1993; Vangsnes, 1999; Holmberg and Platzack, 2005; Julien, 2005). However, considering the two facts (A) that its form is sensitive to the grammatical gender of the noun (cf. *bil-en* “the car”), and (B) that it contrasts with a variant of the phrase *ett hus* ‘a house’ in which the noun is preceded by an element sensitive to the grammatical gender of the noun (cf. *en bil* “a car”) and which is non-definite, it seems possible that definiteness is identified, to use a term from Vangsnes (1999), by means of syntactic movement as opposed to the presence of an overt DEF-head as in German.

(29) looks exactly as expected on the basis of (23),(28): Either a head *d-* is merged in the left periphery, and the realization of an Agr head to its right suffixes onto it (29a), or else a low projection, containing the lexical category, head of the extended projection, moves to the left of the Agr head (29b). This is in tune with the standard analysis of (29b), which assumes movement of N to D (Delsing, 1993; Vangsnes, 1999) or nP (containing N) to Spec,DP (Julien, 2005).²¹ In other words, the proposal, illustrated in tree form in (30), indeed applies indiscriminately of the lexico-categorial identity of the containing extended projection.



The expectations raised by the category-neutral (28) are, hence, empirically met.²²

5 Conclusion

I have addressed three well-known alternations/contrasts in Germanic morphology / syntax: (i) the positional alternation of the finite verb between a low and a left peripheral position (V2), (ii) the morphological alternation between definite and non-definite adjectival agreement, and (iii) the contrast between a free DP-initial definite article and a so-called suffixed definite article.

I have discussed a way of looking at these alternations that emphasizes the similarities between them, and proposed that they are reflexes of the properties of one and the same syntactic head. The proposal has consequences for our understanding of all three empirical domains mentioned, in that it restricts us to analyses for each of them that are compatible with the other two. In other words, I have outlined a way in which evidence from e.g. V2 bears on the analysis of adjectival agreement and vice versa.

A central aspect of the discussion consisted in isolating the subword morpheme *d-*, as found in the ordinary definite article, in the pre-adjectival article, and in the finite complementizer, and analyzing it as the realization of a syntactic head. In the concrete analysis I put forth, there is a left peripheral head F which, indiscriminately of lexical category (V, A, N), either attracts the lexical category associated with its extended projection, or else is spelled out as *d-*. This is a very simple alternation. Yet, it is what underlies a number of major contrasts within and across Germanic languages and across lexical categories, as I hope to have shown.

²¹On the standard analysis, Scandinavian overtly realizes D when noun movement is blocked by the presence of an adjective (Delsing, 1993; Julien, 2005).

i. det store hus
the big house

Danish

On the present proposal, *det* in (i) is part of xAP cf. (23b), forming a constituent with the adjectives, cf. Leu (2009). This implies that the definite xAP *det store* is a possible goal for F in the xNP.

²²Relevant, perhaps, is the standard idea that the three instances of *d-* are historically related, in that the definite article in D as well as the finite complementizer in C derive from the definite demonstrative (Roberts and Roussou, 2003; Van Gelderen, 2007; Harbert, 2007), whose *d-* lexicalizes the xAP left periphery (Leu, 2007). But see Kayne (2008) for the proposal that (synchronically) complement clauses are really relatives, and the complementizer *that* is really a relative pronoun, which in turn, Kayne argues, is a demonstrative. Kayne's proposal bears interesting challenges for aspects of the present approach.

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