LONGMAN
LONDON AND NEW YORK

The New Comparative Syntax

Edited by
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Table of Contents

vii

Chapter 8

V°-to-I° movement and inflection for person in all tenses*

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1 Introduction: V°-to-I° movement

In section 2.2.1 of Liliane Haegeman's introduction to this volume, the suggestion was discussed that syntactic properties like word order depend on morphological properties. One instance of parametric variation discussed there (section 3.1.1) was the variation across languages concerning the position of the finite verb and its correlation with variation concerning the inflectional morphology of finite verbs.

SVO-languages fall into two groups, when one considers the relative order of the finite verb and, for example, an adverbial that occurs between the subject and the complement of the verb: either the finite verb must follow the adverbial, as in English,[1] Danish, (modern spoken) Faroese[2] and also Norwegian and Swedish (see (1)), or the finite verb must precede the adverbial, as in Icelandic, Yiddish, and French (see (2)).

(1) a. En. That John often   eats   tomatoes (surprises most people)
     b. Da. At   Johan ofte   spiser tomater   (overrasker de fleste)
     c. Fa. At   Jón   ofta   etur   tomatir   (kemur óvart á tey flestu)
     d. Ic. *Að Jón   oft   borðar tómata   (kemur flestum á óvart)
     e. Yi. *Az Jonas oft   est   pomidorn (is a xidesh far alemen)
     f. Fr. *Que Jean souvent mange   des tomates (surprend tout le monde)

(2) a. En. *That John eats   often   tomatoes (surprises most people)
     b. Da. *At Johan spiser ofte   tomater   (overrasker de fleste)
     c. Fa. *At Jón   etur   ofta   tomatir   (kemur óvart á tey flestu)
     d. Ic. Að   Jón   borðar oft   tómata   (kemur flestum á óvart)
     e. Yi. Az   Jonas est   oft   pomidorn (is a xidesh far alemen)
     f. Fr. Que Jean mange   souvent des tomates (surprend tout le monde)

For more examples of this difference,[3] see Rohrbacher (1994: 30–67), Vikner (1995: 132–51), and many others.

Following Emonds (1978) and Pollock (1989), this difference has been frequently discussed in the literature, see for example Holmberg and Platzack (1988, 1990), Platzack and Holmberg (1989), Chomsky (1991), Roberts (1993), Rohrbacher (1994), various contributions to Hornstein and Lightfoot (1994), and Vikner (1995), which all analyse it as a question of whether the verb has undergone movement.[4] In (1), the finite verb occurs in its base position, that is immediately preceding an object or a non-finite verb, whereas in (2) it has undergone V°-to-I°

movement, that is, movement to the position where the inflectional endings are taken to be base-generated. This movement is illustrated in (3), where the medial adverbial is taken to be adjoined to VP.

(3)
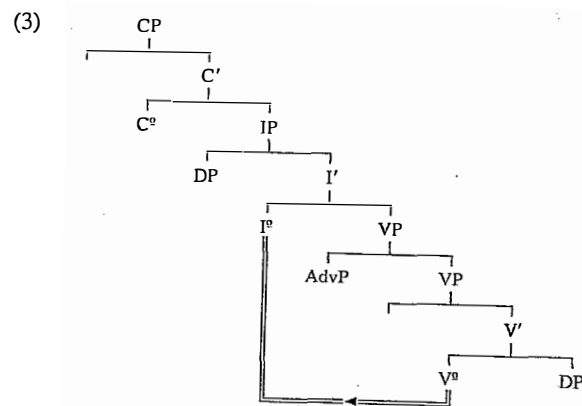
In this chapter, I shall leave aside the exact nature of the landing site (including the question of whether I° should be split up into two elements, Agr° and Tns°, see for example Pollock (1989: 383) and Haegeman (this volume, section 4.1), and concentrate on what exactly triggers this movement of the finite verb. I shall follow the general suggestion first made by Roberts (1985: 46) and Kosmeijer (1986) that the presence or absence of V°-to-I° movement is linked to the strength of inflection,[5] but I will argue below (against most other treatments, including Vikner 1995: 136) that all tenses, not only the present tense, are relevant, as the crucial sign of a strong inflection is that person inflection occurs in every tense.

In section 2, I discuss various suggestions already made in the literature of how to formulate a link between the strength of verbal inflectional morphology and the obligatory movement of the finite verb to I°, showing that the most convincing suggestion is the one made by Rohrbacher (1994). Where section 2 goes through different positions actually suggested in the literature, the various suggestions in section 3 are only various possibilities on the way to my final alternative formulation of the link between inflection and V°-to-I° movement. Section 4 discusses some diachronic consequences of the two analyses and section 5 contains the conclusion.

2   Agreement inflection

In the rest of this chapter, it will be assumed that there is a link between the 'strength' of verbal inflectional morphology and the obligatory movement of the finite verb to I° (i.e. to a position left of a medial adverb), as first suggested by Roberts (1985) and Kosmeijer (1986).

Before discussing exactly how to define 'strong' inflection, here are first the relevant verbal paradigms of the relevant languages:[6]

(4)   *hear*, infinitive, imperatives, participles, and simple present indicative:

	English	Danish	Faroese	Icelandic
Infinitive	hear	høre	hoyra	heyra
Imperative				
Singular	hear	hør	hoyr	heyr
Plural	hear	hør	hoyr(ið)	heyrið
Participles				
Present	hearing	hørende	hoyrandi	heyrandi
Past	heard	hørt	hoyrt	heyrt
Present				
1st sing.	I hear	jeg hører	eg hoyri	ég heyri
2nd sing.	you hear	du hører	tú hoyrir	pú heyrir
3rd sing.	he hears	han hører	hann hoyrir	hann heyrir
1st plur.	we hear	vi hører	vit hoyra	við heyrum
2nd plur.	you hear	I hører	tit hoyra	pið heyrið
3rd plur.	they hear	de hører	tey hoyra	peir heyra
Different forms	2	1	3	5

	Dutch	Frisian	German	Yiddish	French
Inf.	horen	hearre(n)	hören	hern	écouter 'listen'
Imp.					
Sg.	hoor	hear	hör	her	écoute
Pl.	horen	hear	hört	hert	écoutez
Part.					
Prs.	horend	hearrend	hörend	herndik	écoutant
Pst.	gehoord	heard	gehört	gehert	écouté
Pres.					
1sg.	ik hoor	ik hear	ich höre	ikh her	j' écoute
2sg.	je hoort	dû hearst	du hörst	du herst	tu écoutes
3sg.	hij hoort	hy heart	er hört	er hert	il écoute
1pl.	we horen	wy hearre	wir hören	mir hern	nous écoutons
2pl.	ju. horen	ji. hearre	ihr hört	ir hert	vous écoutez
3pl.	ze horen	hja hearre	sie hören	zey hern	ils écoutent
Forms	3	4	4	4	3 (1/3s=2s=3p)

Dutch, Frisian and German are only included for the sake of morphological comparison, as it is very difficult or even impossible to determine whether these three SOV-languages have V°-to-I° movement or not (see, for example, Haider 1993: 58–66; Koopman 1995; Schwartz and Vikner 1995: 46–50; and Vikner 1995:

152–7). Admittedly, if one of the various versions of the so-called Universal Base Hypothesis (see section 3.1.2.3 of the introduction to this volume, and also Haider 1993; Kayne 1994; Zwart, this volume; and references cited there) are on the right track, Dutch, Frisian and German could not have V°-to-I° movement, which would be unexpected under any of the analyses to be discussed below.

2.1   *V°-to-I° movement if there is any inflection*

If there is a connection between strength of inflection and V°-to-I° movement, the simplest version of such a hypothesis must be one that says that there should be V°-to-I° movement if there is any verbal inflection at all (i.e. if the finite verb shows any agreement with the subject as to person or number), and that only in the complete absence of such inflection would it be possible for the finite verb to occur in its base position (to the right of the medial adverbial). Such a very simple version of the hypothesis is clearly inadequate, as it would predict that only those languages which have no person/number inflection at all (i.e. Danish and also Norwegian, and Swedish) have no V°-to-I° movement. However, as we saw in (1) and (2) above, more languages lack V°-to-I° movement than these three, namely also (at least) English and Faroese.[7]

2.2   *V°-to-I° movement if I° is strong*

The next logical possibility is to say that mere presence of inflection is not enough to trigger V°-to-I° movement, but that inflection has to be 'strong'. In other words, the crucial difference is no longer between any inflection and no inflection but between a relatively rich inflectional system and a relatively poor one. This is the view defended in the papers that were the first to suggest a link between inflection and V°-to-I° movement: for English, Roberts (1985), for Scandinavian, Kosmeijer (1986), Holmberg and Platzack (1988; 1990), and Platzack (1988).

Saying that a 'strong' inflectional system (i.e. the presence of a substantial number of distinctions on the finite verb with respect to person and number) are needed to cause V°-to-I° movement to take place is not very interesting if we do not try to answer the question of exactly how high the number of distinctions has to be in order to count as substantial. This brings us to a very serious problem for this version of the hypothesis, namely that both Faroese and French have three different forms, but whereas French has V°-to-I° movement, (modern spoken) Faroese does not.[8]

2.3   *V°-to-I° movement if there are distinctions in person*

An alternative to the idea of 'substantial number of distinctions' is given by Platzack (1988: 233) and Platzack and Holmberg (1989: 70), who suggest that V°-to-I° movement is triggered by the existence of distinctions between different persons. This is done in order to account for the following difference. In the Swedish dialect Älvdalsmålet (spoken in Dalecarlia, western central Sweden) there are both

number and person distinctions, whereas in the Norwegian dialect Hallingmålet (central southern Norway) the verb is only inflected for number not for person. The following paradigms are based on Levander (1909: 62–3, 80, 84–8) (Älvdalsmålet) and on Venås (1977: 156, 164, 167, 177, 188) (Hallingmålet):

(5)   *hear*, infinitive, imperatives, participles, and simple present indicative:

	Älvdalsmålet (Sweden)		Hallingmålet (Norway)	
Infinitive	höra		høyræ	
Imperative Singular	höre		høyr	
Imperative Plural	hörir		høyr	
Present Participle	hörend		høyran	
Past Participle	hört		høyrt	
Present 1st sing.	ig	hörer	e	høyre
2nd sing.	du	hörer	du	høyre
3rd sing.	an	hörer	hann	høyre
1st plur.	uir	hörum	me	høyræ
2nd plur.	ir	hörir	de	høyræ
3rd plur.	dier	höra	dæi	høyræ
Different forms	4		2	

Only Älvdalsmålet[9] has V°-to-I° movement (negation taking over the role of the medial adverb as an indication of whether V°-to-I° movement has taken place):

$$I° \quad Neg$$

(6)   Äd. Ba fo dye at ig uild int fy   om
Just because that I would not follow him
(= Just because I wouldn't follow him)
(from Levander 1909: 123, see also Platzack and Holmberg 1989: 70)

$$Neg \quad V°$$

(7)   Hd. Kall me ko   ru vill, bærræ ru ikkji kalla me æin dretukjæse
Call me what you will, if-only you not call me a   turd-rennet
(= Call me what you want, as long as you don't call me a piece of s..t)
(from Venås 1977: 243, see also Trosterud 1989: 91 and Platzack and Holmberg 1989: 70)

However, like the previous version of the hypothesis, this one also predicts that Faroese and French should both have V°-to-I° movement, which is not correct for Faroese. Taking into account that French does and (modern spoken) Faroese does not have V°-to-I° movement, Platzack and Holmberg's suggestion would have to be amended to say that what counts is whether person distinctions are present in the plural (and that the singular is irrelevant), as is indeed suggested in Roberts (1993: 267, (58)).

2.4   V°-to-I° movement if overt distinct number morphology

The obvious question then is why plural rather than singular (if person distinctions in singular rather than in plural were relevant, we would expect Faroese but not French to have V°-to-I° movement, exactly contrary to fact). In order to avoid this problem, Roberts (1993: 272, (65)) suggests that V°-to-I° movement is triggered by the existence of 'overt distinct number morphology'. In Älvdalsmålet, there are distinct endings which are marked plural, *-um*, *-ir*, and also one which is marked singular, *-er*, which is sufficient to trigger V°-to-I° movement. In Hallingmålet, on the other hand, there is a distinct ending marked singular, *-e*, but no distinct plural ending, as Roberts takes the plural form to have no ending at all (cf. that it is identical to the infinitive).

Applying this version of the hypothesis to the languages discussed above, we obtain the correct predictions that Icelandic, Yiddish, and French (like Älvdalsmålet) all have V°-to-I° movement and that English, Danish, Faroese, and also Norwegian and Swedish (like Hallingmålet), on the other hand, do not have V°-to-I° movement.

Roberts (1993: 335, n11) presupposes that distinct endings are present in the underlying forms in the singular in French (an assumption which goes back at least to Schane 1968: 69). Otherwise French would be like Hallingmålet and Faroese, except that here it would be singular rather than plural which was marked by absence of endings, rather than by distinct endings.

In Danish, Norwegian, and Swedish, distinct endings are present. For instance, the Danish present tense form, *hører*, is distinct from both the infinitive, *høre*, and the imperative, *hør*. But although there are distinct endings in the present tense in these three languages, they can be analysed as endings of tense, and not of person/number, as they are the same in all persons in both singular and plural. Historically (see also section 4.3 below), Middle Danish had a system like Hallingmålet, a distinct ending in the singular, *-ær*, but the plural was identical to the infinitive, *-æ*. When the singular ending generalized to the plural (a process starting in the west of Denmark before 1400, probably completed in the spoken language around 1600 (Skautrup 1947: 355), though the plural forms only disappeared completely in print around 1900), it also lost its number significance, and became a marker of tense.

English and Faroese, on the other hand, are very much like Hallingmålet, in that they have distinct endings which are marked singular, English *-s* (3sg), Faroese *-i* (1sg) and *-ir* (2sg, 3sg), but apparently no distinct plural endings. Roberts (1993) assumes that the plural forms in both languages have no ending at all since they are identical, for example, to the infinitive.

This is actually not true for Faroese, as shown in Rohrbacher (1994: 100-2). Consideration of Faroese verbs from other conjugational classes indicates that the plural form cannot generally be assumed to be identical to the stem. Whereas it is true for the verb given by Roberts (1993: 267), *kasta* 'throw', that the same form is used in present tense plural, in infinitive, and in imperative singular, it does not hold for verbs from other classes, for example, the one given in (4) above, *hoyra* 'hear'. Here it is clear that the present tense plural *hoyra* consists of more than the stem, given that the imperative singular is only *hoyr*.[10] The same argumentation applies to

Hallingmålet, also here the imperative singular, *høyr*, shows that the present tense plural form *høyræ* consists of more than the stem. This would mean that also from the point of view of Roberts' (1993: 267) criterion, Faroese and Hallingmålet would be parallel to French: all three have overt distinct number morphology, even though only the latter has V°-to-I° movement.

2.5   V°-to-I° movement iff 1st and 2nd person are distinctively marked

Rohrbacher (1994: 108, 118, 128) therefore suggests a different formulation of the link between verbal inflection and V°-to-I° movement:[11]

(8)   *The paradigm-verb raising correlate*
A language has V°-to-I° movement if and only if in at least one number of one tense of the regular verbs, the person features [1st] and [2nd] are both distinctively marked.

(Rohrbacher 1994: 108)

Rohrbacher goes on to define 'distinctively' as meaning that 1st and 2nd person forms have to differ from each other, from the 3rd person form, and from the infinitive form.

Whereas this holds for the plural of the French present tense, it does not hold for the plural of the Faroese present tense, where 1st, 2nd, and 3rd person are identical to each other and to the infinitive, and more importantly it does not hold for the singular of the Faroese present tense either, where 2nd and 3rd person are identical to each other. In Icelandic and in Älvdalsmålet, the condition is fulfilled by the plural of the present tense, whereas in Yiddish it is the 1st and 2nd person singular of the present tense that are distinctively marked.

All predictions made by Rohrbacher's version of the hypothesis are factually correct, as far as I am aware (though see section 4.2 below), which is also why it is adopted in Vikner (1995: 136). Nevertheless, at least three different objections may be raised: (a) Why only 1st and 2nd but not 3rd person?; (b) The definition of distinctiveness is not particularly intuitive; and (c) the amount of elements that the child has to keep track of during acquisition is rather large. Each of these points will be discussed below.

The first objection is that it is not intuitively clear why the 1st and the 2nd but not the 3rd person have to satisfy the distinctiveness requirement. As Rohrbacher (1994: 106) points out, the reason is that otherwise we would obtain the wrong predictions for Icelandic and Älvdalsmålet, where the relevant part of the paradigm is the plural of the present tense, and where 3rd person plural does not differ from the infinitive. However, Rohrbacher (1994: 106–8) also presents cross-linguistic support (from Czech, Hungarian, Turkish, Yuma and Hebrew) in favour of 1st and 2nd persons having to be marked, as opposed to the 3rd person which is often left unmarked, and he concludes (1994: 107) that as opposed to 1st and 2nd persons, 3rd person should be viewed 'as the absence of person', an idea which goes back at least to Benveniste (1966: 228).

The second and in my view more problematic objection is that whereas it may be intuitively clear why the 'distinctive' (1st and 2nd person) forms have to differ

from each other (and from the 3rd person), it is less clear why they also have to differ only from the infinitive, but not from any other forms in the rest of the paradigm.

As Rohrbacher (1994: 105–6) explains, the 1st and 2nd person forms have to differ from the infinitive in order to make a distinction possible between Early Modern English (which has no V°-to-I° movement, see section 4.2 below) and Yiddish (which has V°-to-I° movement), given that the present tense singular forms are virtually parallel in these two languages, the 1st person singular having no ending at all. The difference is that the Yiddish infinitive has an ending whereas the Early Modern English one does not and so, if the infinitive is included in the definition of distinctiveness, the 1st person singular is distinctive only in Yiddish. This inclusion of the infinitive in turn leads to the exclusion of the 3rd person discussed above (to get the right predictions for Icelandic and Älvdalsmålet).

As for why the 'distinctive' forms do not have to differ from forms occurring elsewhere in the paradigm, again we need to consider Yiddish 1st person singular present tense. This form, *ikh her*, 'I hear', is identical to the imperative singular *her!*, 'hear!'. Hence, this would not be distinctive if difference from all other forms in the paradigm was required, and Yiddish would fail to meet the requirement for V°-to-I° movement, an unwanted result. However, I would guess that imperatives are at least as frequent in what children hear as infinitives are (if not more), and so including infinitives but excluding, for example, imperatives in the definition of 'distinctive forms' seems conceptually rather arbitrary.[12]

In fact, there is a way of applying the alternative definition of 'distinctive forms' which is too literal, as then not even Icelandic and French should have V°-to-I° movement. In Älvdalsmålet, Icelandic and French, the 2nd person plural forms of the present tense are identical to the imperative plural: Älvdalsmålet *hörir*, Icelandic *heyrið*, and French *écoutez*. In this case, one would be forced to assume that cases of identity between an imperative form and the corresponding 2nd (as opposed to 1st) person form be seen as replacement or paradigm-internal borrowing: Älvdalsmålet, Icelandic and French (and Yiddish too) simply do not have a real imperative plural form, but uses the 2nd person plural of the present tense (see Zanuttini 1994: 119, which distinguishes between suppletive imperatives and true imperatives). This means that of all the languages discussed so far, only Faroese have a real imperative plural (presumably derived diachronically from an old 2nd person plural of the present tense (see the Icelandic form)), and this form is only optional, the singular form can also be used in the plural (Heðin Meitil, p.c.; Barnes 1994: 204).

Finally, the third kind of objection that could be raised is that it is not particularly appealing to require the child to keep track of such a large amount of elements and verb forms during acquisition, given that the child presumably also has to form and test a number of different hypotheses as to how much of the forms are part of the stem of a given verb or of the inflectional morphology. I do, however, have to be careful when making this kind of criticism, as the alternative I am about to suggest in section 3 below also requires a fair amount of computation on the part of the acquiring child.

3 Tense and agreement inflection

For the conceptual reasons outlined in the previous section (2.5), it seems desirable to revise or replace Rohrbacher's (1994: 109, 118, 128) version of the hypothesis, even if the predictions it makes are more or less exactly the ones we would want it to make. I would like to suggest that such a new version of the hypothesis could be arrived at if we include in our considerations more tenses than the present tense.

To extend the database to cover more tenses, here are the simple past paradigms of all the languages under consideration.[13]

(9)   *hear*, infinitive and simple past indicative:

	English	Danish	Halling-målet	Faroese	Älvdals-målet	Icelandic
Infinitive	hear	høre	høyræ	hoyra	höra	heyra
Past						
1st sing.	hear-d	hør-te	høyr-dæ	hoyr-d-i	hör-d-e	heyr-ð-i
2nd sing.	hear-d	hør-te	høyr-dæ	hoyr-d-i	hör-d-e	heyr-ð-ir
3rd sing.	hear-d	hør-te	høyr-dæ	hoyr-d-i	hör-d-e	heyr-ð-i
1st plur.	hear-d	hør-te	høyr-dæ	hoyr-d-u	hör-d-um	heyr-ð-um
2nd plur.	hear-d	hør-te	høyr-dæ	hoyr-d-u	hör-d-ir	heyr-ð-uð
3rd plur.	hear-d	hør-te	høyr-dæ	hoyr-d-u	hör-d-e	heyr-ð-u
Different forms	1	1	1	2	3	5

	Dutch	Frisian	German	Yiddish	French
Inf.	horen	hearre(n)	hören	hern	écouter 'listen'
Past					
1sg.	hoor-d-e	hear-d-e	hör-t-e	–	écout-ais
2sg.	hoor-d-e	hear-d-est	hör-t-est	–	écout-ais
3sg.	hoor-d-e	hear-d-e	hör-t-e	–	écout-ait
1pl.	hoor-d-en	hear-d-en	hör-t-en	–	écout-i-ons
2pl.	hoor-d-en	hear-d-en	hör-t-et	–	écout-i-ez
3pl.	hoor-d-en	hear-d-en	hör-t-en	–	écout-aient
Forms	2	3	4	–	3 (1/2s=3s=3p)

Although all the paradigms are given here, they are not all considered in each of the following sections: Faroese is only considered in 3.2 and the situation in Yiddish only in 3.3. The three SOV-languages – Dutch, Frisian, and German – are merely given for morphological comparison and will not be discussed at all.

Notice that when I speak of tenses, I only refer to those tenses that consist of inflected forms of the main verb (synthetically realized), not to those that include, for example, auxiliaries (periphrastically realized). Thus I take the past tense *heard*

to be a relevant tense, but I take the future tense *will hear* not to be a relevant tense in this sense. A further restriction, excluding even some of the synthetically realized tenses, will be discussed in section 4.1 below.

3.1   V°-to-I° movement iff inflection for tense and agreement cooccur

Trying to (re-)formulate the hypothesis that V°-to-I° movement is triggered by certain properties of the inflection of the finite verb, while focusing not only on agreement morphology but also on tense morphology, a first stab might be to say that V°-to-I° movement is triggered by the occurrence of both tense morphology and agreement morphology on the same finite form.

Danish verbs (like Norwegian and Swedish), regardless of whether they have tense morphology or not, never have any agreement morphology. English finite verbs have either tense morphology (past tense) or agreement morphology (present tense), but never both (as observed in Johnson 1990), and the same goes for finite verbs in Hallingmålet. Älvdalsmålet, Icelandic and French, on the other hand, clearly have agreement morphology even on those verbs that have tense morphology, see the 1pl forms Älvdalsmålet *(uir) hör-d-um*, Icelandic *(við) heyr-ð-um*, French *(nous) écout-i-ons*.

However, when considering Faroese, it becomes clear that this first version of the hypothesis has to be revised, as the Faroese past tense forms clearly have both tense morphology and agreement morphology, see the 1pl form *(vit) hoyr-d-u*.

3.2   V°-to-I° movement iff inflection for person and tense cooccur

Although Faroese past tense forms clearly have both tense morphology and agreement morphology, the agreement morphology is rather minimal: the regular verbs (the weak verbs) are only inflected for number and not for person in the past tense. There is only one form in singular, *hoyrdi*, and another in plural, *hoyrdu*.

At first glance, this seems not to hold for the strong verbs, where not only tense (realized as a change in stem vowel) and number but also person is marked, as 2nd person singular is different from all the other forms: 1/3sg *tók*, 2sg *tókst*, 1/2/3pl *tóku*. However, according to Lockwood (1955: 81) and Haugen (1982: 140), this 2sg ending, *-st*, is often not pronounced[14] so that all three singular forms are the same, and the only distinction inside the past tense is one of number.

This last observation raises the question of which verbs are relevant: only weak verbs or also strong ones? modals and primary auxiliaries as well? I shall follow Rohrbacher (1994: 108), cited in (8) above, who only includes the 'regular' verbs, where I take this to mean the productive paradigms, that is, those paradigms that new verbs follow (the 'weak verbs' in the Germanic languages). I shall nevertheless point out where differences or near-differences (as in the previous paragraph) would occur if also, for example, strong verbs were to count, whereas I shall take it for granted that the paradigms of modal verbs or *have* and *be* are irrelevant.

Returning to the Faroese paradigm(s), it is now possible to revise the formulation of our hypothesis as follows: V°-to-I° movement is only found in languages which

have cooccurrence of person morphology (as opposed to number morphology) with tense morphology, that is, outside the present tense. This is actually parallel to the suggestion of Holmberg and Platzack (1990: 70), see section 2.3 above, except that I here apply it to forms with tense morphology rather than only to the present tense (where tense morphology is absent).

Why should tense and person play a role but not number? Whereas number is an inflectional category in both the verbal system (conjugation) and the nominal system (declination), tense and person are only inflectional categories in the verbal system. I take person not to be an inflectional category in the pronominal system but only in the verbal system: whereas *(they) hear* and *(she) hears* are inflected forms of the same element, *I*, *you* or *she* are not (as opposed to *I* and *me*).

However, there is still at least one language which is problematic: Yiddish has V°-to-I° movement but no cooccurrence of person morphology with tense morphology, as Yiddish does not have any tense morphology marked by bound morphemes on the finite verb.

3.3   V°-to-I° movement iff tense never occurs without person

In Yiddish, the difference between tenses is marked exclusively by auxiliaries (periphrastically), and, as opposed to all the other languages under discussion, not by bound morphemes (synthetically), see, for example, Weissberg (1988: 135). Thus the past tense is realized identically to the present perfect (a distinction can be made by including, for example, adverbial *shoyn* 'already'), and the past perfect is realized by means of two auxiliary forms ('double compound tense'):

(10)   Yi. a.   Jonas hert   dos lid
              Jonas hears the   song
              (= Jonas hears the song/Jonas is hearing the song)
       b.   Jonas hot gehert dos lid
              Jonas has heard   the song
              (= Jonas heard the song/Jonas has heard the song)
       c.   Jonas hot gehat gehert dos lid
              Jonas has had   heard the song
              (= Jonas had heard the song)

The situation is parallel in Afrikaans and in all southern dialects of German (which are not directly relevant here, as they are all SOV). However, only in standard Yiddish does no verb have a (simple) past tense, whereas in Afrikaans (Donaldson 1993: 222), southern dialects of German (König 1985: 159; Fox 1990: 188–9), and a few dialects of Yiddish (Marvin Herzog, p.c.), a few verbs have a simple past form.

V°-to-I° movement is thus found not only in languages with cooccurrence of person morphology with tense morphology (Älvdalsmålet, Icelandic and French), but also in at least one language with no tense morphology at all, namely Yiddish.

3.4   V°-to-I° movement iff all tenses are inflected for person

Based on two different observations, namely

(11)   a.   Yiddish has no tense morphology
      b.   In its only tense, Yiddish makes a clear distinction between persons

two alternative formulations of the correlation between V°-to-I° movement and the finite morphology are now possible:

(12)   An SVO-language has V°-to-I° movement if and only if ...
      a.   ... tense morphology never occurs without person morphology
      b.   ... person morphology is found in all tenses.

One argument against the formulation in (12a) is that it is irrelevant that Yiddish has person morphology in its present (and only) tense, as even languages without any person morphology whatsoever would be expected to have V°-to-I° movement, as long as they have no tense morphology. I find this corollary counter-intuitive, even if it may not have any testable consequencees. The closest we get is Afrikaans (which has no person morphology and no tense morphology in the relevant sense), but this is an SOV-language and thus cannot be checked for the presence or absence of V°-to-I° movement.

If, on the other hand, the formulation in (12b) is accepted, the reason why Yiddish has V°-to-I° movement would be that it has person distinctions in all tenses (i.e. in its one and only tense, simple present), whereas a hypothetical SVO-version of Afrikaans or a hypothetical tense-less version of Danish would not be expected to have V°-to-I° movement.

Another argument against the formulation in (12a) is that additional stipulations would be necessary to explain why children do not take, for example, Icelandic *tók* (1/3sg past of *taka* 'take', i.e. the tense morphology is a change in stem vowel, person and number morphology is absent) as an indication that Icelandic does not have V°-to-I° movement, given that *tók* is a tense-inflected form without any person morphology. Under (12b), the past tense paradigm of *taka* (*tók, tók-st, tók, tók-um, tók-uð, tók-u*) could not possibly be taken as such an indication. However, forms such as *tók* are only found in the strong verbs (see the weak paradigm in (9) above), and may therefore not be relevant at all, as was noted in section 3.2 above.

This argument is, however, valid for French, as forms with the properties discussed above appear in all French verb paradigms. For example, in 1sg *(j') écout-ais* [eku'tɛ] '(I) listened', there is only one morpheme, and the question is whether this is a tense or a person ending. When comparing the past tense form to the present one *(j') écoute* [e'kut] '(I) listen', it would seem that neither form has a person ending, and that the ending in the past is a tense ending (and that person and number are marked by the absence of relevant morphology). In that case, given the formulation in (12a), additional stipulations would be necessary to explain why children do not take tense-inflected forms without any person morphology as an indication that French does not have V°-to-I° movement. Given the formulation in (12b), on the other hand, no such problem arises, as person morphology clearly is found in the French past tense, even if it is not present on all forms (see the paradigm in (9) above).

Based on the two arguments discussed above, I conclude that of all the formulations given in section 3 (which all take into consideration both agreement and tense), the most adequate one is the one in (12b).

4   The diachronic evidence: the weakening of inflection and the loss of V°-to-I° movement

In this section, the two competing views from section 2.5 (Rohrbacher 1994) and from section 3.4 will be compared and applied to the diachronic evidence (see also DeGraff, this volume on the development in Louisiana Creole). Section 4.1 will discuss which tenses are relevant for the hypothesis, and the following sections will discuss two languages in which there is a reasonable amount of evidence concerning the loss of V°-to-I° movement: English in 4.2 and Danish in 4.3. Apart from Swedish, not discussed for reasons of space, at least three more languages (Faroese, Hallingmålet and Norwegian) have lost V°-to-I° movement, but they will not be discussed below because not enough is known (to me, at least) about this loss or about the influence exerted by the administrative language (Danish in all three cases) at the time of the loss.

4.1   *The two approaches and a restriction on the tenses*

As discussed in section 2.5, Rohrbacher (1994) suggests the formulation in (13), whereas in section 3.4 a different formulation was reached, namely the one in (14):

(13)   A language has V°-to-I° movement if and only if in at least one number of one tense of the regular verbs, the person features [1st] and [2nd] are both distinctively marked.   (Rohrbacher 1994: 108)

(14)   An SVO-language has V°-to-I° movement if and only if person morphology is found in all tenses.   (section 3.4 above)

In other words, where the Rohrbacher analysis asks 'Is there a tense where 1st and 2nd person are distinctively marked in singular or plural?', the analysis advocated here asks 'Are all tenses inflected for person?'. In both cases a positive answer entails the presence of V°-to-I° movement.

A question which has not been directly addressed so far is whether all tenses count for the purposes of (13) and (14), and if not, which ones count and which ones do not. Whereas it has already been said that only regular (weak) verbs are taken into consideration (see section 3.2), no similar restriction has been placed as yet on the different tenses of the weak verbs. For the languages considered so far, no such restriction has been necessary, but when we consider the diachronic development, it becomes necessary for the approach in (14) to disregard certain tenses: in English, the person distinction is lost in the present and past subjunctive already in Old English (1/2/3sg *hïere*, 1/2/3pl *hïeren*, from *hïeran* 'hear', see among many others Mitchell and Robinson 1986: 46, 48),[15] whereas V°-to-I° movement is not lost until around 500 years later (see section 4.2 below). As for Rohrbacher's (1994) approach, (13), this problem does not occur. Only the tense with the most inflection is relevant, and this would seem to always be the present indicative. For the approach suggested here, (14), however, all tenses are relevant.

I shall therefore have to take only 'core' tenses into consideration (and as discussed in section 3.3 above only in so far as they are synthetically realized, not

periphrastically), and disregard subjunctives for example. The conceptual justification for this move is that presumably only the core tenses have been acquired (or encountered) by the child at the point where word order is determined, whereas non-core tenses only come in much later. Furthermore, I suspect that in most cases subjunctive and other similar tenses are learned rather than acquired, as witnessed by the many references in the literature as to the absence in the modern spoken language of, for example, the subjunctive in Faroese (Lockwood 1955: 137) or 'passé simple' and the past subjunctive in French (Confais 1978: 14–15; Pedersen et al. 1980: 335; Rougerie 1966: 404; and many others).

Concluding, the tenses that count for the purposes of (14) (and (13)) are those synthetically formed tenses of the regular (weak) verbs that are actually acquired rather than learned, that is presumably only simple present, simple past, and in French also the simple future.

4.2   *The history of English*

The loss of V°-to-I° movement in English is assumed to have taken place in 'the early to mid-sixteenth century' (Rohrbacher 1994: 162, based on Ellegård 1953 and Kroch 1989: 222–8) or 'around 1575'((Roberts 1993: 249, 302; Watanabe 1994: 158, based on a different interpretation of Ellegård 1953 and Kroch 1989: 223–4). The following two examples are typical for the situations before and after loss of V°-to-I° movement:

(15)   En.   The Turkes [...] $\overset{I°}{\text{made}}$ $\overset{Adv}{\text{anone}}$ redy   a grete ordonnaunce
          The Turks   made   at once   ready   a great number of weapons
          (= The Turks at once set up a great number of weapons)
          (1482, Kaye: *The Delectable Newesse of the Glorious Victorye of the Rhodyans agaynest the Turks*, from Gray 1985: 23, 1.1–2, also cited in Roberts 1993: 253,
          (30b))

(16)   En.   We $\overset{Adv}{\text{immediately}}$ by $\overset{Adv}{\text{our}}$ senses $\overset{V°}{\text{perceive}}$ in Fire its Heat and Colour
          (1690, John Locke: *An essay concerning humane understanding*, from the entry *immediately*, OED: 682)

Schäufele (1994: 11–15) points out that cases of V°-to-I° movement are relatively frequent in texts from as late as the end of the seventeenth century (an observation he then uses to question the link between the loss of V°-to-I° movement and the weakening of verbal inflection).

With respect to the loss of V°-to-I° movement, there does not seem to be any reason to assume any difference between northern and southern dialects.[16] However, as far as the history of the inflectional systems is concerned, there is a clear difference between the English spoken in the south of England (including the Midlands) and the English spoken in the north of England and in Scotland.

Consider first the development of the inflectional stem in the south in connection with the predictions made by Rohrbacher's analysis (see (13)). Compare the late

Middle English and the Early Modern English paradigms (based on Pinsker 1959: 178; O'Neil 1979: 265; Davis 1985: 495–7; Roberts 1993: 257; Strang 1970: 201; Görlach 1991: 85, 88; Schäufele 1994: 4, and the entry *hear*, OED: 56):

(17)   *hear*, infinitive, imperatives, participles, and simple present and simple past indicative:

	late Middle English (14th and 15th centuries)		Early Modern English (16th century)	
Infinitive	here(n)		hear(en)	
Imperative singular	her(e)		hear	
Imperative plural	hereth		hear	
Present participle	heringe		hearing	
Past participle	herd		heard	
Finite	Present	Past	Present	Past
1st sing.	I here	herde	I hear	heard
2nd sing.	thou herest	herdest	thou hearst	heardst
3rd sing.	he hereth	herde	he heareth	heard
1st plur.	we here(n)	herde(n)	we hear(en)	heard(en)
2nd plur.	ye here(n)	herde(n)	ye hear(en)	heard(en)
3rd plur.	thei here(n)	herde(n)	they hear(en)	heard(en)
Different forms	4	3	3	2

To Rohrbacher (1994: 105, 148), the person features [1st] and [2nd] are both distinctively marked in the singular of the present tense in the Middle English paradigm, whereas in the Early Modern English paradigm, the person feature [1st] is no longer distinctively marked, as it is identical to the infinitive.[17]

If Roberts (1993: 302) is right both that English lost V°-to-I° movement 'around 1575' and that the Early Modern English inflectional system had taken over already 'early in the sixteenth century', then there may indeed be a gap of 'more than half a century' between when we would expect V°-to-I° movement to be lost under Rohrbacher's analysis and when it is actually lost. As pointed out by Watanabe (1994: 158), this gap is particularly interesting when it is kept in mind that no such gap seems to occur in Swedish (see section 4.4). Roberts (1993: 302–3) suggests that positive declarative *do* somehow becomes a 'functional substitute' for strong inflection in triggering V°-to-I° movement, and then V°-to-I° movement is lost when this kind of *do* is lost again at the end of the sixteenth century. Watanabe (1994: 170, n21) points out certain weaknesses of Roberts' explanation, and goes on to suggest an alternative explanation (based on the phrase structure suggested in Chomsky (1991) and the degree-0 learnability restriction suggested in Lightfoot (1989, 1991), in which this difference is linked to the difference with respect to V2, allowing English (non-V2) to show such a gap, whereas Swedish (V2) should not. What we see in Middle Swedish and in English until 1500 is movement to Agr°, but what we see in English 1500–75 is only movement to Tns°, a distinction which is reflected in

the data by the surge in *do*-support in this period. If the finite verb must move to Agr°, verb movement is less costly (and therefore obligatory), whereas if the finite verb must move to Tns°, *do*-insertion is less costly (and therefore obligatory), Watanabe (1994: 164). However, even though the sequence *does never hear* thus shows the linguist that Tns° is strong (as opposed to the sequence *hears never* which shows that Agr° is strong), this does not count as evidence for the child. In a move that appears to me to be counter-intuitive, Watanabe (1994: 169) stipulates that the only evidence the child will accept for strong Tns° is the sequence *hears never* (which can only arise if Agr° is strong!), and not *does never hear* (the only evidence for the child for a strong Agr° is strong verbal inflections). Thus only one generation will be able to take Tns° to be strong, namely the one which still receives its input from an older generation with strong Agr° (i.e. which says *hears never*). The following generation only gets input where Agr° is weak and Tns° strong, that is *does never hear*, which may suffice to show linguists that Tns° is strong, but not children, and as Agr° is also weak (due to weak inflection), movement of the finite verb is lost.

I shall consider two further alternatives, although they may both amount to what Watanabe (1994: 158) calls 'trivializing the problem'. One is that the dates may not be as far from each other as Roberts (1993: 302) and Watanabe (1994: 158) assume. It is not clear that the inflectional changes required by Rohrbacher did not happen somewhat later (Strang 1970: 201 dates them to around 1550), and furthermore, as mentioned above, it is also not clear that the syntactic change did not happen somewhat earlier (see Rohrbacher's (1994: 162) interpretation of Ellegård (1953) and Kroch (1989: 222–8)). The other alternative is that 'a more adequate formulation of rich agreement can be found' (Watanabe 1994: 158), and in the following I will argue that this is exactly what has been done in the preceding sections of this chapter.

Consider now the development of the inflectional system in the south in connection with the predictions made by the alternative analysis suggested in this chapter, (14). As for the present tense of Early Modern English, given above, it is clear that this tense is not one with no person morphology in any of the six forms. As for the past tense, the last surviving inflection for person in the past tense is 2sg -*st*. According to Barber (1976: 237) and Görlach (1991: 88), it is not lost until the seventeenth century (along with the 2nd sg. pronoun *thou*), which is clearly too late, irrespective of which of the two interpretations of the syntactic evidence is taken. However, a different view is presented in Pyles (1964: 205). Early Modern English past tense 'had no personal endings save for 2nd sg -*(e)st*, which began to be lost in the sixteenth century' and in Strang (1970: 203). By 1570 'there was, as now, practically no distinction of person, number, or mood in the past of any normal verb' (see also that, as discussed in section 3.2, Faroese strong verbs are written with -*st* in 2sg, but this ending is not pronounced). If we now follow Pyles (1964: 205) and Strang (1970: 203) on the inflection and Roberts (1993: 302) and Watanabe (1994: 158) on the syntactic developments, the analysis suggested in this chapter, which would lead us to expect that V°-to-I° movement should be lost in the second half of the century, thus makes the right prediction.

In other words, due to the difficulty in dating the syntactic changes, neither Rohrbacher's analysis nor the alternative one can be shown to make unwanted

predictions for (southern) English (although, as discussed in note 17 above, Rohrbacher (1994) may have a problem in connection with the form of the infinitive).

Consider finally the development of the inflectional system in the north of England and in Scotland (based on O'Neil 1979: 265; Pinsker 1959: 178; and Schäufele 1994: 4):

(18)   *hear*, infinitive, imperatives, participles, and simple present and simple past indicative:

	northern late Middle English (14th and 15th centuries)	
Infinitive	her(e(n))	
Imperative singular	her(e)	
Imperative plural	heres	
Present participle	herande	
Past participle	herd	
Finite	Present	Past
1st sing.	I her(e)	herde
2nd sing.	thou heres	herdest
3rd sing.	he heres	herde
1st plur.	we heres	herde(n)
2nd plur.	ye heres	herde(n)
3rd plur.	thei heres	herde(n)
Different forms	2	2

Because of the lack of distinctions in the northern late Middle English present tense paradigm, Rohrbacher (1994: 162–4), see also (13), makes a different prediction here compared to the southern case discussed above. The prediction is that in the north already late Middle English (fourteenth and fifteenth centuries) should have lost V°-to-I° movement and thereby precede the rest of English by about a century. However, both Rohrbacher (1994: 163) and Roberts (1993: 266) take the syntactic evidence to show that northern late Middle English had V°-to-I° movement. The alternative analysis suggested in this chapter, (14), does not make this unwanted prediction. Both the simple present and the simple past are inflected for person, and thus V°-to-I° movement is expected to take place.

4.3   The history of Danish

The loss of V°-to-I° movement in Danish took place between 1300 and 1700, but a more exact date has yet to be determined. However, even a cursory check of late fifteenth-century texts turns up a number of examples of V°-to-I° movement but no clear examples of absence of V°-to-I° movement, due to interference from OV-order and from stylistic fronting (see Platzack 1988: 225–7 and Falk 1993: 178–88

for Swedish; Vikner 1995: 161–2 for Danish, and references cited there).[18] Thus it seems that Haugen's (1976: 311) dating of this loss between 1350 and 1550 may be somewhat early, which may at least partly be due to examples with stylistic fronting not having been disregarded. The following two examples (from one and the same source) are typical for the situations before and after loss of V°-to-I° movement:

```
                       I°      Adv
(19)   Da. Lader oß nu   see om ui  haffuer nogen tid  hörtt guds ord [...]
           Let   us now see if   we have   any    time heard god's words
           (= Let us now see if we have ever heard God's words ...)
               (1543, Peder Palladius: En Visitatz Bog, from Jacobsen 1925: 45, 1.19)
```

```
                    Neg   V°
(20)   Da. Snæ  kand knyge [...] der  ind, som   soelen icke kand skinneind
           Snow can drift        there in  which sun-the not can  shine in
           (= Snow can get in even where the sun cannot shine)
               (1543, Peder Palladius: En Visitatz Bog, from Jacobsen 1925: 28, 1.18)
```

The predictions of the two approaches under discussion are identical and both seemingly problematic. For both, the inflectional system had already reached the required degree of simplification around 1350: the present tense only had number distinctions, and the past tense had neither number nor person distinctions. Compare the Middle Danish paradigm to that of the preceding stage, Old Danish (based on Bertelsen 1905: 43, 95–7, 171–2; Skautrup 1944: 273–4; Karker 1974: 25; Haugen 1976: 209):

(21)   *judge*, infinitive, imperatives, participles, and simple present and simple past
       indicative:

	old Danish (around 1050)		Middle Danish (around 1350)	
Infinitive	døma		dømæ	
Imperative singular	døm		døm	
Imperative plural	dømið		dømær	
Present participle	dømandi		dømændæ	
Past participle	dømðr		dømdær	
Finite	Present	Past	Present	Past
1st sing.	jak dømi	dømða	iak dømær	dømdæ
2nd sing.	þu dømir	dømðir	þu dømær	dømdæ
3rd sing.	hann dømir	dømði	han dømær	dømdæ
1st plur.	vit dømum	dømðum	wi dømæ	dømdæ
2nd plur.	it dømið	dømðuð	i dømæ	dømdæ
3rd plur.	þer døma	dømðu	þe dømæ	dømdæ
Different forms	5	6	2	1

Under Rohrbacher's analysis, see (13), in no number of any Middle Danish tense are the person features [1st] and [2nd] both distinctively marked. Under the alternative suggested in this chapter, (14), this stage of Danish has not only one but two core tenses with no person morphology in any of the six forms.

Thus both approaches would expect this stage to have lost V°-to-I° movement, and Danish therefore does not provide evidence in favour of one approach over the other, both analyses would lead us to expect V°-to-I° movement to be lost already around 1350, which may be 100 or 200 years too early.

The loss of V°-to-I° movement in Swedish has been the object of much more detailed studies than is the case for Danish, and has been dated to the sixteenth century (Platzack 1988: 232; Falk 1993: 176–7). When applied to the history of Swedish the two approaches outlined here make identical predictions. For reasons of space I must omit further discussion of this point.

4.4   Summary of the historical development

Summing up sections 4.2–4.3 on the diachronic evidence, the two approaches make exactly the same predictions as far as Danish and Swedish are concerned. Depending on a closer study of Danish, the predictions for Danish (V°-to-I° movement from around 1350) might be wide of the mark, whereas the predictions for Swedish seem to be more or less correct.

When it comes to English, the predictions differ. As for southern English, neither approach can be shown to make unwanted predictions (although, as mentioned in note 17, Rohrbacher's approach may have a problem concerning the form of the infinitive). As for northern English, it was clear that the data presented a problem for Rohrbacher (1994: 162–4) but not for the analysis defended in this chapter.

5   Conclusion

After considering a number of different ways of formulating the connection between the strength of verbal inflectional morphology and the obligatory movement of the finite verb to I° (i.e. to the left of a medial adverbial or of negation), two main alternatives were established:

(22)   A language has V°-to-I° movement if and only if in at least one number of one tense of the regular verbs, the person features [1st] and [2nd] are both distinctively marked.   (Rohrbacher 1994: 108)

(23)   An SVO-language has V°-to-I° movement if and only if person morphology is found in all tenses.   (Section 3.4 above)

In other words, where the Rohrbacher analysis asks 'Is there a tense where 1st and 2nd person are distinctively marked in singular or plural?', the analysis advocated here asks 'Are all tenses inflected for person?'. In both cases a positive answer entails the presence of V°-to-I° movement.

As far as the empirical consequences for the present-day languages are concerned, the two approaches seem to make the same predictions. Only when the diachronic evidence is included, do empirical differences appear. The analysis advocated here seems to do better than the one suggested by Rohrbacher (1994: 108) with respect to the (late) Middle English spoken in the north of Great Britain and, depending on various interpretations, may be also with respect to the (late) Middle English spoken in the south.

As for conceptual advantages of one approach over the other, it was claimed in section 2.5 that it was conceptually unmotivated that Rohrbacher's analysis requires the 'distinctive' (1st and 2nd person) forms to differ from each other, from the 3rd person form, and from the infinitive, but not from any other forms in the rest of the paradigm, for example, the imperative. It was also pointed out that including the imperative would lead to unwanted empirical consequences for Yiddish for example. In the approach developed in this chapter, a different restriction is introduced on which tenses are relevant for the purposes of (23), namely only simple present, simple past and simple future (as the tenses must also be synthetically inflected, the past tense is irrelevant in Yiddish, and the future tense is only relevant in French). I would, however, like to claim that this latter restriction is not conceptually unmotivated, as it is meant to exclude those tenses that are learned rather than acquired (subjunctive, French 'passé simple', etc.) and therefore presumably not available to the child during language acquisition. There is no similar reason to suppose that, for example, the singular imperative is not available to the child during language acquisition (probably on the contrary).

A potential problem for both analyses has to do with the default situation, that is with what happens when the child does not encounter any relevant evidence. Under the Rohrbacher analysis, the child must assume the absence of V°-to-I° movement unless he/she finds 'a tense where 1st and 2nd person are distinctive in singular or plural'. Under the approach developed in this chapter, the child must assume the absence of V°-to-I° movement unless he/she finds 'that all core tenses are inflected for person'. Languages which have (obligatory or optional) V°-to-I° movement but no strong inflection thus pose a problem to both approaches. How is it possible for the child to change from the default into V°-to-I° movement without the appropriate trigger (Rohrbacher: distinctive [1st] and [2nd] person features, this chapter: presence of person inflection in all core tenses)?[19]

In this chapter, I hope to have shown that the hypothesis I have suggested (V°-to-I° movement iff all core tenses have person morphology) represents an improvement over previous suggestions both empirically and conceptually.

Notes

*   Thanks for comments, criticisms, help, and judgements to Cecilia Falk, Liliane Haegeman, Hubert Haider, Marvin Herzog, Anders Holmberg, Kyle Johnson, Richard Kayne, Heðin Meitil, Christer Platzack, Eric Reuland, Luigi Rizzi, Ian Roberts, Ramona Römisch-Vikner, Rex Sprouse, Achim Stein, Höskuldur Thráinsson, Trond Trosterud, Barbara Vance, Carl Vikner, and Heike Zinsmeister and also to audiences at the universities of

Venice (May 1995), Berlin (July 1995), Reykjavík (January 1996), Stuttgart (February 1996), Lund, and Copenhagen (both April 1996). Section 2 below is based on section 5.1 of Vikner (1995). An earlier version of this chapter was published in *Working Papers in Scandinavian Syntax*, 1995, vol. 55, pp. 1–27.

1 English perfective and modal auxiliaries present particular problems. For reasons of space I have had to leave them out of the discussion in this chapter.

2 It should be noted that what is said below about Faroese may only be valid for the colloquial Faroese of speakers born after *c.* 1960. See, for example, Barnes (1994: 215) who reports that in all embedded clauses, the finite verb may either follow or precede the adverbial. See also the discussion in Vikner (1995: 150).

3 In the French examples above, the verb is subjunctive rather than indicative. There is however no relevant difference between subjunctive and indicative with respect to the relative position of the verb and the adverbial (neither in French nor in Icelandic, the only other one of the languages in question to have relatively widely used subjunctive).

4 Schäufele (1995) argues against such an analysis, taking Italian, Serbo-Croat, and Vedic Sanskrit to provide counter-examples. However, as Schäufele (1995: 11–13) admits, for each of these three cases, there are various problems with his alternative analyses.

5 Admittedly, other differences exist concerning verb movements across the Germanic and Romance languages which do not seem to be linked to the strength of infectional morphology: e.g. the positions of participles across Romance (see e.g. Belletti 1990; Cinque 1995 and Zanuttini, this volume) or the position of infinitives across Germanic and Romance (see e.g. Johnson and Vikner 1994 and references there).

6 *ju.* is an abbreviation for the Dutch 2nd person plural pronoun *jullie*, and *ji.* stands for the Frisian 2nd person plural pronoun *jimme*. The French singular and 3rd person plural forms *écoute, écoutes, écoute, écoutent* are all pronounced the same: [e'kut].

7 As for the question how the stems of the finite verbs in English and Faroese are united with their inflectional endings (-s in English 3sg, -i in Faroese 1sg, -(i)r in Faroese 2sg and 3sg), at least two possibilities exist. See Haegeman (this volume, section 2.1.2.1).

8 That French only has three different forms is only true as long as we consider only the first conjugation. In the second and third conjugation, 3rd person plural form differs from the singular form: sg. *finis/finit* – 3pl *finissent* 'finish' and sg. *vends/vend* – 3pl *vendent* 'sell'. These paradigms thus have four different forms, one in the singular and three in the plural. See also note 10.

9 Rosenkvist (1994) reports that in Älvdalsmålet of today (as opposed to the stage of the language discussed by Levander 1909, which is 80–90 years older), the finite verb may optionally follow the adverbial/negation, as long as the subject is not missing, although the verbal inflectional system has not changed. It should be noted, however, that Rosenkvist bases the optionality on 14 sentences with and 10 sentences without V°-to-I° movement (and that the 24 sentences are distributed over 9 different speakers).

10 It seems to me that Rohrbacher's (1994: 218) comments on the French paradigm are open to exactly the same criticism that Rohrbacher (1994: 100–2) directs at Roberts (1993): Rohrbacher (1994: 218) says that the 2nd person plural of the present tense, *parlez* '(you pl.) speak', does not differ from the infinitive, *parler* '(to) speak'. Like the syncretism in Faroese discussed in the main text, this syncretism in French also is limited to the first conjugation (see also note 8). In the second and third conjugation, there are clear differences between the infinitive and the 2nd person plural: inf. *finir* 2pl *finissez* 'finish' and inf. *vendre* – 2pl *vendez* 'sell'.

Notice that this does not necessarily invalidate Rohrbacher's (1994: 218) conclusion that no French tense marks both 1st and 2nd person distinctively, insofar as 1st person is

not distinctively marked if we follow Rohrbacher in considering *nous parlons* 'we speak' to have been replaced by *on parle* 'one speaks'. This conclusion forces Rohrbacher (1994: 219–24) to assume that French is essentially a language with null subjects and subject clitics, which in turn leaves unexplained a number of differences between French and those languages that are generally assumed to have null subjects and subject clitics, such as northern Italian dialects like Trentino and Fiorentino, as discussed in detail in Brandi and Cordin (1989). This conclusion is not necessary given the analysis to be suggested in section 3 below, which in turn means that the differences between French and the northern Italian dialects do not present any problems: to the analysis of this chapter, French does have strong inflection, and thus does not have to be taken to be a null subject language.

11 Rohrbacher (1994: 118, (48)) also requires that, in at least one person of one tense, [+ sing] is distinctively marked. As far as I can tell, this move follows for theoretical reasons, and is not based on any facts, as the predictions for the languages he discusses remain the same.

12 One phenomenon might support the assumption inherent in Rohrbacher's analysis that infinitives are more basic or more relevant to the child than, for example, imperatives, namely the so-called root (or optional) infinitive phenomenon: very young children often use infinitive forms instead of finite forms. See Rizzi (1993), Wexler (1994) and references cited there.

13 The French singular and 3rd person plural forms *écoutais, écoutais, écoutait, écoutaient* are all pronounced the same: [eku'tɛ].

14 Heðin Meitil (p.c.) suggests that leaving out the 2sg ending is typical of the southern dialects of Sandoy and Suðuroy.

15 Kyle Johnson (p.c.) points out that instead we might say that present indicative and present subjunctive simply count as one tense for the purposes of (13) and (14). However, as Johnson also points out, this would make the prediction that languages might keep V°-to-I° movement even when person inflection has been lost in the indicative, as long as it still exists in the subjunctive. This is clearly counter-intuitive though not necessarily factually incorrect, as none of the relevant languages seem to have more inflectional distinctions in the subjunctive than in the indicative. This counter-intuitiveness is not encountered in the suggestion made in the main text.

16 See Roberts (1993: 266) on the northern dialects (the fifteenth-century northern examples with V°-to-I° movement cited by Roberts are verse rather than prose, but according to Görlach (1991: 18) no prose older than the sixteenth century has survived). The statistical studies like Ellegård (1953) and Kroch (1989) do not distinguish between northern and southern dialects.

17 It is crucial to Rohrbacher (1994: 105, 147) that the late Middle English infinitive ends in *-en* (*to heren*) and thereby differs from the simple present 1st person singular (*I here*), as otherwise his analysis would predict the loss of V°-to-I° movement to have already taken place in late Middle English (see also section 2.5 above). However, as shown, for example, in Davis (1985: 495) and Wyld (1927: 262), from the fourteenth century onwards there actually was an alternative infinitive form without this ending (*to here*), which thus was identical to the simple present 1st person singular.

The question is whether for a particular form (like *I here*) to be distinctively marked it needs to differ from just one infinitive form (e.g. *to heren*) or from all infinitive forms (i.e. both from *to heren* and from *to here*). It seems more plausible to me that distinctive marking requires difference from all infinitive forms, in which case the above is a problem for Rohrbacher's analysis.

Also, if difference from one infinitival form is enough, then Rohrbacher's analysis would predict that not even Early Modern English would have lost V°-to-I° movement, as

also here there are two alternative infinitival forms (both *to hear* and *to hearen*), one of which (though admittedly the less common one) differs from the simple present 1st person singular (*I hear*), Görlach (1991: 88) and Strang (1970: 201).

18 Rohrbacher (1994: 173) cites a late fifteenth-century example taken from Vikner (1991: 156) as one of 'the first clear instances of V *in situ*', even though Vikner (1991: 156) points out that this example can also be derived in a grammar with V°-to-I° movement by means of stylistic fronting (a possibility considered for Swedish in Rohrbacher 1994: 171).

19 The Swedish dialect of Kronoby and the Norwegian dialect of Tromsø are cases in point. For reasons of space it is not possible to include the discussion in this chapter.

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