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Variation in verbal inflection in Dutch dialects

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Abstract From a diachronic perspective, Germanic languages are in the process of deflection. In this context, there appears to be a rather chaotic amount of variation within the verbal inflectional paradigms of Dutch dialects. Based on the paradigms of the verb *leven* (“to live”) in 253 Dutch dialects, we provide a description and a paradigmatic analysis of the variation that we found in verbal inflection in geographically determined, synchronic varieties of Dutch. It turns out that the observed variation is remarkably consistent: there are nine different paradigms, eight of which show a geographically delimited distribution. We discuss the observed geographical variation in the context of Germanic deflection. We argue that variation and deflection are determined by paradigmatic simplification of the feature system involved. We demonstrate that the following economy strategies are relevant: (A) the reduction of the number of distinctive features for a particular affix in an inflectional paradigm: each affix within the Dutch verbal inflectional system is characterized by one phi-feature only; (B) the introduction of a default category [+finite]; (C) the reduction of the number of feature categories in an inflectional paradigm: Dutch inflectional paradigms allow the presence of only one inflectional category ([number], [person], [gender]). These strategies largely determine the realm of variation, within which regional varieties occupy

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different positions. By doing so, we provide a perspective on paradigmatic change, triggered by properties of the language system.

Keywords Verbal inflection · Dutch dialects · Phi-features · Deflection · Morphology · Germanic languages

1 Introduction

It is a well-known fact that Germanic languages show substantial variation with respect to inflection. From a diachronic perspective, Germanic languages are in the process of deflection. Whereas older stages of Germanic demonstrate a large amount of verbal inflection with respect to the features [person], [number] and [gender], the so-called phi-features, present-day Germanic languages often only have a limited amount of inflectional distinctions in the verbal paradigm. Most extreme in this respect is Afrikaans, in which the finite verb is no longer inflected (cf. Ponelis 1979). Other languages such as English do not have much inflection left either. Standard Dutch is somewhat less deflected, in that [person] and [number] still belong to the verbal paradigm as grammaticalized features. The feature [number] distinguishes plural verb forms from singular ones, and the feature [person] makes a distinction between first, second and third person. The Dutch inflectional system has been substantially reduced over the past centuries. However, it has often been observed that the verbal paradigm shows a large amount of variation in Dutch dialects. This phenomenon has never been thoroughly studied in a comparative survey of dialects (but cf. Goeman 1999). Within the context of the research project “Variation in Inflection” (Meertens Institute/University of Amsterdam) a survey of the patterns of variation in varieties of Dutch has been achieved. This paper provides a first presentation and a preliminary analysis of the variation that we found in verbal inflection in geographically determined synchronic varieties of Dutch.

The observation that there appears to be a huge amount of variation within the verbal inflectional paradigm of Dutch varieties is exemplified by the inflection for second person singular. In Standard Dutch the inflectional morpheme in the subject–verb order is *-t*, but moving through the dialects one also finds the inflectional suffixes *-st*, *-s*, *-en*, *-n*, and *-0*.¹ In this paper, we concentrate on the feature system that is minimally required to describe and analyse the observed variation from a paradigmatic point of view. This focus implies the preliminary assumption that there is a one-to-one relationship between inflectional affixes and (a set of) morpho-syntactic features (cf. Aalberse in press). In other words, we start with the assumption that one specific inflectional form is characterized by just one specific (set of) feature(s) and vice versa.²

The data that we have used, were drawn from the SAND (the Syntactic Atlas of the Dutch Dialects), a database containing a large corpus of syntactic information,

¹ Given the fact that we look at inflection from a paradigmatic point of view, we assume that a zero-morpheme is present when one of the forms in a verbal paradigm lacks an overt inflectional morpheme.

² We leave a detailed discussion of the relationship between subject and finite verb in the dialects, i.e., the agreement relation, for further research. It concerns questions about the syntagmatic relevance of the features that we have argued to carry paradigmatic significance.

gathered through interviews with dialect speakers from 267 measuring points.^{3,4} The SAND contains complete information on the finite verbal paradigm of *leven* (“to live”).

The verbal forms were elicited through oral translation of sentences such as (1) by speakers of the various dialects.⁵

- (1) *Als hij nog drie jaar leeft, leeft hij langer dan zijn vader.*
 If he still three years lives lives he longer than his father
 “If he lives three more years, he’ll be living longer than his father.”

The objective of this paper is to structure the at first sight rather chaotic amount of variability in the verbal inflectional system of Dutch varieties and to provide a preliminary account of the processes that are involved in variation and deflection from a paradigmatic perspective. The most important outcome of this research is that variation in inflection and deflection can be analysed as being determined by paradigmatic principles of economy.

2 Verbal inflection in Dutch dialects

Map 1 provides an overview of the inflectional paradigms of present-tense verbs in the dialects that were included in the SAND-survey. It shows that the majority of the Dutch dialects has a paradigm with three different inflectional affixes.

Out of the 253 dialects that are included in this study, more than half demonstrate this pattern ($n = 147$).⁶ Dialects with four different affixes are found in the north-east (Groningen and Friesland) and the south-east (Limburg). In West- and East-Flanders, Lower Saxony and the river area we find two affixes. There is just one instance of a dialect without inflectional distinctions.^{7,8} Examples of these paradigms are given in (2).⁹

³ The SAND has been developed at the Meertens Institute and various universities in the Netherlands and Flanders. For more information on the SAND-project and its methodology, we refer the reader to www.meertens.knaw.nl/projecten/sand, Barbiers et al. (2005) and Cornips and Jongenburger (2001).

⁴ Each measuring point is taken to represent a dialect. Thus, “267 measuring points” can also be read as “267 dialects”.

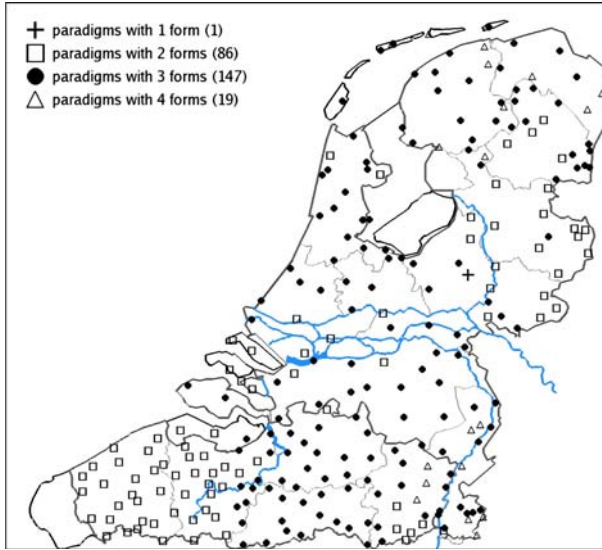
⁵ The discussion in this article is restricted to the order “subject—Vf”, unless explicitly indicated. A discussion of the inverted patterns in dialects of Dutch is left for future research. For some interesting correlations in this connection, see Hoekstra and Smits (1997).

⁶ Out of the 267 measuring points, 14 could not be used, due to incomplete paradigms, amongst other things.

⁷ As indicated in footnote 1, we take the absence of an overt affix in these paradigms to indicate the presence of a zero-morpheme.

⁸ Note that this pattern is identical to the system in Afrikaans in which no distinguishable affix is present. In footnote 21, we shall argue that this dialect might be an instance of a two-affix system.

⁹ We abstract away from differences that belong to the phonological level. Most clearly, we find differences in the realization of the affix *-en*. This affix is pronounced as *-e*, *-en*, *-m* or *-n*. Similar regional variation is found in the realization of the nominal plural affix *-en* and of lexical elements which end in the sequence *-en*. It might be the case that in older stages *-e* and *-en* were different affixes in the same paradigm, e.g. in the Flemish paradigm for [1] and [plu] (see (2b) above). However, we have checked the recorded SAND-data for differences between *-e* and *-en*, but we have not been able to detect paradigm-internal differences in the relevant dialects. Without further discussion, we use the Standard Dutch *en*-affix to indicate this set of phonologically related affixes.



Map 1 Number of forms in the paradigms of the verb *leven* (“to live”)

(2)	a.	<i>1 affix</i>	b.	<i>2 affixes</i>	c.	<i>3 affixes</i>	d.	<i>4 affixes</i>
		Beekbergen		Diksmuide		Leuven		Lemma
		(Veluwe)		(Vlaanderen)		(Brabant)		(Friesland)
	1sg	<i>leef</i>		<i>leven</i>		<i>leef</i>		<i>leef</i>
	2sg	<i>leef</i>		<i>leeft</i>		<i>leeft</i>		<i>leeft</i>
	3sg	<i>leef</i>		<i>leeft</i>		<i>leeft</i>		<i>leeft</i>
	1pl	<i>leef</i>		<i>leven</i>		<i>leven</i>		<i>leven</i>
	2pl	<i>leef</i>		<i>leven</i>		<i>leeft</i>		<i>leven</i>
	3pl	<i>leef</i>		<i>leven</i>		<i>leven</i>		<i>leven</i>

A first step which may lead us to the understanding of the system behind the dialectal variability in the inflectional system, is our hypothesis that the Dutch system is determined by a one-feature-only condition, formulated in (3).

- (3) Hypothesis I
 Each affix within the Dutch verbal inflectional system is characterized by one phi-feature only

With respect to the feature number, we take singular to be the unmarked case; it concerns the absence of the feature [plural], following Benveniste (1966) amongst others. If that is correct, the hypothesis in (3) doesn't allow person distinctions in the plural, giving rise to a system as in (4).¹⁰

¹⁰ An alternative system might arise if we would take [3] to be the unmarked expansion of the person feature. This would allow a system in which gender might be realized, such as [1], [2], [masc], [fem], [neuter], [plu]. As far as we know, there is no dialect that shows an inflectional paradigm like that. In the revised feature system that we present below (cf. Sect. 6), it follows that [3] cannot be considered the unmarked expansion of person, and consequently, that there is no room for gender distinctions in Dutch inflection, given the one-feature-only condition in (3).

- (4) Maximal phi-feature system for Dutch: [1], [2], [3], [plu]

Hypothesis I thus leads to a more specific instantiation, in which it is claimed that there are no person distinctions in inflected plural verbs. This is formulated in (5).

- (5) Hypothesis Ib
Dutch dialects do not show person distinctions in the plural

As can be observed in (2), this hypothesis is easily falsified. It is indeed the case that the inflectional affix for second person plural deviates in a large number of dialects from first and third person plural affixes, which are always identical. Examples are given in (6).

(6) a.	Bree (Limburg)		b. Lokeren (Vlaanderen)		c. Hasselt (Limburg)	
	sg	pl	sg	pl	sg	pl
	<i>leef</i>	<i>leven</i>	<i>leef</i>	<i>leven</i>	<i>leef</i>	<i>leven</i>
	<i>leefs</i>	<i>leeft</i>	<i>leeft</i>	<i>leeft</i>	<i>leef</i>	<i>leef</i>
	<i>leeft</i>	<i>leven</i>	<i>leeft</i>	<i>leven</i>	<i>leef</i>	<i>leven</i>

Given the abundant evidence to the contrary, it seems to be the case that we have to give up the hypothesis in (5), and, by consequence, the hypothesis in (3) as well. However, as we will discuss in the next section, it is not clear that an affix [2, plu] should be distinguished in Dutch dialects.

3 Second person plural inflection

In this section we argue that it is not necessary to analyse the deviant plural forms in (6) as being a realization of the feature combination [2, plu] in violation of the hypotheses in (3) and (5).

First of all, there is no dialect in which second person plural has a unique affix. In all the deviant cases there is syncretism with an affix in the non-plural part of the paradigm: second and/or third person (see (6)).¹¹

The most important argument for the non-existence of [2, plu]-inflection concerns the correlation between a deviant form in the plural paradigm and the occurrence of the pronoun *gij(-lie)* as a pronoun for a plural addressee. De Vogelaer (2005; p. 87, map 26) compares the inflection for second person singular and second person plural in Dutch dialects (cf. also Goeman 1999). The area in which a second person plural inflection differs from first and third person plural is precisely the area in which the second person pronoun is *gij* (SAND-I: map 38b): West- and East-Flanders, Brabant (incl. the province of Antwerp) and the western part of Flemish Limburg.¹² In those areas the first part of the regular pronoun for second person plural is similar to the

¹¹ An issue that is not crucial to the discussion here, is whether the verb with deviant inflection corresponds morpho-syntactically to [2] or to [3] (cf. (6)). We will come back to this issue below. For the moment we will assume that [2] is the relevant feature.

¹² The use of *gij* instead of *jij* is typical for “Standard Flemish-Dutch”, i.e. the variety that is considered to be Standard Dutch in the Dutch speaking provinces in Belgium.

pronoun for second person singular (*gij/ge*), most often followed by a plural marker *-lie* (*ge-lui, ge-lie, gij-lie*, cf. SAND-I: map 46a). The plural marker *-lui* or *-lie* is derived from a plural noun *-lui* resp. *lieden*, meaning “people”.¹³ It appears to be the case that the plural marker is optional if the speaker does not wish to express the plurality of the addressee.^{14,15,16}

If the speaker specifically wants to express that he/she addresses more than one person he/she has the option to make use of the apposition *lui/lieden* to mark plurality. The pronoun *ge/gij* is specified for [2]. The addition of the appositional *-lie* is semantically relevant in that it explicitly restricts the reference to a plural set, but it doesn’t change the morpho-syntactic properties of the pronominal phrase and by consequence of the agreement relation between the pronominal subject and the finite verb.

From this perspective it is somewhat unexpected that the majority of Dutch dialects takes the complex *jullie* (*je+lie*) as a plural pronoun morpho-syntactically ([plu]), instead of a second person pronoun ([2]). We might have expected these dialects to behave like Flemish dialects in this respect. The appearance of a morpho-syntactically plural second person pronoun is a rather recent development and was not attested before 1800 (cf. Verdenius 1938; De Vogelaer 2005).¹⁷ Middle Dutch and 17th century Dutch were in this respect similar to the Flemish dialects by having a subject pronoun *ghi/ghi-lui* for a plural addressee and *t*-inflection on the finite verb (cf. Schönfeld 1959; Stoett 1923; Weijnen 1952). The reanalysis from [2] to [plu] in Holland Dutch *jullie* probably has been triggered by intransparency of the complex pronominal. Phrases that have been formed by a pronoun + apposition (*lieden/lui*) occur rather generally for first person plural (*wullie* etc.) and third person plural (*zullie* etc.) in Flemish and Brabantish, but are generally lacking in Holland. This can be observed in the SAND-I: maps 44 and 47. The internal complexity of the pronoun *jullie* was paradigmatically irrelevant in Holland and got lost. We suppose that the appositional structure [je [lie]] has been replaced by the compositional structure [[je][lie]]. As a consequence, the *-lie* feature [plu] became dominant, possibly as a consequence of the Righthand Head Rule, and the pronoun *jullie* thus changed its morpho-syntactic feature from [2] to [plu].

Support for this analysis comes from the behaviour of the polite pronoun *U*.¹⁸ In modern Standard Dutch the polite or honorific pronoun *U* is not specified for number, just as *gij* is interpretively unspecified for number in Flanders. This is shown

¹³ See De Vogelaer (2005) for an extensive discussion of this issue.

¹⁴ In older stages of the dialects, *gij* used to be a plural pronoun and *du* the corresponding singular second person pronoun. This state of affairs can still be found in dialects in Dutch Limburg (cf. SAND-I, maps 38b, 46a).

¹⁵ In archaic Standard Dutch and in expressions, the pronoun *gij* still exists, referring to a singular or plural addressee. In those cases the verb is singular, or rather unmarked for plurality, independent of the interpretive plurality of the pronoun.

¹⁶ Kayne (2000) argues that the form “you are” in English is grammatically plural but semantically either singular or plural. Similarly with French “vous êtes”. In the case at issue here, we might have argued that the second person plural verb form is grammatically singular, though semantically plural. We take the more restrictive perspective that the deviant second person plural verb in (6) is characterized by the absence of number.

¹⁷ In archaic Standard Dutch it is still possible to combine *jullie* with a non-plural finite verb, i.e. *jullie leeft*, instead of *jullie leven*.

¹⁸ For a rather extensive discussion of the morpho-syntactic properties of this pronoun, see Bennis (2006, 2007).

in (7a,b). If we add an apposition such as *lieden* (“people”) or *allen* (“all”), indicating that *U* must be interpreted as having plural reference, the sentence becomes somewhat marked (7c), but there is no doubt that the corresponding finite verb must show up in its singular form.

- (7) a. *U* moet alleen naar huis.
 you[po] must[sg] alone to house
 b. *U* moet/*moeten allen naar huis.
 you[po] must[sg/*plu] all to house
 c. [*U* lieden/allen] moet/*moeten naar huis.
 you[po] people/all must[sg/*plu] to house
 “You alone/all must go home”

The data in (7) show that standard Dutch *U* is morpho-syntactically non-plural, even in those cases in which it is accompanied by an apposition that indicates plurality, as in (7c). In this way, the polite pronoun *U* is similar to the Flemish pronoun *ge/gij*.

Therefore, we claim that there is no evidence for the existence of the feature combination [2, plu] morpho-syntactically. The verbal form co-occurring with a plural addressee is either [plu] (Standard Dutch, northern dialects) or [2] (southern dialects). Given the detailed consequences discussed above, the analysis in which each verbal inflectional form is determined by one feature only, as is claimed in the hypotheses (3) and (5), is corroborated by the data.

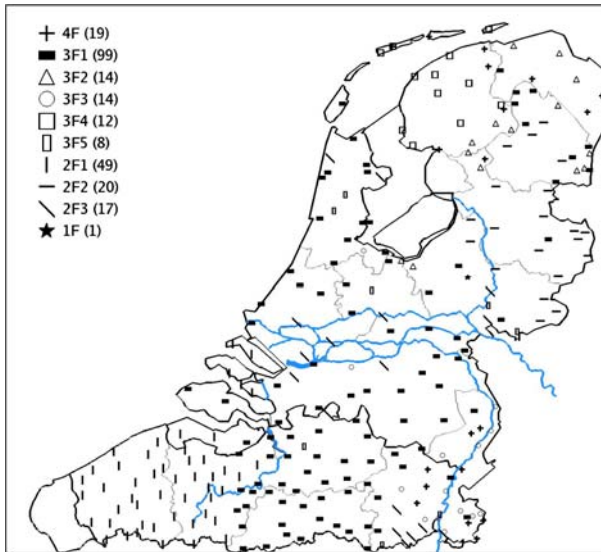
4 Patterns of deflection

The maximal paradigm with four different inflectional affixes is found in Groningen and Friesland (north-east; 8a) and Limburg (south-east; 8b). As might be expected on the basis of the preceding section, these two dialect groups differ in the inflectional affix corresponding to the second person plural pronoun. Middle Dutch was characterized by an inflectional paradigm such as (8b).

- | | | | | | |
|--------|------------------|--------------|----|----------------|--------------|
| (8) a. | Groningen | | b. | Limburg | |
| | sg | pl | | sg | pl |
| | <i>leef</i> | <i>leven</i> | | <i>leef</i> | <i>leven</i> |
| | <i>leefst</i> | <i>leven</i> | | <i>leefst</i> | <i>leeft</i> |
| | <i>leeft</i> | <i>leven</i> | | <i>leeft</i> | <i>leven</i> |

We now turn to the various ways to reduce the number of inflectional affixes in the process of deflection that can be witnessed in Dutch dialects. Map 2 shows the various patterns of inflection that are found.

In order to understand the patterns of deflection, we will start with a discussion of the maximal paradigm. The 19 dialects with four different inflectional affixes (4F) are characterized by *st*-inflection for second person singular. Moreover, all these dialects have a corresponding second person pronoun *du* or *dich* (cf. SAND-I: map 38b). There thus appears to be a correlation between the occurrence of *du/dich* and the presence of *st*-inflection. In the dialects in which *du/dich* does not/no longer exist, second person inflection in non-inverted clauses is generally assimilated to third



Map 2 patterns of deflection of *leven* “to live”

person inflection *-t* (Standard Dutch, West-East-Flanders, Lower Saxony), with the exception of Stellingwerf (*-en*, 3F2) and some isolated cases (*-0*, 3F5). On the basis of this pattern, we can now formulate the generalization in (9), which we will discuss in more detail in the next section.

(9) Generalization I

Dialects with four different affixes in their verbal inflectional paradigm (4F) are uniquely characterized by:

- a. *-st* inflection for second person singular ([2])
- b. the pronoun *du/dich* as a second person singular subject

Let us now proceed to the different reduction patterns that are found on map 2. Four different systems with three forms ($n = 147$) are realized in delimited dialect areas (3F1–3F4). One pattern (3F5) does not show a clear distribution. The patterns are given below.

3F1	Holland and Brabant / Standard Dutch	$n = 99$
	[1] [2/3] [plu]	
	<i>-0</i> <i>-t</i> <i>-en</i>	
3F2	Stellingwerf	$n = 14$
	[1] [3] [2/plu]	
	<i>-0</i> <i>-t</i> <i>-en</i>	
3F3	Limburg	$n = 14$
	[1/3] [2] [plu]	
	<i>-0</i> <i>-s</i> <i>-en</i>	

3F4	Friesland			<i>n</i> = 12
	[2]	[3]	[1/plu]	
	- <i>st</i>	- <i>t</i>	- <i>en</i> (- <i>je</i>)	
3F5	no coherent distribution			<i>n</i> = 8
	[1/2]	[3]	[plu]	
	-0	- <i>t</i>	- <i>en</i>	

Systems with two different forms in the verbal paradigm are found in four dialect areas (*n* = 86), and show three different patterns. These patterns are given below:

2F1	West-/East-Flanders			<i>n</i> = 49
	[2/3]	[1/plu]		
	- <i>t</i>	- <i>en</i>		
2F2	Lower Saxony			<i>n</i> = 20
	[1]	[2/3/plu]		
	- <i>e</i> /-0	- <i>t</i>		
2F3	South-East Limburg / River area			<i>n</i> = 17
	[1/2/3]	[plu]		
	-0/- <i>t</i>	- <i>en</i>		

A striking observation is that almost all Dutch dialects have a *t*-affix corresponding to the third person singular subjects. On the basis of these facts we postulate the generalization in (10).¹⁹

- (10) Generalization II
Verbal inflection [3] is characterized by a *t*-affix

5 *t*-Deletion

There are exceptions to the generalizations in (9) and (10). Apparently, Generalization II is violated in the patterns 3F3 and in most of the cases in 2F3 (12 out of 17). In these instances, there is no visible affix corresponding to third person singular subjects. Goeman (1999) has demonstrated quite clearly that there exists an optional process of *t*-deletion in Dutch dialects. The process of word final *t*-deletion is determined by various factors, but it is evident that *t*-deletion is a morphologically conditioned phonological rule that applies amongst others in the

¹⁹ The stability of the *t*-affix for third person singular inflection in Dutch appears to correspond to the third person affix -*s*, which is the only remaining inflectional affix in English.

Limburg dialects.²⁰ Assuming the rule of *t*-deletion to apply in the dialects in 3F3 and 2F3, Generalization II is almost without exceptions.^{21,22}

Especially interesting in this respect is the fact that pattern 3F3 seems to possess a unique inflectional affix *-s* for second person singular that does not occur anywhere else in the dialects. These dialects have the second person pronoun *du/dich*, as well (SAND-I: map 38b). The Limburg dialects appear to prevent a biconditional interpretation of the correlation in Generalization I: a dialect has *st*-inflection for [2] if it has *du/dich* as a second person singular subject pronoun, and vice versa. However, the process of *t*-deletion in this area allows us to stick to a strict interpretation of the correlation between *du/dich* subjects and *st*-affixation. The pattern in 3F3 can be derived by the application of *t*-deletion on the maximal pattern 4F that is found in the same area. This derivation is illustrated in (11).²³

(11)		[1]	[2]	[3]	[plu]	
	F4:	-0	-st	-t	-en	<i>t</i> -deletion = =>
	3F3:	-0	-s	-0	-en	

Consequently, we take the exceptional *s*-affix to be an underlying *st*-morpheme and [3] to be *-t* underlyingly, in accordance with Generalization II.

6 Natural classes for syncretism

From the patterns in Sect. 4, it can be observed that [2/3] should be a natural class for inflectional syncretism. It shows up in Holland, Brabant and West-East-Flanders ($n = 148$) and is part of the standard language. [1/2] and [1/3] syncretisms do not occur regularly: [1/2] is the syncretism that is found in pattern 3F5 ($n = 8$) and in the inverted order (... V -subj ...) in Standard Dutch and many dialects; [1/3] is only found in pattern 3F3. In the preceding section we have argued that 3F3 is a non-existing inflectional pattern, but rather the result of *t*-deletion on pattern 4F. This brings us to the generalization in (12).

²⁰ Why *t*-deletion is primarily restricted to Limburg dialects in our data remains unclear. Many other dialects optionally allow deletion of an inflectional *t*-affix.

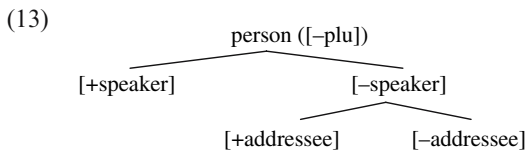
²¹ Below we argue that 3F3 is an instance of 4F in which the optional process of *t*-deletion has been applied. Apparently, the informants in 3F3 locations show a preference for applying *t*-deletion.

²² An interesting exception to Generalization II is the dialect of Beekbergen that has no inflectional distinctions left (cf. (2)). We may assume that the inflectional affixes in this dialect have also undergone the rule of *t*-deletion. Given that Beekbergen is on the border of the Lower-Saxon dialects and a strong *t*-deletion area, it might be the case that this dialect belongs to the Lower-Saxon pattern in 2F2, with deletion of verb final *-t* in [2], [3] and [plu].

²³ Note that this analysis leads us to a more abstract interpretation of the relation between the form of the inflection and its features (cf. Sect. 1). As it is clear from (11), the zero-inflected finite verb in dialects of the type 3F3 can be either [1] or [3] superficially, as a consequence of *t*-deletion on [3].

- (12) Generalization III
[1/3]-syncretism does not occur

We thus suppose that [1/3] is not a natural class for syncretism.^{24,25} How can this generalization be expressed within the system? In order to account for syncretism, we could rely on a feature-system in the spirit of Harley and Ritter (2002) in which the features [\pm speaker] and [\pm addressee] are being distinguished. Such a system would give rise to a feature-structure as in (13).



In an organization as in (13) we expect syncretisms to be of the type [2/3], or rather [-speaker] or of the type [1/2/3] (or [-plu]). Although we observe [2/3]-syncretism to be present in the majority of the deflected varieties, [1/2] syncretism does occur (3F5 and inverted contexts). Since [1/2]-syncretism cannot be expressed in a feature system such as (13), we should look for another way to understand the observed patterns of inflection. Kerstens (1993) proposes a different feature system, in which the features [\pm speaker] and [\pm utterance] are distinguished. The feature [+utterance] applies to elements of which the reference is determined as a consequence of the utterance, as is the case with speaker and addressee.²⁶ This system gives rise to three feature combinations, as shown in (14).

- (14) a. [+utterance, +speaker] = first person
 b. [+utterance, -speaker] = second person
 c. [-utterance, -speaker] = third person
 d. [-utterance, +speaker] = * (contradictory)

If this is the correct feature system, there are two natural classes for syncretism: [+utterance] and [-speaker]. This implies that we expect systems with [1/2]-syncretism (+utterance) in which the feature [\pm speaker] is neutralized, and we expect [2/3]-syncretism (-speaker) in which case [\pm utterance] is neutralized. Since [1] and

²⁴ According to Cysouw (2001), 1/3-syncretism is typologically rare, and occurs mainly in plural contexts as in Flemish and Brabantish. For these dialect groups we have argued above that it does not concern 1/3-syncretism, but rather the absence of plural, in combination with 2/3-syncretism (cf. Sect. 3 and 4).

²⁵ A problem for this generalization is the fact that we do find [1/3]-syncretisms, but only in the case of modal verbs (in Standard Dutch), as in *willen* ‘‘to want’’ (*ik wil, jij wilt, hij wil*), *kunnen* ‘‘to be able’’ (*ik kan, jij kunt, hij kan*) or *zullen* ‘‘shall/will’’ (*ik zal, jij zult, hij zal*). This appears to be a problem. Note that the modal verbs are also deviant with respect to the almost exceptionless pattern that [3] is characterized by a *t*-affix (cf. Generalization II, (10) above). Given that there are other deviant properties in modal inflection such as vowel shift (*zAl* vs *zUlt* and *kAn* vs *kUnt*), we leave the irregular category of modals out of consideration here. We discuss the inflectional properties of modal verbs in more detail in Sect. 10.

²⁶ We might have proposed to make use of the feature [\pm participant] instead of [\pm utterance] (Harley and Ritter 2002). For reasons that will become clear below, we have a slight preference for the feature [\pm utterance], although nothing hinges on this choice.

[3] have no features in common in (14), the syncretism [1/3] is not expected to occur. The feature organization in (14), although less restrictive, appears to be a better system to analyse syncretisms in the Dutch inflectional system than the system for person features in (13).

There is an additional consideration that may support an analysis in terms of [\pm utterance] and [\pm speaker]. A potential complicating factor in the analysis of syncretism is the fact that the choice of the inflectional affix is not only determined by properties of the subject itself, but sometimes by the position of the subject with respect to the inflected verb as well. In Standard Dutch we find this to be the case in second person singular inflection, as can be observed in (15). In subject initial clauses such as (15a), the verb is *t*-inflected. This inflection is absent in topicalized phrases (15b) or V1-clauses such as the yes/no-question in (15c).

- (15) a. Jij spreek-**t** altijd dialect.
 You speak always dialect
 b. Altijd spreek-**0** jij dialect.
 c. Spreek-**0** jij altijd dialect?

Other instances of this phenomenon are found in eastern dialects (cf. Van Haeringen 1958). Based on this phenomenon amongst others, Zwart (1993) argues that the finite verb in main clauses in Dutch is not uniformly located in the C-position, as has been the standard view of Verb Second after Den Besten (1977). Zwart argues that the finite verb is located in the I-domain in subject initial main clauses (as in (15a)) and in the C-domain in clauses in which the subject follows the verb (15b, c). At least for Standard Dutch we may therefore argue that the nature of syncretism is determined by the position of the verb. If the finite verb resides in I in subject initial clauses, [2/3]-syncretism is determined by the feature [$-$ speaker]; if the verb is moved to the C-position, [1/2]-syncretism is determined by the feature [$+$ utterance]. The fact that the utterance-feature is located in the C-domain and the speaker-feature in the I-domain appears to correlate with the differential properties of these domains: the C-domain is characterized by general pragmatic features of the clause (e.g. features expressing mood), whereas the I-domain is the location of pronominal properties of the subject.²⁷

7 Second person deflection

Let us now return to a problem we have left undecided above (cf. footnote 11). We have observed that the form of the second person plural inflection is either [plural] or [2]. The paradigms in (6), however, show that the deviant inflection is always similar to [3], whereas it deviates from [2] in (6a). This latter situation shows up in a number of Limburg dialects with a specific *-st/-s* affix corresponding to second person singular subjects. The claim that the deviant plural inflection should be analysed as an instance of the morpho-syntactic category [3], would require the assumption that there is no intrinsic relation between morpho-syntactic categoriza-

²⁷ From this it follows that only second person should be allowed to have different inflections with respect to different word orders, since [3] and [1] are characterized by one feature only: [$+$ speaker] for [1] and [$-$ utterance] for [3], as is argued below (cf. (17)).

tion and semantic interpretation in the domain of inflection since [3] may agree with a second person plural pronoun. However, the existence of such a strict relation is presupposed in theories such as discussed in the previous section. We then take the position that it cannot be the case that the agreement between a second person plural pronoun and the finite verb is morpho-syntactically of the type [–speaker, –utterance].

Given our analysis of syncretism above, we claim that in cases such as in (6), the relevant inflection feature is not [2] or [3], but rather [–speaker]. Support for this assumption comes from the fact that we find a similar situation with the pronouns *gij* and *U*. These pronouns similarly deviate from Standard Dutch inflection for second person singular in the inverted order, as is shown in (16).

- (16) a. Leef/*Leeft jij nog?
live you still
b. Leeft hij nog?
lives he still
c. Leeft/*Leef U nog?
live you[polite] still
d. Leeft/*Leef *gij* nog?
live you[archaic] still
“Are you/Is he still alive?”

In the inverted V1-order in (16), the finite verb loses its *t*-affix in (16a), but not in (16b–d). The addressee pronouns *gij* and *U* in (16c, d) cause the inflected verb to show a *t*-affix in the inverted condition, just like *hij* “he” in (16b) and unlike *jij* “you” in (16a).²⁸ This observation leads us to assume that the inflected verbs corresponding to *hij*, *gij* and *U* should be analysed as [–speaker] in both inverted and non-inverted order. It is the pronoun *jij* that is the deviant one in that it causes an order effect that might be analysed as being a consequence of the feature [–speaker] in I and [+utterance] in C, as argued above.

Returning to the paradigm of Bree in (6a), we conclude that the inflection corresponding to plural *gij* is morpho-syntactically specified as being [–speaker], whereas the inflection agreeing with the second person singular pronoun *du* is specified as being [–speaker, +utterance], giving rise to the specific *st*-form. This leads us to a new perspective on the one-feature hypothesis in (3).

8 One-feature-only revisited

Without further discussion we have assumed above that [1], [2] and [3] are instances of a one-feature system, in which the person categories 1, 2 and 3 are taken to be single features. However, in order to understand syncretism, we have introduced the features. This leads to an inconsistent system in which [1], [2] and [3] are considered to be single features on the one hand, while they are being decomposed into more primitive categories on the other.

Let us therefore assume that [1], [2] and [3] are abbreviations for different combinations of the primitives [±speaker] and [±utterance], as in (14). The system in

²⁸ In the order in which the subject precedes, all these pronouns combine with a *t*-inflected verb.

(14) still allows some simplification by getting rid of redundancies. This brings us to a system for person features as represented in (17).

- (17) a. [1] = [+speaker] (implies [+utterance])
 b. [2] = [–speaker, +utterance]
 c. [3] = [–utterance] (implies [–speaker])

From (17) it follows that [1] and [3] are in line with the hypothesis in (3), by being characterized by one feature only, [+speaker] and [–utterance], respectively. It is second person singular that constitutes the problem. However, as we have seen above, [2] appears as a separate, non-syncretized inflectional category ($n=45$) in the provinces of Friesland (3F4), Groningen (4F) and Limburg (4F/3F3) only. It concerns the *st-/s-*inflected verbs. We may take these peripheral dialects to represent an earlier stage of the language in which the one-feature condition is not (yet) operative.²⁹ This view allows us a perspective on the process of deflection in such a way that deflection is characterized by the reduction of morpho-syntactic features, which is a clear instance of an economical process within the grammatical system (cf. Chomsky 1995).³⁰

The introduction of the one-feature condition in Dutch has a direct effect on the realization of the inflection for second person singular. The problematic feature representation [–speaker, +utterance] has to go. The mechanism to do so is syncretism, which is a means to establish deflection. It either develops into [–speaker] which results in [2/3]-syncretism, or into [+utterance] which leads to [1/2]-syncretism. The second person pronouns *U* and *gij* uniformly co-occur with the [–speaker] option. For the second person pronoun *jij* the one-feature condition is realized in a more complex way. The [–speaker]-inflection is realized in the I-domain and the [+utterance]-inflection in the C-domain.³¹

The most frequent inflectional paradigm of present-tense verbs is found in the dialects of Holland and Brabant (and Standard Dutch) and can be characterized as in (18).

- (18) Holland/Brabant (3F1 / $n=99$)
non-inverted (I) *inverted* (C)
 –0 [+speaker] –0 [+utterance]
 –*t* [–speaker] –*t* [–utterance]
 –*en* [plural] –*en* [plural]

²⁹ Support for this view may be derived from the fact that in *–st-*dialects word order is not relevant in the case of second person singular. Both in C-position and in I-position, the verb is *st/s-*inflected.

³⁰ Intuitively speaking, the reduction of inflectional features is made possible by the fact that the language requires subjects to be overtly present. Interestingly, we can observe that only in the case of *st-*inflection — which is the only affix that corresponds to a unique pronominal subject (i.e. *du/dich* or [–speaker, +utterance, –plural]) — a pro-subject is allowed in finite clauses in Dutch dialects. This observation should lead us to a construction-specific approach to pro-drop (cf. Bennis 2006).

³¹ Only a few scattered dialects opt for a general [±utterance] strategy (3F5). The fact that the [±speaker] paradigm for person features is more often realized than the [±utterance] paradigm in dialects of Dutch remains to be explained.

9 Another strategy for deflection

We have argued above that the majority of the Dutch dialects can be characterized by a condition that allows one phi-feature only to determine a particular instantiation of verbal inflection. The hypothesis in (3) was argued to be relevant in the organization of the inflectional paradigms in the dialects, mainly with respect to second person plural and second person singular. However, so far we have not succeeded in explaining all the instances of syncretism that are found in the dialects.

If deflection is caused by a reduction of features required to characterize a particular inflectional affix, maximal deflection is the absence of specific features, resulting in the absence of formal distinctions in the paradigm. A logical situation in between the maximal deflection that is characteristic of Afrikaans and a one-feature organization that characterizes most varieties of Dutch, is the situation in which all the inflectional forms in a paradigm are characterized by a specific feature except one. This featureless inflection can be considered to constitute the default.

Let us try to introduce this perspective into the theory that is developed here. Suppose we take the verbal feature [+finite] to characterize the default form within a paradigm. The feature [+finite] is maximally underspecified since it provides no information with respect to the inflectional phi-features for person and number. It is inserted to distinguish [+finite]-inflected or finite verbs from verbs that are non-finite and to indicate that subject-verb agreement is applicable.³² It allows operations that manipulate finite verbs (such as Verb Second) to take place by referring to the finiteness feature. At the same time, it also satisfies the one-feature condition in (3).³³ We can now formulate the hypothesis in (19).

(19) Hypothesis II

The feature [+finite] represents the default form in a verbal inflectional paradigm

Accepting the existence of a morpho-syntactic feature [+finite], we have to look for candidates within the paradigm that are maximally unspecific. The obvious candidate in the paradigms of varieties of Dutch is the form that is corresponding to plural subjects, amongst others because the feature plural is substantially different from the other features that were discussed above in that it is not binary. In the presence of person features, we have taken “singular” to mean the absence of plurality, rather than the negative value of a feature [\pm plural]. We may go one step further and claim that [plural] is not a morpho-syntactic feature either. This would give rise to a situation in which plural subjects agree with an inflectionally unspecified verb that is characterized by the feature [+finite], as in (20).

(20) Hypothesis IIb

The feature [+finite] represents the default form in the verbal inflectional paradigm; it is found on finite verbs that correspond to plural subjects in Dutch

³² Note that in this view the feature [+finite] is considered to refer to the agreement-properties of the verb, rather than to its tense-properties. This might be supported by the fact that tenseless, finite verbs seem to exist, as in the case of imperatives (Bennis 2006).

³³ If a particular inflectional form is characterized by a phi-feature such as [+speaker] or [-utterance], the feature [+finite] is of course redundant.

The advantage of such an approach is that we may begin to understand the fact that in a large number of dialects ($n=95$), the finite verb form that co-occurs with plural subjects, shows up in agreement with singular subjects as well. In Friesland (3F4), and Flanders (2F1), the *en*-affix co-occurs with plural subjects and first person pronouns ($n=61$), in Stellingwerf (3F2) the *en*-affix corresponds with plural and second person subjects ($n=14$) and in Lower Saxony (2F2) the *t*-affix is used in agreement with plural, third person singular and second person singular subjects ($n=20$). These dialects form syncretisms by adding to the default.³⁴ They have the inflectional paradigms shown in (21).

(21)	<i>Stellingwerf</i>	<i>Friesland</i>	<i>Flanders</i>	<i>Lower Saxony</i>
	-0 [+ speaker]	-st [-speaker, + utterance]	-t [-speaker]	-0 [+ speaker]
	-t [-utterance]	-t [-utterance]	-en [+ finite]	-t [+ finite]
	-en [+ finite]	-en/-je [+ finite]		

As a consequence of the one-feature condition in (3) and by introducing a default feature [+finite] in (19), we are able to provide an account of almost all the syncretisms that are found in the inflectional paradigms of varieties of Dutch.

10 [1/2/3]-syncretism

There is one type of syncretism that has not been discussed yet. It concerns the case of the 17 dialects that have [1/2/3]-syncretism in pattern 2F3. This pattern is mainly found in strong *t*-deletion areas in Limburg and the River area. In Sect. 5 we have argued that the 12 dialects that have a uniform zero-affix in [1], [2] and [3] can and probably should be analysed as dialects in which the *t*-affix has been deleted for [2] or [3]. If we take that to be the case, these dialects do not constitute a case of [1/2/3]-syncretism; they belong to the Holland/Brabant dialects in 3F1.

We are thus left with five dialects with [1/2/3]-syncretism in which the *t*-affix is found in the case of agreement with a singular subject. A remarkable property of these dialects is that *t*-inflected verbs occur in agreement with the first person pronoun *ik*. These are the only five dialects that show this co-occurrence.

In Goeman (1999: p. 218/map 3) it is demonstrated that the area around Rotterdam is the area in which a *t*-affix may co-occur with a first person singular pronoun. This is in line with our data. Given that no person distinctions are left, it seems to be the case that these dialects make use of the number distinction [\pm plural] in verbal inflection, instead of a person distinction.

Support for the assumption that [1/2/3]-syncretism exists in Dutch can be derived from the inflection of modal verbs. It can be observed that modals are in the process of developing a [1/2/3]-syncretism, since in addition to the regular zero-inflected

³⁴ It is interesting to note that the actual form of the default is the *en*-affix (the “normal” affix for plural agreement) in those cases in which it concerns [1/plu]- or [2/plu]-syncretism, whereas it is a *t*-affix in the case of [3/plu]-syncretism. This again points at the strong character of the *t*-generalization in (10).

modals for [1] and [3] (cf. footnote 25), the zero-inflected forms *jij wil* “you want”, *jij kan* “you can” and *jij zal* “you will” are increasingly considered to be Standard Dutch as well (cf. Postma 1993, Haeseryn et al. 1997). In this way these modal verbs follow the modal verb *mogen* (“to be allowed to”) in which the process of [1/2/3]-syncretism has been completed in Standard Dutch: *ik mag*, *jij mag* (archaic: *gij/U moogt*), *hij mag*.

Related to modals in this respect is the irregular verb *hebben* that appears to undergo a similar development in substandard Dutch. The standard paradigm for *hebben* is *ik heb* “I have”, *jij hebt* “you have”, *hij heeft* “he has” and *wij/jullie/zij hebben* “we/you/they have”. The finite form corresponding to third person subjects is *heb* instead of *heeft* in substandard varieties. This is a remarkable form; on the one hand it concerns a regularization in that the verbal stem is changed from *heeft* to *heb*, which is the stem that is present in the rest of the paradigm; on the other hand it is irregular in that it does not fit the general pattern that [3]-agreement is expressed by *t*-inflection (Generalization II). The “expected” form *hebt* is ungrammatical for agreement with third person subjects (**hij hebt*) in these varieties (which pleads against a *t*-deletion approach to *heb*, since *t*-deletion is always optional). Given that these varieties also allow [2] to be zero-inflected, the inflectional system of *hebben* shows a similarity to modal verbs by developing a [1/2/3]-syncretism without overt inflection.

Finally, we find a similar distinction between singular and plural verbs in the case of past tense, for both weak (with past inflectional morpheme) and strong (with vowel shift) verbs, as shown in the examples in (22).

(22)	weak: <i>werken</i> (“to work”)	strong: <i>vinden</i> (“to find”)
	<i>werkte</i>	<i>vond</i>
	<i>werkte</i>	<i>vond</i>
	<i>werkte</i>	<i>vond</i>
	<i>werkten</i>	<i>vonden</i>
	<i>werkten</i>	<i>vonden</i>
	<i>werkten</i>	<i>vonden</i>

Given the fact that past is realized as a separate morpheme or with umlaut, it seems reasonable to claim that the feature [+past] does not fall under the one-feature condition, which appears to be restricted to agreement features only. In addition to the tense feature, past verbs provide a position for an agreement feature, which appears to be characterized as [\pm plural].

These three types of data — the subset of 2F3 verbs which have *t*-inflection for first person, modal and auxiliary verbs, and past verbs — lead us to assume that there exist another way to realize deflection. In the cases mentioned in this section, person features are replaced by the number distinction [+plural] or [–plural]. In all the other cases we have discussed before, the number feature was argued to be irrelevant; the feature-systems were argued to contain person-features only, with the addition of the default feature [+finite]. This observation allows us to postulate the hypothesis formulated in (23).

(23) Hypothesis III

Dutch inflectional paradigms allow the presence of only one inflectional category for agreement ([number] or [person])

We either have person-based inflectional paradigms, as the paradigms discussed in the preceding sections, or number-based inflectional paradigms as the paradigms that were introduced in this section. Why person-based inflection is predominantly found on non-past main verbs and number-based inflection on modals, auxiliaries, past verbs and a small minority of non-past main verbs remains to be investigated.

If this analysis is correct, we now have an additional perspective on why the plural part of the paradigms in the preceding sections behaves as the default category [+finite]. The condition in hypothesis (23) forces us to drop the number feature [plural] from a paradigm in which person features play a dominant role. We therefore consider hypothesis IIb to be the consequence of hypothesis III.

11 Features and forms

In this section, we provide an overview of the various feature systems that are relevant for various dialects. From the list of dialects in Sect. 4, we have eliminated the categories that were argued to be the result of *t*-deletion: 3F3 and the majority of dialects in 2F3. We are left with eight different patterns in the dialects of Dutch:

4F + 3F3	Limburg (n = 33)	[+speaker]	[-speaker, +utterance]	[-utterance]	[+finite]
		-0	-st	-t	-en
3F1 + 2F3	Holland + Brabant (n = 111)	[+speaker]	[-speaker]	[+finite]	
		-0	-t	-en	
3F2	Stellingwerf (n = 14)	[+speaker]	[-utterance]	[+finite]	
		-0	-t	-en	
3F4	Friesland (n = 12)	[-sp, +utt]	[-utterance]	[+finite]	
		-st	-t	-e	
3F5	no coherent distribution (inverted order) (n = 8)	[+utterance]	[-utterance]	[+finite]	
		-0	-t	-en	
2F1	Vlaanderen (n = 49)	[-speaker]	[+finite]		
		-t	-en		
2F2	Lower Saxony (n = 20)	[+speaker]	[+finite]		
		-0	-t		
2F3	Rotterdam-area (n = 5)	[-plu]	[+plu]		
		-t	-en		

Six of these patterns are found in clear and well-known dialect areas. We have included the infrequent pattern 3F5, since this pattern is found in the inverted order in Standard Dutch.

Thus far we have concentrated mainly on the feature systems. However, as is clear from the overview of patterns above, the set of affixes that is used is quite constant in the varieties of Dutch. The generalization appears to be that [1] = -0 , [2] = $-st$, [3] = $-t$ and [plu] = $-en$, just as in the paradigm 4F. It is evident that $-st$ is the least robust affix. Only in 45 dialects, mainly in Limburg and Friesland, we still find the st -affix, always in agreement with second person singular only (cf. Sect. 4). On the other side of the scale of strength we find that $-t$ co-occurs with third person singular noun phrases in all cases. The only cases in which the t -affix is lacking is in t -deletion contexts, as discussed above. The generalization that $-en$ agrees with plural subjects is only violated in the case of Lower Saxon. This is an interesting case, since [3]/[–utterance] has been added to the default [+finite]. The resulting competition between $-en$ and $-t$ is apparently settled in favour of the t -affix. The last generalization, -0 = [1], is quite strong, but is violated in Friesland (3F4; $n = 12$), Vlaanderen (2F1; $n = 49$), the Rotterdam area (2F3; $n = 5$) and in more than half of the dialects in the Lower Saxon area (2F2; $n=12$ (out of 20)). Summarizing, we have the order of affixes in terms of robustness given in (24).

(24) Order of affixes in terms of robustness

$$-t > -en > -0 > -st$$

The relevance of the order in (24) is corroborated by the fact that in all cases of syncretism in the Dutch dialects the actual choice of the affix is in line with the ordering in (24).

We can conclude that the actual patterns of in- and deflection are determined by properties of the feature system involved, in combination with the available affixes and their surviving properties.³⁵

12 Dialect areas

Although inflection and deflection in the verbal domain of varieties of Dutch are subject to constraints, as discussed above, a number of options for a particular dialect area remain. We have seen that the selection of particular instantiations of the feature system is made in a remarkably coherent fashion geographically. Traditional dialect areas appear to favour their own distinctive choice from the available options. A short discussion of the different areas is given below.

The area in which we find four distinct forms (4F) predominantly is Limburg, in particular Dutch Limburg and the eastern part of Belgium Limburg. The system that we find in this area is to a large extent similar to the inflectional paradigms of

³⁵ There is one more process which might contribute to deflection. There seems to be a phonological condition at work. There exists a tendency to restrict inflection to one phonological segment (or zero). There are two violations of such a generalization. The st -affix and the en -affix. The st -affix corresponds to two inflectional features and is the least robust affix in the paradigm. The fact that $-st$ has almost disappeared from Dutch varieties is possibly in part inspired by the relative phonological complexity of the affix. The en -affix is generally reduced in Dutch varieties, either by n -deletion or by schwa-deletion; the finite verb *leven* is pronounced as [leve] in Holland dialects and as [leevn] in eastern dialects. Whether or not such a condition is relevant in deflection is a question that we leave for further research.

Standard German and Middle Dutch. In this area we find the phenomenon of *t*-deletion (pattern 3F3), which only superficially disturbs the unity of this area.

The Holland–Brabant area shows the pattern that is similar to Standard Dutch (3F1), as might have been expected. This area is characterized by a syncretism of the type [–speaker] in the non-inverted order.³⁶ The fact that second person agreement is no longer distinguished fits the tendency to drop [–speaker, +utterance] as a consequence of the one-feature condition.

The Flemish area is characterized by a further reduction of forms (2F1). In addition to second person agreement it also drops first person inflection as a distinct inflectional category. The tendency to stick to the most robust affixes — the plural *-en* affix and the third person *t*-affix (see (24))—is observed. The Flemish system appears to be the variety that is the consequence of further reducing the Holland–Brabant system.³⁷

As usual, the Frisian area diverges from the rest of the Dutch dialects. It is the only dialect area where a distinct second person inflection remains in place in cases with three (or less) inflectional affixes, violating the one-feature condition. We might predict that the loss of *-st* is the next step in the development of Frisian, which might give rise to an English-type system if [2] is added to the default category [–finite]. The other option—[2] becomes part of the syncretized category [–speaker]—, would lead to the Flemish system.

The fifth major inflectional system is found in the Lower-Saxon area. In this system third person inflection became part of the default. As a consequence, the default affix became *-t* since the *t*-affix is the most robust affix in Dutch paradigms (24).

The Rotterdam area is special in that it has developed a number-based paradigm instead of the person-based paradigms in the other dialects. The actual choice of affixes (*-t* for [–plural], *-en* for [+plural]) is in line with the scale of robustness that was discussed in the preceding section.

A very interesting area is the extreme north-east, in between Friesland, Lower-Saxony and Germany. Part of this area is known as the Stellingwerf-dialect area. This is the only area without a dominant paradigm. We find the paradigms 4F ($n = 9$), 3F1 ($n = 9$) and 3F2 ($n = 12$) distributed quite randomly. It appears to be an area in which the reduction of four forms to three forms is gradually taking place through the drop of the *st*-inflection through [–speaker]-syncretism as in Holland–Brabant (3F1) or through adding [2] to the default (pattern 3F2).³⁸ If the pressure of normative Dutch is higher than the identity related tendency to develop a separate system, we will see 3F1 win the battle; if identity prevails over norms, the paradigm 3F2 will dominate inflection in this area in the future. It would be interesting to observe in more detail what is happening to verbal inflection in this area in the near future.

³⁶ Whether these dialects show [+utterance]-syncretism in the inverted order systematically, as is the case in Standard Dutch, is something that is left for further research.

³⁷ In this respect it is interesting to observe that the northern part of Zeeland, which we might have expected to demonstrate the Holland–Brabant system, is the only area outside Flanders in which the Flemish pattern 2F1 is found.

³⁸ In the 4F dialects the formal second person pronoun is *joe* or *jo* and the corresponding inflection on the verb is *-en*. The fact that this pronoun is phonologically similar to the informal standard Dutch *jij*, might lead the development of these dialects in the direction of the 3F2-type dialects.

13 Conclusions

We have argued above that the dialectal variation in verbal deflection is the result of an ongoing simplification of the feature system involved. On the basis of a detailed survey of the variation within the Dutch dialects, we have been able to provide a first approximation of the process of deflection that was seen to be the consequence of five properties. These properties are:

- A. the reduction of the number of distinctive features for a particular affix in an inflectional paradigm (one-feature condition in (3));
- B. the organization of person features in [\pm speaker] and [\pm utterance] in (14);
- C. the introduction of a default category [+finite] in (19);
- D. the reduction of the number of feature categories in an inflectional paradigm (one-feature-category condition in (23));
- E. the robustness scale in (24).

The one-feature condition was seen to be relevant in the discussion on the non-existence of deviant plural forms of the type [2,plu] and in the demise of the *st*-affix in Dutch dialects for second person singular inflection. The feature organization in (14) was relevant in order to explain the non-existence of [1/3]-syncretism in the Dutch language area. The introduction of a default category was required in order to explain the occurrence of [1/plu], [2/plu] and [2/3/plu] syncretisms in the Dutch dialects. With the restriction of feature categories we were able to account for the existence of number-based paradigms versus person-based paradigms and to interpret the introduction of the default category. Finally, we have seen that the affix ordering in (24) was relevant in the choice of the actual affix in syncretized categories.

In this way, we have achieved an account of geographic and synchronic variation of verbal inflection in the Dutch language area. Although the data appeared to be rather unsystematic and chaotic at first sight, the ordering of paradigms by means of the properties in A–E provides a precise perspective on language variation and a dynamic perspective on language change in the realm of verbal inflection.

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