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Comparative Studies in Germanic Syntax
From Afrikaans to Zurich German

Edited by
Jutta M. Hartmann
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Volume 97
Comparative Studies in Germanic Syntax: From Afrikaans to Zurich German
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Towards a syntactic theory of number neutralisation

The Dutch pronouns je ‘you’ and ze ‘them’*

Gertjan Postma
Meertens Institute, Amsterdam and Nijmegen University

Dutch has two weak pronouns je (‘you’) and ze (‘she/they’ or ‘her/them’), which show number neutralisation in function of the syntactic context. Je can be singular or plural only when it is bound, while ze is either singular or plural when it is subject but not when it is object (in some dialects). This is accounted for by Kayne’s syntactic theory of number neutralisation: the plural reading, as well as its syntactic sensitivity, comes about by an abstract distributor, DIST, which must be bound. Extending Kayne’s theory, it is proposed that DIST must be bound by an argumental position (je) or by an non-argumental position (ze). The theory is applied to two diachronic issues: 1. the transition of sg/pl Middle Dutch hem (‘him/them’) to sg Modern Dutch hem (‘him’) and 2. the introduction of the English pronoun ‘they’, which was needed because of loss of neutralisation in Old-English hio (‘she/they’).

1. Introduction

Language, and morphology in particular, can be studied in its syntagmatic and in its paradigmatic aspects (Saussure 1910 [1993]). Ever since Baker (1985[1988]), the syntagmatic aspects of morphology has been subject to reduction to syntax proper. It raised the more general question whether syntax and morphology represent distinct modules of grammar, as traditional grammarians assume, or that syntax and (the syntagmatic part of) morphology share their basic formal

*I would like to thank the audience of the TIN-conference, Utrecht 2005 and the audience of the Germanic Comparative Syntax Workshop, Tilburg 2005, and two anonymous reviewers for their helpful comments on a preliminary version of this paper.
properties, such as hierarchical ordering, binary branching, anti-symmetry, etc. so that there is no firm basis to hypothesize two distinct modules. The introduction of functional projections has boosted the integration of morphology and syntax further, especially after the work of Pollock (1989) and others, who show a systematic connection between inflectional morphology and syntactic operations. Later developments have put the connection between morphological features and syntactic operations on a more abstract footing e.g. in Chomsky’s minimalism, who introduces abstract formal features on morphemes as the trigger of syntactic movements.

The paradigmatic aspect of morphology has resisted integration into syntax much more. But also here, proposals can be reported that argue for a syntactic motivation for paradigmatic structure, e.g. patterns in definitiveness and allomorphy (Postma 1993; Bobaljik 2004; Barbiers 2005). Kayne (2000) contains an intriguing suggestion in the direction of a syntactic theory of paradigmatic feature neutralisation. In the present study we will apply these ideas to two weak pronouns in Dutch and extend the theory slightly. It will provide us with the first contours of a theory of feature neutralisation.

2. Number neutralisation in Dutch je ‘you’

The Dutch weak object pronoun, oblique pronoun, and possessive pronoun je ‘you’ is both singular and plural. In traditional terms: je exhibits number neutralisation.1 This is illustrated in (1)–(3).


<table>
<thead>
<tr>
<th>Position number</th>
<th>(1) a. Jij zag je in de spiegel</th>
<th>you.sg saw you in the mirror</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b. Jullie zagen je in de spiegel</td>
<td>You.pl saw.pl you in the mirror</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position number</th>
<th>(2) a. Jij kunt dat naast je neerzetten</th>
<th>you.sg can that next-to you down put</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b. Jullie kunnen dat naast je neerzetten</td>
<td>You.pl can.pl that next-to you down put</td>
</tr>
</tbody>
</table>

Significantly, this property of je is dependent on the syntactic context: only if je is a bound variable can it be both singular and plural. In pronominal use, only the singular reading is retained.

(3) a. Jij kunt je boek bij het examen gebruiken poss sg you.sg can your book in the exam use ‘you can use your book at the exam’

b. Jullie kunnen je boeken bij het examen gebruiken poss pl You.pl can.pl your books in the exam use ‘you can use your books in the exam’

To get a plural reading in (4a–c), using the complex plural form jullie ‘youguys’ is the only option.

(4) a. Ik zag je in de spiegel sg/*pl I saw you in the mirror

b. Ik kan dat naast je neerzetten sg/*pl I can that next-to you down put

c. Ik kan je boek bij het examen gebruiken sg/*pl I can your book in the exam use

The traditional way to handle neutralisation phenomena is to assume two distinct lexical forms je with the same phonological matrix, an anaphoric pronoun je which is underspecified for number ([±plural]), and a pronominal pronoun je which is specified as singular ([−plural]). We may call this the lexicalist approach. Obviously, the lexical approach works in a technical sense. But it fails in providing a restrictive theory of natural language. By storing the relevant information in the lexicon, we tacitly assume that it is an arbitrary quirk of Dutch: the facts might have been the other way around, with the pronominal use of je being underspecified and the anaphoric use singular. Or even quirkier: the anaphoric use could be plural only. However, there are various arguments against neutralisation being subject to this type of arbitrariness: morphological, comparative, theoretical, and diachronic. These support the idea that neutralisation is a dynamic process. In fact, the pronoun is inherently singular but it is, under particular circumstances, used as a plural. I will review these arguments in Section 2. In Section 3, I will present and discuss a proposal by Kayne (2000) to handle these cases. In Section 4, I will apply this theory to another case of number neutralisation in Dutch: the pronoun ze. It will lead us to modify and extend the theory. In Section 5, I will discuss and test the proposal. We will finish with some remaining problems and conclusions.
3. Arguments against the lexicalist approach

3.1 A morphological argument

In the previous paragraph I discussed a pronoun with number neutralisation. It was suggested that the Dutch pronoun *je* is singular, while its plural use comes about by syntactic means. The first argument is morphological. The pronoun *je* seems to be part of the singular paradigm. The singular paradigm has both heavy and weak pronominals, as can be seen in (6). The plural paradigm, on the other hand, has only strong forms, unless the pronoun can also be used as a singular.

\[(6) \quad \begin{array}{ll}
\text{singular} & \text{plural} \\
1 \text{ mij} & 1 \text{ ons} \\
2 \text{ jou} & 2 \text{ jullie} \\
3 \text{ hem} & 3 \text{ hen/hun (ze)} \\
\text{haar} & \text{ze} \\
\text{het} & \text{t}
\end{array} \]

It seems that the plural use is paradigmatically parasitic on the singular, rather than the other way around. This argument is in fact taken from Kayne (2000), who developed the argument while discussing Italian. This brings in the comparative argument.

3.2 A comparative argument

Kayne (2000) shows a similar state of affairs holds in the Romance languages. In discussing the behaviour of *se* in Italian, French, and other Romance dialects, he argues that *se* has the shape and behaviour of the singular paradigm. The pronoun is inherently singular, but *can be used* in some contexts as a plural.

\[(7) \quad \begin{array}{ll}
\text{singular} & \text{plural} \\
1 \text{ me} & 1 \text{ ci} \\
2 \text{ te} & 2 \text{ vi} \\
3 \text{ se} & 3 \text{ se}
\end{array} \]

The singularity is not lifted but in contexts where *se* is seemingly plural, the context distributes over the singular.\(^2\)

We come back to the details of the proposal in Section 3. What is important in the present argument is that semantically plural morphemes can be morpholog-

\[\text{ically singular. This is not limited to Dutch but is observed in various languages. Plural morphemes can never be used as singulars. The fact that the languages under consideration behave the same in taking the singular as the basis can be stated in the lexicon but the lexicon cannot provide a principled account for it.}\]

3.3 Theoretical considerations

The neutralisation effects under discussion occur in bound contexts. This is not an accident. According to the Theory of Reflexivity (Reinhart & Reuland 1993), anaphoric use of a pronoun implies that it is used as a dependent in a chain. According to Reinhart en Reuland, the referent in the head of a chain must be referential [+R], while pronouns in a dependent position should be referentially defective [−R]. They link the [−R] feature to an under-specification for features, particularly number (cf. Reuland 2000).\(^3\) This shows a theoretical relation between number neutralisation and the anaphoricity in the paradigm of (1)–(3). A disadvantage of the framework is the stipulation of the relation. Though theoretically plausible, it does not follow from basic principles nor does it provide us with a mechanism.

3.4 Diachronic evidence

There is diachronic evidence that the link between anaphoric use and number neutralisation is not accidental. Middle Dutch did not have a reflexive pronoun. It used the ordinary pronoun *hem* 'him' in 3rd person reflexive use. So the sentence in (8) encodes a reflexive context.

\[(8) \quad \text{Nu keert hem daer toe mijn zin} \quad \text{(Middle Dutch)}
\]

\[
\begin{array}{c}
\text{Now turns himself there to my mind} \\
\text{`My mind turns itself to it'}
\end{array}
\]

Importantly, the Middle Dutch pronoun *hem* can also be used as a plural ('them'). *Hem* displays number neutralisation. When the plural use of *hem* was lost (from 1400 onwards), it could not be used as a reflexive anymore. A gap in the paradigm was created, which was filled by Eastern forms, such as *sick* and *sich*. Using a cor-

\[\text{(i) die giraffen hebben een lange nek} \quad \text{those girafs have a long neck} \quad \text{those girafs } x \text{ has a long neck}\]

\[\text{3. Another attested underspecification that causes anaphoricity is [±oblique] in those languages that have such a feature, such as Frisian. For a discussion, cf. Hoekstra (1994), Reuland (2000), Postma (2006).}\]
pus of verdicts in the province of Drenthe, Postma (2004) shows that the two processes are correlated. Over a period of one century (roughly 1400–1500) the two changes are proceed in tandem.

When sick/sich had completely taken over hem’s position as a reflexive, hem could only be used as a singular. This shows us two things. First, anaphoricity is a necessary condition for number neutralisation. Secondly, when number neutralisation disappears, the pronoun retreats to its singular meaning. Apparently, the Old-Germanic singular form hem/ihm had only temporarily been used as a plural. If hem in Middle Dutch plural contexts were a true plural, one would expect variation in the outcome when the neutralisation was lifted. But in all dialects of Dutch that underwent the change, the outcome was singular. Traditionally, one would say that the singular is the unmarked form. Marked forms have morpho-syntactic complexity (Kusters 2003). In the next section we will discuss a proposal that implements this notion of complexity in a syntactic way.

4. Kayne’s syntactic theory of number neutralisation

It is useful to put the plural use of singular pronouns in the perspective of a proposal made in Kayne (2000), who shows that Italian se is part of the singular paradigm. Despite its inherent singularity, it can be used as a plural, cf. (10b).

(10) a. Il ragazzo ha parlato di sé
   ‘the boy has spoken about himself’
   b. I ragazzi hanno parlato di sé
   ‘the boys have spoken of themselves’

The plural reading is more marked than the singular reading. Kayne suggests that se acquires plural readings by an abstract distributor, DIST.

(11) I ragazzi hanno parlato DIST di sé

Potentially, the markedness of the plural construction can be accounted for by the presence of DIST. By means of DIST, the subject distributes over the object in a way floating quantifiers do. For that reason, DIST must have a kind of anaphoric relation with the subject. Kayne mentions two additional arguments that a syntactic object is the mediating factor. First, number neutralization is sensitive to the syntactic configuration. This is explained by the fact that DIST occupies a syntactic position, i.e. some configurations allow for insertion of a distributor while other configurations do not. Prepositional constructions seem to provide a slot in their specifiers. Secondly, DIST has syntactic properties, such as the requirement to be locally bound by a plural antecedent. In this way, the special behaviour of the plural reading with respect to long-distance anaphora can be accounted for.

(12) a. Il ragazzo mi ha convinto a parlare di sé
   ‘the boy has convinced me to speak about himself’
   b. *I ragazzi mi hanno convinto a parlare di sé

The ungrammaticality of (12b) follows from the fact that there is no possible slot for DIST. The various possibilities drawn in (13) lead to violation of the locality conditions.

(13) I ragazzi mi hanno (*DISTi) convinto a parlare (*DISTi) di sé

The first occurrence of DIST violates locality with respect to SE, the second occurrence violates locality between DIST and its antecedent. Kayne’s theory can be

4. The corpus consists of 5000 verdicts of almost every year, 225000 words in total.

5. In fact, it appears that number neutralization is a necessary and sufficient condition for anaphoricity for 3rd person pronouns. According to many researchers only 3rd person pronouns can be specified for number (Postal 1972; Poletta 2005 and many others).

6. DIST can be compared with binominal each (Beghelli & Stowell 1997; Postma 2000), reciprocal each, which all involve two theta-positions and have A-bar and A anaphoric dependencies, cf. Aoun (1985).
considered as a syntagmatic account of morphological neutralisation, instead of the traditional paradigmatic approach.

This theory is straightforwardly applicable to the Dutch data listed above. The singular reading of je is well-formed, whether it is anaphoric or not. The plural reading is only grammatical when je is anaphoric. By assumption, the plural reading is established by a distributor. The anaphoricity of the plural reading derives from the fact that DIST must be bound.²

(14) a. 

\[ \text{Julie zagen DIST je in de spiegel} \]
\[ \text{You.pl saw.pl you in the mirror} \]
\[ \text{you saw yourselves in the mirror} \]

b. 

\[ \text{*Jan zag DIST je in de spiegel} \]
\[ \text{John saw you.pl in the mirror} \]

We conclude that the syntactic approach to number neutralisation has several advantages. It captures the fact that plural forms are more complex, it makes the correct link between binding effects in the plural reading, in Italian ze and in Dutch je, and it clarifies the diachronic issue of Middle Dutch plural hem. A potential objection is that the precise conditions on DIST are distinct in the two languages. According to Kayne (2000), DIST in Italian can be inserted before prepositions, probably in the specifier of PP, while we must allow Dutch DIST to occur more freely as an adjunct. However, such differences are to be expected, as DIST is a syntactic object and the languages under consideration are syntactically different. In the optimal case, such differences will be derivable from independently established properties of the languages, for instance, they could be linked to differences in the distribution of other distributors such as EACH. Obviously this is a research program that exceeds the scope of this paper. As a first beginning, though, we will develop in the next section one dimension of this complicated field, where we describe the behaviour of Dutch ze, a pronoun that is etymologically related to Italian se.

5. Number neutralisation in Dutch 3rd person pronouns

5.1 Middle Dutch 'hem'

Before we can understand the position of ze in Dutch, it is enlightening to return to the discussion of 3.4 on the Middle Dutch hem. As we have observed in 3.4, Middle Dutch hem displayed number neutralisation, and could therefore be used anaphorically. However, hem could be used as a plural in non-reflexive contexts as well. If we assume that this reading comes about through mediation of DIST, which is anaphoric, the question arises what the antecedent of DIST might be in the pronominal reading of hem. It is, of course, unattractive to assume a non-anaphoric DIST, since that would destroy the correlation between anaphora and number neutralisation. A plausible solution is that DIST is always anaphoric but that it can select an antecedent in an argument position as well as in a non-argument position, e.g. referential features in Comp. Extending Rizzi's criterial approach to languages that have a grammaticalized topic structure, such as the full V2 languages, we may assume that there are topic features in CP that induce verb placement by some Topic criterion (Zwart 1993; Rizzi 2004). Let us assume that such topic features are in C'. So, hem is anaphoric to the features in C, but is not reflexive, as there is no arguemental co-indexation. We will denote this A-bar distributor that has an A-bar dependency as DIST⁺ (DIST-bar).⁸ We arrive at a structure in (15) for non-reflexive use of hem.

(15) [ C'\[a [ ik zag DIST⁺ a hem ]] ]

In this case, hem behaves as a kind of topic or discourse pronoun that picks up its referent in its first antecedent CP. We will postpone a discussion of the predictions and the tests to Section 4.3. Let us now turn to the fact that Middle Dutch lost the option of hem being in the scope of DIST or DIST'. We then predict that there will be three empty slots in the paradigm: 3rd sg and pl reflexive, and 3rd plural in non-reflexive context. Hem recourses to its singular non-reflexive reading. As we have seen in Section 2.4 the empty slots in the reflexive paradigm were filled through borrowing of sick/sich. The filling of the empty slot in the plural paradigm was more problematic. In the written standard language, the object pronouns hen/hun ‘them’ emerged but they are uncomfortable until the present-day and are virtually absent from the spoken language (Uit den Boogaard 1975). Most of the time, a discourse pronoun⁹ is used suppletively: die ‘them’, which may remain in situ with inanimate referents, but fronts with animates.¹⁰

(16) a. 

\[ \text{Ik heb die gezien} \]
\[ \text{I have them seen} \]

b. 

\[ \text{Die heb ik gezien} \]
\[ \text{them have I seen} \]

8. Why it is the case that 2nd person je takes DIST while 3rd person pronouns take DIST⁺ or DIST and ze only takes DIST⁺ remains a stipulation that abides explanation.


10. The in situ use with animates is possible with a pejorative reading.
This deictic pronoun *die* has not yet developed into a true pronoun (this is what happened with English *them*). Deictic pronouns move to COMP before or after spell-out, but pronouns obtain their interpretation in situ. The difference between personal pronouns and discourse pronouns can be traced by various tests, such as coordination, reflexivity, disjoint reference, oblique context test. For a more extended discussion of the various tests, I refer to Postma (2004).

(17) a. Ik zag jou en *hen/*die coordination test
   I saw you and them
b. Zij zagen *(17)hunzelf/*diezelf reflexivisation test
   They saw themselves
c. Zij zeiden dat ik *hen/*die moest helpen disjoint reference
   They said that I must help them
d. Zij zorgden voor *hen/*die11 oblique test
   They took care for them

In oblique contexts, discourse pronouns have a special suppletive form, the so-called pronominal adverbs,12 R-pronouns in the generative literature (Van Riemsdijk 1978). All these restrictions immediately follow from the assumption that discourse pronouns move to CP at some point of the derivation. Under a movement analysis, the ungrammaticalities in (17) are explained: the coordination constraint is violated in (17a), the structure in (17b) is a case of strong cross-over, as is (17c). The block on prepositional contexts (17d) follows from the absence of preposition stranding in Dutch.

5.2 Number neutralisation in Modern Dutch *ze*

5.2.1 *Ze* as an object pronoun (*them*)

In this section we will discuss number neutralisation with the pronoun *ze* 'her/them', as in (18).

(18) Ik zag ze
   I saw her/them

There are two caveats to be made here. Although the singular use of *ze* is a feature of standard Dutch according to all descriptive grammars, the actual use is very much limited to the South. In (19a), I give an impression of the area of the actual neutralisation. It is an impression based on data found in the literature (De Schutter 1987) and from informants. A second caveat is that not the entire

11. With very strong deictic focus the construction becomes fine. Perhaps a deictic focus feature percolates to the PP and moves the PP at LF.
12. The so-called "voornaamwoordelijke bijwoorden" (pronominal adverbs).

Dutch area allows for the prepositional use of *ze*. In (19b), the dots indicate the area where prepositional use is attested. The map is created using data extracted from the RND,13 which were entered into the map-drawing program of the SAND database.14

(19) a.

If we inspect the two maps, we conclude that the dialects that have neutralisation (the South), do not allow for prepositional use. The reverse is not true, as there are dialects in the Northeast that do not allow for either. In other words, there is an implicational relation. It is rendered in (20) for further reference.

(20) A dialect δ has neutralisation in *ze* → δ does not allow for [P *ze*]

A theory of neutralisation should provide an answer for why this is the case. It must be noted that a block on the prepositional use of *ze* is unique in the Dutch

14. Only those dialects are drawn whose geographical number in the RND coincided with a number of the SAND atlas (cf. references). The statistics is in fact much better than the map suggests.
language. No other pronoun in Dutch displays this curious behaviour. Instead of introducing an entirely new opposition between objective Case and oblique Case, it is attractive to pursue a syntactic line.

As we have seen in Section 4.1, the slot of plural *hem* became available when *hem* retreated to its singular base. The gap was partly filled by discourse pronouns, but another new form was object *ze*. In most of the grammars, *ze* is treated as a personal pronoun, but evidence for this is not very strong. Let us apply our tests of Section 4.1. First, it cannot be used in co-ordinations (21), it cannot enter reflexivity (cf. (22)) not even in dialects that allow pronouns to do so, it displays disjoint reference effects (see Section 4.3), and finally it does not occur in prepositional contexts (23).

(21) a. Hij zag een foto van jou en *mezelf
   he saw a picture of you and myself
b. Hij zag een foto van jou en *zezelf
   he saw a picture of you and her-self
(22) a. *Zij zagen hunzelf
   They saw themself
b. *Zij zagen zezelf
   They saw them-self
(23) a. Zij zorgden voor hen/*ze
   'They took care for them'

I conclude that *ze* does not behave as a personal pronoun. Rather, it has properties that remind us of discourse pronouns, such as *die*, cf. (17a–d). On the other hand, we have the result that *ze* is part of the paradigm of *me/je/ze*. Apparently, there is a specific additional property of *ze* that disqualifies it as a personal pronoun. In view of our discussion on the nature of feature neutralisation, an explanation emerges. As we saw, DIST' is anaphoric to CP. DIST'[ze] will therefore have an ab-

5.2.2 *ze* as a subject pronoun

In the previous paragraph we have seen that there is number neutralisation in the Dutch object pronoun *ze*. This comes about by an anaphoric distributor (DIST'), which is anaphoric to topic features in CP. The distributor turns *ze* (a singular personal pronoun) into a discourse pronoun. This number neutralisation is only present in the southern dialects. The situation as to subject *ze* ('she/they') is much simpler. All dialects display the neutralisation. Moreover, the weak pronoun has its emphatic counterpart *zij* ('she/they') with identical properties.

(24) a. *Ze/zij gaan naar Amsterdam
    She goes.sg to Amsterdam
b. *Ze/zij gaan naar Amsterdam
    They go.pl to Amsterdam

We could of course copy the reasoning from the previous paragraph, but this would leave unexplained why there is no language variation with respect to neutralisation in the subject pronouns. This lack of variation extends to the German dialects (*sie = 'she/they*'). Pronouns that are not etymologically related, such as Frisian *hja* ('she/they'), equally display number neutralisation. This absence of variation, language internally (all pronouns comply) and cross-linguistically (all continental Germanic variants comply) asks for an explanation. Does it correlate with another property? We would like to suggest that it correlates with a specific type asymmetric V2: Dutch, Frisian and German at the one hand, and Swedish, Yiddish and Icelandic at the other hand. The definition needs some care, as various demarcation lines are possible. As it has been argued in the literature that German and Frisian have embedded V2 under bridge verbs (Reis 1997; De Haan & Weerman 1986), a property that has similarity with Mainland Scandinavian (Vikner 1994), which display inversion with embedded topicalisation under bridge verbs only. However, the similarities are superficial. They disappear if we confine ourselves to integrated embedded clauses, i.e. to subordinated clauses with an overt complementizer that can have dependencies with quantifiers in the main clause. As argued in De Haan (2001), Frisian embedded clauses with V2 resist such relations. Embedded V2 structures are in fact coordinated structures with *dat* as a coordinat-

15. The neuter pronoun *het* ‘it’ cannot be used after prepositions either. The pronoun *het* shares this property with unstressed neuter pronouns in general, such as *alle* ‘everything’, *niets* ‘nothing’, *dat* ‘that’, etc. It might be that the theory developed in this paper is applicable to neuters. It is far from clear whether neuter pronouns are singular or plural. They pass various tests on singularity and plurality.

16. This sentence is grammatical in the Dutch area without neutralisation, cf. (19b).
(25) a. Do sjochst sa min dat do soest mar op bêd you look.2sg so bad that you should.2sg PRT to bed
b. *Do sjochst sa min datst do soest mar op bêd you look.2sg so bad that.2sg you should.2sg PRT to bed
c. Do sjochst sa min datst do mar on soest you look.2sg so bad that.2sg you PRT to bed should.2sg 'you look so bad that you better go to bed'

As we want to investigate the anaphoric relation between subject pronouns and features in C, this restriction to true embedding seems natural. In (26), I render the correlation in a table.

(26) Language symmetric V2 \( ^{17} \) number neutralisation

<table>
<thead>
<tr>
<th>Language</th>
<th>Number Neutralisation</th>
<th>Dutch</th>
<th>no</th>
<th>yes (hij/zij/zij)</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>no</td>
<td>yes</td>
<td></td>
<td>(er/sie/sie)</td>
</tr>
<tr>
<td>Frisian</td>
<td>no</td>
<td>yes</td>
<td></td>
<td>(hy/hja/hja)</td>
</tr>
<tr>
<td>Surselvan</td>
<td>no</td>
<td>yes</td>
<td></td>
<td>(ej/ej)</td>
</tr>
<tr>
<td>Swedish</td>
<td>yes</td>
<td>no</td>
<td></td>
<td>(han/hon/de)</td>
</tr>
<tr>
<td>Yiddish</td>
<td>yes</td>
<td>no</td>
<td></td>
<td>(er/sil/sii)</td>
</tr>
<tr>
<td>English</td>
<td>yes</td>
<td>no</td>
<td></td>
<td>(be/she/they)</td>
</tr>
<tr>
<td>Icelandic</td>
<td>yes</td>
<td>no</td>
<td></td>
<td>(hann/hun/their/thaer)</td>
</tr>
</tbody>
</table>

Even the Swiss Rhaeto-Romance dialects (e.g. Surselvan), which have a Romance base, display number neutralisation to the extent they do not have gender (ej 'ambient it', 'arbitrary they', Haiman 1990). This tells us two things: number neutralisation seems to be blocked by overt gender marking, and secondly, number neutralisation in subjects does not seem a lexical property of any specific root but seems to be linked to a common parameter setting of continental Germanic. Let us see if the Theory of Neutralisation gives us a clue what this parameter setting might be.

As we see from the data in (24), the situation with neutralised subjects is different from the situation with objects: neutralisation in subjects does not give rise to ambiguity because of the overt singular-plural opposition in the verbal agreement. It seems that verbal agreement somehow facilitates number neutralisation in Dutch, Frisian and German, but not for instance in English or Icelandic. It does so because of some property of common continental Germanic. Within a theory with an anaphoric DIST', the suggestion is imminent that agreement can function as an antecedent to DIST'. Put differently: in languages in which C acts as a probe (Van Koppen 2005), the agreement features in C can function as an antecedent to DIST'. The structure is given in (27).

(27) \([cp \ spec C_{agr}, a \ [IP [DIST' \_a [ze] ] tv\ldots\]

In main clauses the inflected verb is always in C in V2 languages. So, the solution in (27) is straightforward for main clauses. However, number neutralisation also occurs in embedded clauses, cf. (28). In embedded clauses the finite verb is clause final.

(28) dat ze naar huis gaat/gaan
1. that she to home goes
2. that they to home go

There is ample evidence, however, that C is a probe both for main and embedded clauses (Van Koppen 2005), which shows up as the well-known and well-studied phenomenon of complementizer agreement (Zwart 1993; Hoekstra 1997), a property of many dialects of the asymmetric V2 languages. An example is given in (29), which is Dedemsvaarts, a dialect from the North-eastern part of the Netherlands.

(29) a. datte wi (...) speult (Low-Saxon, Van Haeringen 1962)
   that.plC we (...) play.plI
   that.plC we
   then play.plC we

In (29) we have a Low-Saxon dialect that has two verbal present tense paradigms, a clause final paradigm in -t and a V2 paradigm in -e. Significantly, the inflectional plural morpheme in inversion contexts, -e, also shows up as inflection on the complementizer. This shows that inversion contexts are CP contexts. For embedded clauses we therefore assume the same structure as in (26), although the agreement features in C remain in some dialects without spell-out. The true correlation of number neutralisation in the subject pronoun is therefore with abstract phi-features in C rather than overt. C with abstract phi-features act as a probe for phi-features in I and causes that these languages display overt I-to-C, which derives the correlation in (25).

5.3 Discourse properties of 'ze'

In the previous sections, we have shown that the 3rd person pronoun ze behaves like a discourse pronoun with respect to various tests. We attributed this behaviour to the abstract distributor DIST', which is CP oriented. We have left one essential

17. Evaluation of main clauses versus integrated embedded clauses with overt complementizer.

18. DIST[je] cannot take the AGR features in C as an antecedent, since DIST has only A-dependencies in the case of je.
test for later discussion: disjoint reference. It is now the moment to verify to what extent ze indeed complies with principle C. As ze is a pronoun, we can only study disjoint reference by means of bi-clausal structures. If we take standard bi-clausal structures, however, our expectation is not borne out. Consider (30).

(30) De jongens dachten dat ik *die/ze hen bedroeg.

"The boys thought.pl that I them cheated"

While a true discourse pronoun, such as die 'that', indeed displays disjoint reference with a c-commanding antecedent, ze can be bound. It must be kept in mind, though, that a true discourse pronoun moves to the highest CP, and causes a cross-over effect with the subject of the main clause (de jongens). DIST’ on the other hand, has a relation with the first c-commanding CP. The structures are in (31).

(31) a. [CP die] [CP de jongens: dachten dat ik tij hen bedroeg]]

   (cross-over)

b. [de jongens: dachten [CP [DIST’ ze] dat ik tij hen bedroeg]] (no cross-over)

This explains the asymmetry between die and ze with respect to disjoint reference. If this line of reasoning is on the right track, decisive data will be bi-clausal structures without intermediate CP. Typical structures are given in (32). These are Acc constructions, where the embedded subject receives Accusative case from the matrix verb. This is evidence that no embedded CP is present. Let us look at the data:

(32) a. Mijn kinderen vinden mijn *die/*ze hun/hen te weinig

   my children believe me them too little pocket money

   zakgeld geven

   'My children think I give them too little pocket money'

b. De jongens hoorde ze

   the boys heard.pl the director them

   mocken

   'The boys heard the director mock them'

We see that in such structures the object pronoun ze, in fact [DIST’ [ze]], behaves on a par with die rather than with true pronouns without number neutralisation, such as hun/hen. This is clear evidence that ze has a special relation with CP. The structure of (32b) is in (33).

(33) [die/ze] de jongens hoorde de directeur hun/hen bespotten

Both die and ze cause a cross-over effect by moving past the co-indexed subject, while hun/hen do not move. This is evidence that a pronoun with number neutralisation (ze) behaves syntactically distinct from pronouns without number neutralisation, such as hun/hen. A minimal pair is given in (34), where we have two sentences with the same meaning, one finite, the other infinitival.

(34) a. De jongens vroegen mij of ik ze/hen/hun wil helpen

   The boys asked.pl me if I them help

b. De jongens vroegen mij *ze/*hun/hen te helpen

   The boys asked me them to help

   'The boys asked me if I wanted to help them'

Once again, the disjoint reference effect shows up with ze, but not with hen/hun. Moreover, ze does display the effect in function of the absence/presence of an embedded complementizer. We can take this as independent evidence that number generalisation is established in the syntax.

6. An application: The rise of English ‘they’

In Section 4.2.2, we established a correlation between number neutralisation in subject pronouns and asymmetric V2. The relation between an alleged morphological property and a well-established syntactic property (V2) can be explained using Kayne’s abstract distributor, which is A-anaphoric (DIST) or A-bar anaphoric (DIST’). In this section, we apply it to older stages. We will see that the correlation between the two grammatical properties sheds new light on an important language change in the history of English.

In (35) I give the correlation from Section 4.2.2 for older language stages.

(35) Language symmetric V2 number neutralisation

   Old-Saxon no yes (he/siu/siu)

   Old-Frisian no yes (by/hia/hia)

   Old-HGerman no yes (er/siu/siu)

   Old Kentish no? yes? (he/hio/hio)

   Anglo-Saxon no? yes? (he/hei,hio)/(hie/hio)

   Old-Norse yes no (hann/hon/their/thaer)

   Gothic yes no (isis/esi/sios)

The correlation parallels the one in (25). Only Anglo-Saxon is a bit problematic, since the number of distinct 3rd person forms is huge. The introductory grammars of Old-English do not claim number neutralisation, but if one considers the texts and consult more advanced grammars one gets doubts. The CHEAL (1907) writes:

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19. We have tested these judgements with a group of 8 informants.
The situation is even more extreme in the pronominal system is not tied to particular roots: both German and Old-Kentish. Sweet (1908:166) notes that in Kentish texts hio ‘she’ was used as a singular fem, as a plural ‘they’ and even in object position. In this respect, Kentish displays a pronominal subject system that is close to German, where sie ('she, they, her, them') is used as a singular and a plural, both in subject and in object position. Not accidentally, this Kentish dialect is most conservative with respect to the specialisation of singular and plurals 3rd person had implications for the asymmetric V2 property.

However, whether this change was language internal or not, it is clear that the change was boosted by the introduction of the Nordic form they. The new system he/she/they (from 1300 onward) established a clear loss of neutralisation with the consequence that the language started to be in the category of Icelandic, Mainland Scandinavian, etc. From this perspective the borrowing of they and the changes of asymmetric V2, properties that occurred under language contact with the Nordic invaders, are not completely independent.

### 7. Conclusions

We have shown that number neutralisation is not a lexical paradigmatic property, but is established by syntactic means. There is an abstract distributor, DIST, with syntactic properties that are responsible for number neutralisation. DIST is anaphoric, and can take argumental antecedents (Romance se, Dutch object je) and non-argumental antecedents (features in CP). A non-argumental antecedent is active when a pronoun resides in subject position. In that position, C can bind DIST provided that C acts as a probe for agreement features, which typically is the case in asymmetric V2 languages.

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20. “Except in Kentish, a particularly archaic southern dialect, we find by the mid-fourteenth century that the V2 constraint is clearly being lost” (Kroch & Taylor 2000).