# Chapter 9

# "Them's the men that does their work best": The Northern subject rule revisited

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> This paper addresses a set of issues concerning the analysis and historical development of the so-called Northern subject rule (NSR), which characterises many northern varieties of English. Based on an investigation of NSR effects in the Northern Middle English *York plays*, we present a new account of the NSR that combines a DM analysis of the relevant agreement markers with the idea that inflectional heads lacking phi-features ("blank generation", Roberts 2010) may acquire agreement features via the incorporation of adjacent subject pronouns. Based on this analysis, we suggest a new scenario for the historical development of the NSR, arguing that after the breakdown of the Old English agreement system, the NSR developed via dialect contact between northern and southern varieties. More precisely, we propose that syncopated verb forms (resulting from southern Agr-weakening) were integrated into the northern grammar as marked agreement formatives that contrasted with the generalized *-s*-ending.

# 1 Introduction

This paper deals both with (i) synchronic properties and (ii) the diachronic development of a peculiar agreement phenomenon that characterizes many northern dialects of (British) English. In varieties spoken in (central) northern England (in



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particular, Northumberland, Cumberland, Durham, and Westmorland), Scotland and northern Ireland (see Pietsch 2005a,b for details concerning the geographical distribution), the distribution of the verbal agreement formative -s is governed by what is today commonly called the Northern subject rule (NSR, Ihalainen 1994: 221; in earlier work, the same phenomenon has also been dubbed the "personal pronoun rule", McIntosh 1988, or "Northern present tense rule", Montgomery 1994).<sup>1</sup> Many northern English dialects have in common that the s-inflection, which is confined to 3sg present tense indicative in Standard English, has a wider distribution and may (variably) occur in other contexts as well (with plural subjects, in particular, but in certain varieties also with 1sg and 2sg; see Pietsch 2005a,b for NSR dialects with different inventories of inflections). Crucially, however, the realization of verbal agreement is subject to further conditions in the NSR dialects. The relevant varieties typically show the standard agreement pattern (3sg -s, zero ending elsewhere) in cases where the finite verb is directly adjacent to a pronominal subject, but whenever this configuration is not given, the generalized -s form occurs (cf. Murray 1873, Berndt 1956, McIntosh 1988, Montgomery 1994, Schendl 1996, Corrigan 1997, Börjars & Chapman 1998, Klemola 2000, Pietsch 2005a,b, de Haas 2011, amongst others). In other words, the realization of verbal agreement is sensitive to (i) the type of subject (pronouns vs. full DP subjects) and (ii) the position of the subject.

(1) *Northern subject rule* (NSR): A finite verb (in the present indicative) takes the ending *-s* except when it is directly adjacent to a non-3sg pronominal subject (*I/you.sg/we/you.PL/they*).

As a result, the NSR dialects exhibit a three-way distinction dependent on type and position of subject: if the subject is a full DP, the finite verb takes the *-s* and adjacency is no determining factor (see 2a). If the subject is a non-3sG pronoun and adjacent to the finite verb, the finite verb doesn't take the *-s* ending (see 2b) and instead appears without overt inflection; if the subject pronoun is not adjacent to the verb, the *-s* occurs again. The adjacency effect is triggered by adverbs that intervene between the subject and the finite verb as shown in (2c) and in cases of VP coordination, as in (2d). A related effect can be observed in relative clauses such as (2e), where the relativizer intervenes between the pronominal head and the finite verb.

<sup>&</sup>lt;sup>1</sup>See Godfrey & Tagliamonte (1999) for a similar pattern in Devon English spoken in the southwest of England.

- (2) a. the birds (only) sings
  - b. they sing
  - c. they only sings
  - d. they sing and dances
  - e. they that sings ('they who sing')

The NSR also applies in cases where the pronoun is right-adjacent to the finite verb, i.e., in cases of subject-verb inversion:

- (3) a. *Do* they sing?
  - b. *Does* the birds sing?

The differences between the Standard English agreement system and the NSR dialects are schematically summarized in Table 9.1.<sup>2</sup>

	Std. English	NSR varieties of English					
		Pronomin	Nom. subjects				
		Adjacent to V	Non-adjacent to V				
1sg	sing	sing	sing-s	_			
2sg	sing	sing (thou sing-s)	sing-s	_			
3sg	sing-s	sing-s	sing-s	sing-s			
1pl	sing	sing	sing-s	—			
2pl	sing	sing	sing-s	_			
3pl	sing	sing	sing-s	sing-s			

Table 9.1: Verbal inflection (present tense), Standard English vs. Northern varieties + NSR

The kind of NSR as defined in (1) and illustrated in Table 9.1 has been reported for historical stages of Northern varieties of English (cf. e.g. Cowling 1915 on the dialect of Hackness in North-Yorkshire; Montgomery 1994 on Old Scots and northern ME/EModE), but does not seem to exist in this 'pure' form anymore today. Present-day varieties typically exhibit some amount of variation concerning the distribution of *-s* (cf. Montgomery 1994; Britain 2002; Pietsch 2005a,b; Adger & Smith 2010; Buchstaller et al. 2013; Childs 2013): With the exception of (i) 3SG

<sup>&</sup>lt;sup>2</sup>As indicated in Table 9.1, in those dialects that have retained some reflex of the original 2sG pronoun *thou*, the 2sG pronouns typically behave on a par with 3sG forms in that they always trigger *s*-marking on the verb, Pietsch (2005b: 76). This observation will be addressed in more detail below.

subjects (which invariably trigger *-s*) and (ii) non-3sG pronouns adjacent to the verb (which strongly disfavour *-s*), the use of the *-s*-ending may vary with both nominal and pronominal subjects. To account for this kind of variation, it is often assumed that the constraints concerning type and position of subject are two separate (and competing) conditions (Montgomery 1994; Pietsch 2005a,b): Little or no variation obtains when there is no conflict between the constraints (i.e., with (i) 3sG subjects and (ii) non-3sG pronouns adjacent to the verb), while variable agreement patterns emerge in other contexts (e.g., with non-3sG pronouns that fail to be adjacent to the verb; more generally, non-adjacency of subject and verb generally seems to favour the use of *-s*, cf. Pietsch 2005b for details). Still, we think that it is important to understand the somewhat idealized system in Table 9.1, which can be taken to represent the historical basis from which the present-day dialects developed.

In the literature, a number of analyses have been put forward to explain the synchronic (and diachronic) facts (cf. Henry 1995 on Belfast English, Börjars & Chapman 1998, Hudson 1999, Pietsch 2005a, de Haas 2008; 2011, de Haas & van Kemenade 2015, Tortora & den Dikken 2010 on related phenomena in Appalachian English, Adger & Smith 2010 on the variety of Buckie in North-East Scotland). However, as pointed out by Pietsch (2005a: 180), most of these proposals focus on either the type of subject or position of subject constraint and therefore typically miss a subset of the relevant descriptive generalizations (cf. Pietsch 2005a and de Haas 2011 for extensive discussion).<sup>3</sup> This can be illustrated with the analysis proposed by Henry (1995) for so-called "singular concord" in Belfast English (basically the same account is adopted by de Haas 2008 to analyze NSR effects in the northern varieties more generally). Henry assumes that there is a link between morphological case marking and the subject's ability to trigger agreement on the verb. More precisely, she claims that only elements that are clearly marked as nominative (the pronouns I, we, he, she, they; you is treated as an exception) move to SpecAgrsP and trigger "standard" agreement on the verb (i.e., 3sg -s vs. zero in all other contexts). In contrast, full DP subjects occupy SpecTP, from which they cannot trigger verbal agreement, leading to insertion of the default ending -s, which is analyzed as a pure (present) tense marker:<sup>4</sup>

<sup>&</sup>lt;sup>3</sup>Pietsch himself proposes a usage-based account of the data which captures the variable agreement facts in present-day NSR varieties in terms of competing lexicalized constructions but misses the morphological generalization that *-s* is the underspecified exponent in the relevant systems. See also Adger & Smith (2010: 1122f.) for critical discussion.

<sup>&</sup>lt;sup>4</sup>Henry seems to assume that 3sG -*s* and default -*s* are separate markers, which happen to be homophonous. To account for variable -*s*-marking with phrasal subjects, she assumes that full DP subjects may optionally carry nominative (instead of default) Case, which licenses movement to SpecAgrsP.

(4) a. [<sub>CP</sub> [<sub>AgrsP</sub> They [<sub>Agrs'</sub> are [<sub>TP</sub> [<sub>T'</sub> T [<sub>VP</sub> going]]]]]
b. [<sub>CP</sub> [<sub>AgrsP</sub> [<sub>Agrs'</sub> [<sub>TP</sub> The teachers [<sub>T'</sub> is [<sub>VP</sub> busy]]]]]]

This approach accounts for the type-of-subject condition, but it does not seem to have much to say about the adjacency condition that characterizes all other NSR varieties.<sup>5</sup> Moreover, Henry's account makes use of a number of non-standard assumptions and stipulations (e.g. concerning the optional presence of nominative Case on phrasal subjects), which does not seem to be particularly attractive on conceptual grounds. Recently, de Haas (2011) and de Haas & van Kemenade (2015) have put forward an update of Henry's analysis that includes a set of extra assumptions that take care of the adjacency condition. De Haas and de Haas & van Kemenade maintain the idea that only pronominal subjects occupy the specifier of a functional agreement head located above TP (de Haas 2011: SpecFP; de Haas & van Kemenade 2015: SpecAgrsP) whereas nominal subjects occur in a lower position (SpecTP) from where they cannot induce agreement. The adjacency effect is then captured by assuming that the (post-syntactic) realization of agreement on the finite verb (situated in T in ME, but presumably in an even lower position in the present-day varieties) is blocked by material that intervenes between AgrS/F and T and interrupts the transfer of agreement features from AgrS/F to T (which de Haas 2011: 166 analyzes as an instance of morphological merger, basically following Bobaljik 2002).<sup>6</sup> In all cases where the finite verb cannot acquire a set of valued agreement features, the resulting non-inflected verb is repaired by the (post-syntactic) insertion of the default inflection -s.

While this kind of mixed approach successfully describes the basic facts pertaining to the NSR, it still misses a couple of generalizations and raises certain issues from the perspective of more recent developments in the theory of syntax. First of all, it is based on the traditional assumption that subject-verb agreement is established in a spec-head relation and therefore does not translate easily into

- (i) The children really are late.
- (ii) \* The children really is late.

<sup>&</sup>lt;sup>5</sup>Note that the distribution of *-s* is also subject to an adjacency effect in Belfast English. However, the outcome of the adjacency condition seems to differ from what we have seen so far in that *-s*-marking is blocked when an adverb intervenes between a phrasal 3PL subject and a finite auxiliary (see Adger & Smith 2010: 1116ff. for discussion of the difference between Belfast English and other (Scottish/Northern English) NSR varieties).

<sup>&</sup>lt;sup>6</sup>The authors further assume that this additional condition has been dropped in a number of varieties which exhibit the subject condition only (i.e., where pronominal subjects generally trigger a special form of agreement).

more recent models where agreement is taken to result from the operation Agree, that is, a configuration where a functional head with unvalued Agr-features ccommands the agreement controller (i.e., the subject in the case at hand). Second, an approach that maintains that there is a close connection between the NSR and multiple subject positions has to assume that there are still two different subject positions in the present-day NSR varieties. However, it is far from clear whether this consequence is supported by the facts. At least at first sight (abstracting away from the NSR), there does not seem to be a huge difference between Northern dialects and Standard English with regard to the structural position of pronominal and nominal subjects. In addition, the analysis raises the question of why adverbs intervening between the subject and the verb trigger an adjacency effect in Northern English but not in Standard English. To account for this empirical fact, de Haas (2011) assumes that adverbs have a completely different syntax in the NSR varieties: According to her analysis, adverbs occupy specifiers of separate functional projections in the Northern varieties (the heads of which block morphological merger of Agr and the finite verb in T) while they are merely adjuncts in Standard English. Again, this seems to be unwarranted. Moreover, as already pointed out by de Haas (2011) herself, the idea that default inflection is another repair strategy (in addition to do-support) that rescues an otherwise uninflected verb by attaching -s to it invites the question of why the relevant varieties do not resort to do-support instead (note that do-support is regularly used in other such contexts such as negation etc. in the present-day NSR varieties).

In the literature dealing with the historical development of the NSR, basically three different lines of thinking can be discerned (in addition to traditional accounts that typically invoke some form of analogical extension, cf. e.g. Sweet 1871 for the idea that the zero/vocalic plural ending was generalized from the present subjunctive to the present indicative; see Pietsch 2005a,b and de Haas 2011 for comprehensive overviews and critical discussion). First, it has been proposed that the NSR reflects an Old English (OE) pattern where 1PL and 2PL agreement endings are reduced to schwa in inversion contexts (OE agreement weakening, cf. Rodeffer 1903; see below for further details and discussion). Second, several authors have put forward the claim that the NSR results from language contact with Celtic/Brythonic (cf. e.g. Klemola 2000), where similar differences between pronouns and DP subjects can be observed (e.g., in Welsh). Finally, the rise of the NSR is sometimes attributed to dialect contact with southern varieties (cf. e.g. Pietsch 2005a,b). It seems fair to conclude, however, that no commonly accepted single explanation for the development of the NSR has hitherto been proposed. More recently, de Haas (2011) and de Haas & van Kemenade (2015)

(partially based on findings of Cole 2014) have put forward a multi-factorial approach to the rise of the NSR which incorporates aspects of both languageinternal and language-external modes of explanation. They argue that the NSR developed when learners reanalyzed extensive variation in the plural endings of the present tense paradigm  $(-\emptyset/-e, -s, -th, -n)$  as morphological marking of differential subject positions (i.e., a high position for pronouns linked to agreement, and a low position for other subjects giving rise to non-agreement/default inflection). According to the authors, this change was promoted by a conspiracy of factors, including agreement weakening in OE (- $\emptyset$ /-e instead of -a $\vartheta$  with 1PL, 2PL pronouns in inversion contexts), language contact with Brythonic Celtic (which presumably had an agreement system similar to present-day Welsh, which makes a systematic difference between pronominal and nominal subjects, see also Benskin 2011), language contact with Old Norse (which led to the erosion of the agreement morphology and presumably introduced the generalized -s marker), and the observation that pronominal subjects were particularly frequent in the context of (present) subjunctive forms of the verb, where the reduced ending - $\emptyset$ /-*e* had already become the norm (due to loss of final -*n*).<sup>7</sup> While the scenario envisaged by de Haas (2011) and de Haas & van Kemenade (2015) represents the most comprehensive explanation of the historical development of the NSR so far, some problems and open questions remain. In particular, the authors' decision to focus solely on the plural part of the paradigm (cf. de Haas 2011: 60) is somewhat unfortunate since it excludes the possibility that a given morphological change is sensitive to properties of the paradigm as a whole. This applies to all other (diachronic) studies, which usually ignore the first and second person singular.<sup>8</sup>

In this paper, we attempt to narrow the empirical gap concerning the first and second person singular by taking a look at the behavior of relevant forms in a late Northern ME text (the *York (Corpus Christi) plays*) that is also affected by the NSR. In addition, we will explore the synchronic and diachronic implications of an alternative theoretical approach to the NSR sketched in Roberts (2010). Roberts suggests a new analysis of the NSR which is based on his notion

<sup>&</sup>lt;sup>7</sup>The connection between the subjunctive mood and pronominal subjects can be traced back to the fact that both tend to be used in embedded clauses, cf. de Haas (2011).

<sup>&</sup>lt;sup>8</sup>An exception is Fernández-Cuesta's (2011) study of the NSR in first person singular contexts in Early Modern English. She shows that in 15th and 16th century wills from Yorkshire the adjacency constraint was still operative, especially in the period between 1450 and 1499. Further, Fernández-Cuesta cites evidence from the *Linguistic atlas of Early Middle English* (LAEME) which shows that the adjacency constraint was operative in Early ME (although, it must be said that the numbers are very small). Overall, she comes to the conclusion that the emergence of the *-s/-eth* ending in the first person singular context should be seen as an extension of the adjacency constraint of the NSR.

of "blank generation": He assumes that inflectional heads can enter the syntactic derivation without content/phi-features. The NSR is then attributed to the idea that subject pronouns incorporate into the relevant Agr-head, endowing it with features that trigger the marked (zero) agreement ending on the verb (while *-s* signals the absence of agreement features). As a result, the verb can only appear in its inflected form (marked by  $\emptyset$ ) when it is string-adjacent to a weak/clitic subject pronoun.

The paper is structured as follows. In §2 we briefly highlight a set of morphological issues relating to the proper analysis of the NSR (and singular forms, in particular) that are at least in part only rarely discussed in theoretical approaches to the NSR. §3 deals with the historical development of the NSR and shows that, although in OE times there is unfortunately no direct textual evidence for the rule (but see Cole 2014 on possible early traces of the NSR in Northumbrian OE), there are some indications that OE agreement weakening in inversion patterns might have played a role in its development. Further, we will take a closer look at (late) Northern ME, focusing on the status of the NSR in the *York (Corpus Christi) plays*, which exhibit an intermediate version of the NSR with a set of special and interesting properties. §4 presents an analysis of the NSR based on Roberts (2010) in terms of "blank generation". §5 brings together our theoretical claims and diachronic observations and shows that our analysis can shed new light on both the inner mechanics of the NSR and its historical development. §6 provides a brief concluding summary.

# 2 Unfinished business: Morphology problems

The general morphological problem concerning the differences between Standard English and the northern varieties is what Pietsch (2005b) refers to as the "markedness paradox": while *-s* appears to be the marked inflection in Standard English, the situation in the NSR dialects is more complex, since with full DPs and non-adjacent subjects the *-s* affix seems to function as a default marker, whereas with subject pronouns adjacent to the verb the *-s* ending seems to mark the feature combination [–speaker, –pl] (at least in the conservative NSR varieties that have retained the original 2sG pronoun *thou*, compare the somewhat idealized system in Table 9.1). The "markedness paradox" presents certain problems for morphological analysis which are rarely (if at all) addressed in the existing literature on the NSR. In particular, it appears that the widespread assumption that *-s* is an underspecified default marker (possibly signalling tense and/or mood, cf. e.g. Henry 1995; Pietsch 2005b; de Haas 2011; de Haas & van Kemenade 2015) does not suffice to capture its distribution in the above paradigm: If the s-marker represents the elsewhere case, then the zero marker must be specified for a certain combination of values for the features [person] and [number]. However, assuming standard (binary) feature systems such as [±speaker], [±hearer]/[±author in speech event], [±participant in speech event] for [person] and [±plural] for [number],<sup>9</sup> it turns out that it does not seem to be possible to describe the distribution of the zero marker in terms of a specific set of feature values: As the zero marker occurs in the singular (1sG) as well as in the plural, and with all three persons, it does not signal any person or number distinctions (compare Table 9.1). So we seem to face a (impossible) situation where a paradigm is made up by two seemingly equally underspecified markers. Note that this dilemma cannot be resolved by treating s-marking with nominal and non-adjacent subjects separately (e.g. by assuming that verbs with nominal/non-adjacent subjects fail to acquire a set of agreement features in the syntax), at least as long as we want to maintain the idea that there is only a single *s*-affix in the NSR varieties. Such an approach merely restates the "markedness paradox": Again, it would seem that while -s is the unmarked/default marker with nominal/non-adjacent subjects, it appears to be more specified than the zero ending in cases where a pronominal subject is adjacent to the verb (cf. the second column in Table 9.1). Without additional assumptions, this state of affairs also seems to be incompatible with the proposal of de Haas (2011) and de Haas & van Kemenade (2015) that in the NSR dialects, the relevant inflectional markers are not linked to specific phi-feature values, but are used instead to realize a minimal binary distinction between "real" subject-verb agreement (signaled by  $\emptyset$ ) and default inflection (via insertion of *-s*).

In what follows, we will outline a new approach to the distribution of markers in the "classic" NSR varieties (cf. Table 9.1) that maintains the basic insight that the relevant dialects have only a single *-s* affix with a uniform specification. More precisely, we agree with previous work that *-s* is a completely underspecified default marker, which represents the elsewhere case. We take it that the zero marker (*sing-* $\emptyset$ ), on the other hand, signals the presence of positive values for person or number features.<sup>10</sup> The resulting (binary) inventory of agreement markers can be described as follows:

<sup>&</sup>lt;sup>9</sup>And excluding further options such as accidental homophony, or the possibility of disjunctive feature specifications (e.g., [+plural OR 1sG]), which we consider to be less attractive theoretically. However, see Adger & Smith (2010) for an account of variable agreement marking in a present-day dialect based on the idea that a particular surface form may be linked to different feature specifications.

<sup>&</sup>lt;sup>10</sup>Alternatively, we might assume that the *-s* ending marks the absence of positive specifications for person or number. While this analysis seems to be a technical possibility, it fails to capture the elsewhere/default character of *-s* is the relevant varieties (e.g., its use under non-adjacency etc.).

(5) a.  $[+phi] \leftrightarrow \emptyset$ b. elsewhere  $\leftrightarrow /-z/$ 

Thus, if the process of vocabulary insertion detects a positive phi-feature value for person or number (which is only possible in connection with adjacent subject pronouns, see §4.2 for a syntactic analysis), the verbal agreement morpheme will be realized by the zero affix, while in all other cases the default marker *-s* is inserted.

As concerns the presence of the *-s* affix with 3sG pronouns, we follow the common idea that 3sG forms are characterized by the absence of (positive) specifications for [person] and [number] (cf. e.g. Benveniste 1966, Halle 1997, Noyer 1997, Harley & Ritter 2002). As a result, the elsewhere marker *-s* is inserted in all 3sG contexts.

But note that this morphological analysis faces a similar problem as previous approaches in that it apparently fails to account for the use of the *s*-affix in the context of 2sG (note that (5) should lead us to expect that the zero marker is used in 2sG contexts in connection with *thou*). To solve this puzzle, we would like to propose that the relevant agreement morphemes are subject to the following impoverishment rule that operates on the output of the syntactic derivation and reduces the feature content of agreement morphemes (on T) under adjacency with subject pronouns prior to the insertion of vocabulary items (NOM = nominative):<sup>11</sup>

(6)  $[+hearer] \rightarrow \emptyset / \_pronoun_{[NOM]}$ 

As a result of (6), the feature [+hearer] is deleted when the finite verb is adjacent to a subject pronoun (i.e., part of the same phonological phrase/word). This serves to block insertion of the zero marker in the context of 2sG due to the absence of positively valued feature values, leading to systematic syncretism of 2sG and 3sG. In all other contexts, a positively valued feature remains ([+speaker] with 1sG, [+PL] with all plural forms), which triggers insertion of the zero marker.

This analysis not only accounts for the basic facts in the NSR dialects but also makes available a new perspective on 3sG -s in the present tense of Standard English. Similar to the NSR dialects, we might assume that this affix is not explicitly specified for [person] and [number]; rather, the distribution of -s and the zero form is sensitive to the presence/absence of positive feature values for [person]

<sup>&</sup>lt;sup>11</sup>See Halle & Marantz (1993), Halle (1997), and Noyer (1997) on the workings of impoverishment rules, which typically lead to an extension of the contexts where underspecified markers can be used.

or [number] in the following way: The zero marker is inserted in all cases where a positive value for person or number can be detected (that is, in all contexts apart from 3sG); in the remaining context, *-s* is used (see Haeberli 2002, Roberts 2010 for a related analysis).

### 3 The historical development of the NSR

#### 3.1 Historical stages in the rise of the NSR

In this section, we take a look at the historical development of the NSR. Before we deal with possible OE origins of the NSR in some more detail, we first outline its historical development from OE via ME to ModE (basically following Pietsch 2005a,b, de Haas 2011, and Cole 2014).

It is a well-known fact that during the transition from OE to ME nominal and verbal affixes became drastically reduced. The loss of inflections is particularly apparent in northern varieties. As shown by Berndt (1956) and Cole (2014), the erosion of the inflectional system first led to variation between several competing agreement markers, as evidenced in the Lindisfarne gospels, where 3sG and 1PL/2PL/3PL subjects may be cross-referenced on the verb variably by -es, -as, -eð, or -að. The default ending for 2sG is -st in OE; variants include -est, -as. In early Northern ME (NME), the OE 2sg -est, 3sg -e/ðe and plural forms -a/ðe/-as had already fallen together in the form -e(s), which could be interpreted as an underspecified inflectional marker. Further, after the loss of vowels in the final syllable, Northern ME started to exhibit an opposition between 1sg  $-\emptyset$  and all other contexts (-s). At this point, new zero markers were introduced in the Northern ME varieties, eventually giving rise to the NSR. First, the zero marker was introduced in plural contexts where a finite lexical verb was adjacent to a subject pronoun, initially with 1PL/2PL and somewhat later with 3PL. In a further step, the -s affix was extended to 1sg pronouns (non-adjacent to the verb), presumably as a result of analogical pressure (Holmqvist 1922 assumes that the inherited null 1sg ending came to be perceived as being subject to the same mechanism that governed the alternation between -s and -Ø with plural forms). Finally, again probably via processes of analogy, the NSR was extended to forms of be, including was/were.<sup>12</sup> In some Northern dialects, 2sg thou was replaced with you (the original plural form) in the EModE period, which further broadened the scope

<sup>&</sup>lt;sup>12</sup>Apparently, the use of *is* and *was* in the plural was never as categorical as the use of *-s* with lexical verbs (cf. e.g. Montgomery 1994). However, it seems that present-day dialects exhibit a different tendency, in that they preserve the NSR more strongly with forms of *be* (Pietsch 2005b: 12–13; but see Buchstaller et al. 2013 for different findings).

of the NSR.<sup>13</sup> Somewhat idealised, these stages of development are schematised and summarised in Table 9.2.

	OE	Northumbrian OE	NME I	NME II	NME	III/NSR
1sg	sing-e	sing-e/-Ø	sing-e/-Ø	sing-Ø	sing-Ø/-s	I sing-Ø
2sg	sing-es(t)	sing-es/-as	sing-es	sing-s	sing-s	thou sing-s
3sg	sing-eð	sing-es/-as/-eð/-að	sing-es	sing-s	sing-s	he sing-s
1pl	sing-að	sing-es/-as/-eð/-að	sing-es	sing-s	sing-s	we sing-Ø
2pl	sing-að	sing-es/-as/-eð/-að	sing-es	sing-s	sing-s	you sing-∅
3pl	sing-að	sing-es/-as/-eð/-að	sing-es	sing-s	sing-s	they sing- $\emptyset$

Table 9.2: Historical development of verbal inflection, Northern varieties

#### 3.2 Old English

Berndt (1956) makes the observation that a group of late Northumbrian texts, including the Lindisfarne gospels, the Rushworth gloss, and the Durham ritual, which are all dated to the mid-10th century, are the first OE texts showing the -s form variably with the -ð-ending. Berndt assumes that the triggering factor for the occurrence of this form are subject pronouns which could take over the function of person marking. What is implied in his comment is the special role subject pronouns play as opposed to full DP subjects, and his observations and assumptions hence foreshadow part of the NSR. Berndt's finding is corroborated by Cole (2014), the most comprehensive study of the earliest (Northumbrian OE) stages of the NSR so far. Cole provides an in-depth textual and linguistic analysis of the Lindisfarne gospels, focusing on the agreement system and early traces of the NSR, in particular. Using statistical methods, she is able to identify a set of factors that govern the variation between the various agreement endings. One of her most intriguing results is the observation that adjacency between the finite verb and a (plural) subject pronoun (usually cases of inversion) clearly favours -s over -ð. For the 1/2PL subject pronouns we and ge she finds that they occur 57% and 59% of the time with an -s ending on the finite lexical verb (Cole 2014: 112). Two examples are given here (cf. Cole 2014: 93):

<sup>&</sup>lt;sup>13</sup>Concerning the empirical gap in studies of the NSR, Pietsch (2005b: 46) notes that the *LALME* (McIntosh et al. 2013) "[...] does not give detailed accounts or statistics regarding [...] any information about the first and second persons in the documents studied. The only information given per document is whether -s forms were used regularly or rarely."

- (7) a. þæt ue gesegun we getrymes. that we seen we testify
  'What we have seen we testify.' (JnGl(Li) 3.11)
  - b. huu minum wordum gelefes ge. how my words believe you.pl
    'How will you believe my words?' (JnGl(Li) 5.47)

Thus, at first sight it seems that in late Northumbrian OE, there is already an early form of the NSR that differs from its later installments in that the (innovative) *s*-ending plays the role later assumed by the zero/vocalic endings. However, this conclusion is misleading, since the relevant markers have a different status in their respective paradigms. While zero represents the marked inflection in the NSR varieties, *-s* is clearly the elsewhere case in the Northumbrian agreement system (cf. Table 9.2). At least from a morphological point of view, the Northumbrian facts are more similar to southern OE agreement weakening, in that a less distinctive agreement marker is used in connection with adjacent pronominal subjects.<sup>14</sup> Recall that (late) southern OE exhibits an agreement alternation that is sensitive to subject type and the position of the finite verb (Jespersen 1949: 15; Quirk & Wrenn 1955: 42; Campbell 1959: 296; van Gelderen 2000). In cases where the 1PL/2PL subject pronouns *we* or *ge* directly follow the inverted finite verb, the regular agreement endings (present tense indicative/subjunctive *-að*, *-on*,*-en*) are replaced by schwa:<sup>15</sup>

 (8) a. Ne sceole ge swa softe sinc gegangen. NEG must you so easily treasure obtain 'You must not obtain treasure so easily.' (Battle of Maldon, p. 244, 1.59)

- i. Jij loop-t dagelijks met een hondje over straat. you walk-2sg daily with a doggy over street
- ii. Dagelijks loop-Ø jij met een hondje over straat. daily walk you.PL with a doggy over street

<sup>&</sup>lt;sup>14</sup>This can perhaps be analyzed as an instance of featural haplology (Nevins 2012), where the verb's phi-set is deleted in cases where the verb is adjacent to another pure phi-set, i.e., a subject pronoun.

<sup>&</sup>lt;sup>15</sup>Similar observations hold for early OHG (1PL), cf. Braune & Reiffenstein (2004: 262), and present-day Dutch (Ackema & Neeleman 2004: 193):

<sup>(</sup>i) Dutch

b. Hwæt secge we be þæm coc?
what say we about the cook
'What do we say about the cook?'
(AElfric's Colloquy on the Occupations, p. 188, 1.68)

As noted above, Rodeffer (1903) explicitly assumes that these syncopated forms were the direct source of the later affixless forms in the NSR varieties. Although there is no direct equivalent of the NSR in OE, the finding that the reduced -e affix occurs in inversion contexts might have contributed to the development of the NSR (see §5 for further discussion).

In §1 we have noted that in the studies hitherto presented, there is an empirical gap concerning the 1sG and 2sG forms. Since we are interested in the development of the full paradigm, we are going to include these two forms in the empirical study that we will present in the following section.

#### 3.3 Middle English

In a recent study of the NSR in ME, de Haas & van Kemenade (2015) investigate the agreement properties of full verbs, focussing on present tense indicative plural forms. The study is based on 36 texts dated between 1150 and 1350 taken from the LAEME corpus, as well as the sample of the *Northern prose rule of St. Benet* from the PPCME2 and a digitized version of a Lancaster romance. They identify 15 texts which display variation between  $-\emptyset/-e/-n$  and -s/-th endings and show the strongest effects for the adjacency and type-of-subject condition in their corpus. Further, they locate a core area of the NSR in Yorkshire and note that in texts from more peripheral areas the adjacency condition is often weaker or even absent. They interpret this finding as evidence for an analysis that is based on different subject positions, as mentioned above in §2. A short glance at the sample of Richard Rolle's *Epistles* in the PPCME2 (Kroch & Taylor 2000)<sup>16</sup> confirms that both the adjacency and the type-of-subject condition seem to be quite well established:

(9) a. Some be devell deceyves burgh vayne glory, bat es ydil joy: when some the devil deceives through vain glory that is idle joy when any has pryde and delyte in bamself of be penance bat *bai* any has pride and delight in themselves of the penance that they *suffer*, of gode dedes bat *bai do*. of any vertu bat *bai have*; es suffer of good deeds that they do of any virtue that they have is

<sup>&</sup>lt;sup>16</sup>Richard Rolle of Hampole (ca. 1290–1349), Yorkshire, English hermit and mystic, was one of the first religious writers to use the vernacular. He was very well known at his time, and his writings were widely read during the 14th and 15th century.

glad when *men loves* þam, sari when *men lackes* þam, *haves envy* glad when men loves them sorry when men lacks them haves envy to þam þat es spokyn mare gode of þan of þam; to them that is spoken more good of than of them (ROLLEP,86.368)

b. He says þat "he lufes þam þat lufes hym, and *þai þat arely* he says that he loves them that loves him and they that early *wakes* til hym sal fynde him".
wakes till him shall find him (ROLLEP,76.212)

As the Yorkshire area seems to have played an important role in the historical development of the NSR, it might be worthwhile to take a closer look at texts from that region to complement de Haas & van Kemenade's (2015) findings on plural forms with relevant data from the singular part of the agreement paradigm (with a focus on 1sG and 2sG; recall that 3sG usually does not take part in the NSR). Under the assumption that first and second singular pronouns are likely to occur in dialogues, we decided to survey the *York plays*, a ME cycle of 47 mystery plays dated between the mid-fourteenth century and 1463–1477, when the manuscript (MS. Add. 35290, British Library, London) was copied.<sup>17</sup>

As has been repeatedly pointed out in the literature (cf. e.g. Smith 1885; Cawley 1952; Beadle 1982; Burrow & Turville-Petre 2005; Johnston 2011), the *York plays* (even if they are the work of different authors) display an identifiably northern variety interspersed with some southern/Midlands influences (in particular concerning loanwords, spellings including combinations of southern spelling and a northern rhyme etc.).<sup>18</sup> In what follows, we will report our findings on properties of the agreement system as found in the *York plays*, focusing on 2sG (and 1sG) forms, and the distribution of the NSR. As already briefly mentioned above, the make-up of the agreement paradigm and the scope of the NSR depend in part on the inventory of pronominal forms. The pronominal system found in the individual plays is remarkably uniform, with variation being confined to differences in spelling. Table 9.3 gives an overview of the relevant subject forms (cf. Smith 1885: ixxii; Burrow & Turville-Petre 2005: 272, Johnston 2011).

<sup>&</sup>lt;sup>17</sup>For our study we tagged the collection of plays which are part of *The corpus of Middle English prose and verse*. In addition, we conducted a full text analysis of all plays and looked through them manually, see references below.

<sup>&</sup>lt;sup>18</sup>It is commonly assumed that dialectal features of south-east Midland and London varieties were introduced when the *York plays* were copied in the mid/late 15th century, cf. e.g. Beadle & King (1984).

	Subject pronouns
1sg	Ι
2sg	þou, þow(e), thou, thow
3sg	he (masc.), scho (fem.), it (neut.)
1pl	we
2pl	ye, ge
3pl	þei, þai, þey, þay

Table 9.3: Subject pronouns as found in the York plays

As can be gathered from Table 9.3, the pronominal system of the *York plays* features the inherited 2sg subject pronoun *thou* in combination with the 3pr form *they* borrowed from Old Norse. We thus expect full verbs to take *-s* in 2sg contexts (in the present tense indicative).

The system of verbal agreement endings is characterized by a higher amount of linguistic variation, although it should be pointed out that the inventory of endings is quite limited.<sup>19</sup> In the present tense, the only significant residue of the formerly more elaborate OE/ME agreement paradigm is -s, which appears in a variety of different surface manifestations dependent on factors such as spelling preferences and phonetic context (e.g. -s, -is, -es, -vs etc.).<sup>20</sup> In addition to the variants of the -s-marker, present tense verbs appear with zero inflection, or -e. However, there are reasons to believe (e.g. evidence from rhymes) that the latter is usually not pronounced, representing the residue of a former contrast which by the time the York plays were composed was confined to the writing (cf. e.g. Johnston 2011). This leaves us with a basically binary contrast between variants of -s and variants of the zero marker  $(-\phi, -e)$ . The situation is made more complex by the workings of the NSR (which widens the scope of the -s-marker) and the fact that there are cases where the -s-marker and the zero marker seem to vary freely. Table 9.4 gives a rough overview of the distribution of markers in the present tense (for the time abstracting away from variants of -s and  $-\emptyset$ ). Each cell of the paradigm contains the dominant (i.e. most frequent) marker, while competing variants are added in parentheses.<sup>21</sup>

<sup>&</sup>lt;sup>19</sup>It is very likely that the linguistic variation found in the *York plays* is at least partially the result of the fact that the plays were composed by different authors. However, an in-depth investigation of the impact of authorship on the type of NSR found in the individual plays is well beyond the scope of the present paper.

<sup>&</sup>lt;sup>20</sup>In addition, there are few 3sG forms ending in *-th* such as *haith* 'have-3sG', which clearly reflect Midlands/southern influence.

<sup>&</sup>lt;sup>21</sup>Table 4 is based on the descriptions in Smith (1885: lxxii), Burrow & Turville-Petre (2005: 272), and Johnston (2011), which we have cross-checked with our own corpus-based studies.

	Pronom	Nominal subjects	
	Adjacent to V	Non-adjacent to V	
1sg	-Ø	-Ø	_
2sg	-s (-Ø)	-s (-Ø)	_
3sg	-S	-S	-S
1pl	-Ø	-s (-Ø)	-
2pl	-Ø	-s (-Ø)	_
3pl	-Ø	-s (-Ø)	-S

Table 9.4: Verbal inflection in the York plays (present tense indicative)

As can be seen from Table 9.4, the agreement system found in the York plays exhibits some special properties that possibly shed some light on the historical development of the NSR. First of all, the NSR seems to be restricted to the plural part of the paradigm, whereas the realization of singular forms is not influenced by the position or (in the case of 3sg) type of subject. According to the standard view of the historical development of the NSR, this seems to be indicative of an early stage of the NSR, where the agreement alternation had not yet spread to singular forms (see §3).<sup>22</sup> Second, it appears that while non-adjacency may license -s-inflection in connection with pronominal subjects, zero-marked forms or forms marked with -e do also occasionally turn up in this context.<sup>23</sup> The variation between -s and zero in connection with pronominal subjects non-adjacent to the verb seems to suggest a tripartite agreement system with a distinction between pronominal subjects adjacent to the verb (which invariably trigger zero marking), pronominal subjects non-adjacent to the verb (which trigger either -s or  $-\emptyset$ ), and nominal subjects (which always trigger -s). In what follows, we will first add more data and examples, including some quantitative findings resulting from our corpus study, before we address the question of how the agreement system should be analysed in §4. As noted above, we will focus on forms which have been neglected in previous work on the NSR, i.e. 2sG in particular.

In contrast to later NSR-varieties, -s is only rarely found with 1sG forms, which strongly tend to exhibit -e/zero marking in the present tense independently of

<sup>&</sup>lt;sup>22</sup>But note that there are few examples where *-s* seems to appear with a 1sG subject under nonadjacency, as shown in (11).

<sup>&</sup>lt;sup>23</sup>The fact that the zero ending co-varies with -s under non-adjacency might be taken to represent an early stage of a development in which the type of subject constraint gradually gains more importance, eventually leading to zero marking of pronominal subjects independently of their position relative to the verb (contrasting with -s-marking of nominal subjects).

their position (adjacency/non-adjacency) relative to the subject. This is shown in (10). However, there are few examples where NSR effects do show up in connection with 1sG subjects (the majority of which in connection with 'have'), as in (11):<sup>24</sup>

- (10) a. For thowe art my Savyour, *I say*, for you are my savour I say
  'For you are my saviour, I say.'
  (York plays, 17, 404)
  - b. A, lorde, to the *I love* and *lowte*.
    a lord to thee I love and bow
    'Ah, Lord, I love and venerate you.'
    (York plays, 9, 189)
  - c. And so I schall fulfille / That I before *haue* highte.
    and so I shall fulfil that I before have promised
    'And so I shall fulfil what I have promised before.'
    (York plays, 37, 396)
- (11) a. For *I* am lame as men may se / And *has* ben lang. Because I am crippled as man may see and have been long.
  'Because I am crippled as one may see and have been long so.' (York plays, 25, 369)
  - b. A, sir, a blynde man am I / And ay has bene of tendyr yoere
     A sir, a blind man am I and always has been of tender year
     Sen I was borne.

since I was borne.

'Ah, Sir, I am a blind man and always have been of tender year since I was born.'

(York plays, 25, 297)

c. *I* here the lorde and *seys* the nought.
I hear thee lord and sees thee not
'I hear the Lord and do not see you.'

(York plays, 5, 139)

This finding corroborates the findings of Fernández-Cuesta (2011). In her study of the *LAEME* data only two non-adjacent 1sg verbs occur with an *-s* ending (of six unambiguous cases of non-adjacency).

<sup>&</sup>lt;sup>24</sup>Examples taken from Davidson's (2011) edition of the *York plays* are referenced in the format "play number, line". All other examples are taken from the edition by Beadle (1982).

We will now take a closer look at 2sG forms, which present a set of interesting properties that are directly relevant for the analysis of the agreement system and the type of NSR found in the *York plays*. The following discussion is based on a data set of 852 clauses with 2sG subjects that we extracted from Davidson (2011)'s edition of the *York plays*. With 2sG subjects (variants of the "old" form *thou*), *-s* is the dominant ending in the present tense (indicative), independently of whether the subject is adjacent to the verb or not (in general, non-adjacency between subject pronoun and finite verb is much less frequently found in the corpus than adjacency). In other words, there are no clear NSR effects in the context of 2sG. Alternative forms of the *-s* inflection include markers extended by *-t(e)* (particularly frequent with forms of 'have', e.g. *hast(e)*, see Table 9.5),<sup>25</sup> and by pre-consonantic vowels (*-es, -is, -ys*). See Table 9.5 for the quantitative distribution of the 2sG endings with lexical verbs and (12–13) for a selection of relevant examples.

The subject and the finite verb are adjacent:

- (12) a. And *thou sais thou hast* insight and thou says thou hast insight (York plays, 20, 99)
  - b. *Heris thou* not what I saie thee? hers thou not what I say thee 'Don't you hear what I say to you?' (York plays, 31, 317)
  - c. *Thou makist* her herte full sare thou makest her heart full sore 'You make her heart fully sore.' (York plays, 13, 251)

(i) And sen thou *dose* not as I thee tell, (York plays, 22, 169).

These are counted as instances of *-s*. In addition, there are four examples where the enlarged ending *-st* combines with *-e* (e.g. *saiste* 'say-2sG', 30, 477). Modals such as 'can', 'must', 'shall' always appear without *-s* (due to their origin as preterite-presents) and are therefore not considered here (there are a few instances of *moste* 'must-2sG', though).

<sup>&</sup>lt;sup>25</sup>Apart from verbs that are made up by only a single CV-pattern (e.g. *se* 'see'), we have counted here all verbs ending in *-e*, including forms such as *come*, *take* etc. There are seven instances (all under adjacency of subject and verb) where *-e* attaches to the *s*-ending as in (i).

d. Fro thens *come thou*, Lorde, as I gesse from thence come thou lorde as I guess
'From thence thou come, Lord, as I guess.' (York plays, 21, 114)

The subject and the finite verb are not adjacent:

- (13) a. For tho that *thou* to wittenesse *drawes* / Full even agaynste thee for though that thou to witness draws full even against thee will begynne.
  will begin
  'For those whom you cite as witnesses are equally against you.'
  (York plays, 37, 279)
  b. *Thou* arte combered in curstnesse / and *caris* to this coste.
  thou are troubled in cursedness and cares to this cost
  - 'You are troubled with sin and dread this price.'

(York plays, 26, 171)

At first sight, it appears that the use of reduced markers (zero or *-e*) is also widespread. However, upon closer inspection it turns out that the vast majority of reduced endings represent subjunctive or imperative/optative forms (as illustrated in 14). The latter are conspicuously frequent, which can be attributed to the religious character of the plays, which include many prayers, or passages where the characters directly address Jesus or God. If subjunctive (and adhortative/optative) forms are filtered out, it appears that around 80% of 2sg lexical verbs carry some form of the *s*-inflection in the present tense indicative; see Table 9.5 for a summary of our quantitative findings.<sup>26</sup> Furthermore, it turns out that of the 31 cases with *-e* 16 are forms of the preterite-present verb *witen* 'know' that usually does not inflect for 2sg. That is, the share of *s*-marked forms is probably even larger than 80%.

(14) a. Luk nowe that *thou wirke* noght wrang ... look now that thou act not wrong
'Look now, that you do not wrong.'
(York plays, s439)

<sup>&</sup>lt;sup>26</sup>In quite a number of cases it is hard to tell whether we are dealing with a subjunctive or indicative form. This seems to support the hypothesis (cf. e.g. Sweet 1871) that the spread of the reduced ending involved a reanalysis of originally subjunctive forms as indicative (most likely in subordinate clauses).

b. Iff I have fastid oute of skill, *Wytte thou* me hungris not so ill if I have fasted out of skill know you me hungers not so ill 'If I have fasted unreasonably, you should know that I'm not so hungry.'
(York place e10(2))

(York plays, s1962)

Table 9.5: Verbal endings of the second person present tense indicative in the *York plays* (lexical verbs only)

	S and V are adjacent				S and V	are i	non-adjac	ent
Verb endings	-s	-st	-е	-Ø	-s	-st	-е	-Ø
uninverted	68	15	13	5	13	0	2	0
inverted	49	8	16	1	0	0	0	0
Total	117	23	29	6	13	0	2	0
	(66.9%)	(13.1%)	(16.6%)	(3.4%)	(86.7%)	0	(13.3%)	0

In what follows, we take a closer look at the behaviour of the auxiliaries 'have' and 'be'. As shown in Table 9.6, variants of the *s*-ending (especially *-st*) are particularly frequent with 'have' in its use as a perfect tense auxiliary (almost obligatory, in fact).<sup>27</sup>

Table 9.6: Verbal endings of the second person perfect auxiliary 'have' in the *York plays* 

	S a	S and V are adjacent				S and V are non-adjacent			
Verb endings	-s	-st	-е	-Ø	-s	-st	-е	-Ø	
uninverted	19	21	1	0	2	3	1	0	
inverted	8	14	0	0	0	0	0	0	
Total	27	35	1	0	2	3	1	0	
	(42.8%)	(55.6%)	(1.6%)	0	(33.3%)	(50%)	(16.7%)	0	

So it appears that forms ending in *-s/st* are highly grammaticalized as realizations of the 2sg perfect auxiliary 'have'. Furthermore, note that the extended

<sup>&</sup>lt;sup>27</sup>In connection with the perfect auxiliary 'have' 2sg *st*-forms are frequently extended with *e*: In cases where the subject is adjacent to the verb, we have found 9 instances of *haste* in inversion contexts, and 11 instances of *haste* without inversion.

2sG marker *-st* has been better preserved in connection with 'have', which can presumably be attributed to the fact that auxiliary 'have' is a highly frequent element. A similar frequency-related preservative effect can be observed with 2sG forms of 'be', albeit with a different effect on the distribution of *s*-marked forms, as illustrated in Table 9.7.

	S a	nd V are adj	S and V a	re non	-adjacent	
Verb forms	is	art	arte	is	art	arte
uninverted	2	13	29	3	0	0
inverted	2	5	10	0	0	0
Total	4 (6.6%)	18 (29.5%)	39 (63.9%)	3 (100%)	0	0

Table 9.7: 2sg forms of the auxiliary 'be' (present tense) in the York plays

'Be' differs significantly from the other verbs surveyed so far, and its special behaviour is of particular theoretical interest, as will become clear shortly. First and foremost, the *s*-marked form *is* (which is also standardly used in connection with all kinds of 3sg subjects) is guite rare;<sup>28</sup> in around 90% of all cases, the 2sg of 'be' is realized by a variant of art, with the extended form arte being twice as frequent as the short alternative. Again, the fact that the suppletive form of 2sg 'be' has been preserved in the York plays can be attributed to the high token frequency of art(e), which in this case has blocked the spreading of the s-marked alternative *is*. However, *art(e)* seems to be confined to contexts where the subject is adjacent to the finite auxiliary. In any case, the absence of *art(e)* in non-adjacent contexts seems to be noteworthy. It might well be that non-adjacent instances of *art(e)* are simply by chance absent from the records (recall that there is a strong tendency for pronominal subjects to be adjacent to the verb). Moreover, examples like (15) suggest that the use of *is* is not necessarily a reflex of theNSR in 2sg contexts, since is is used both under adjacency and non-adjacency with the subject pronoun.29

(i) Why, *arte* thou a pilgryme and *haste* bene at Jerusalem why are thou a pilgrim and has been at Jerusalem 'Why, are you a pilgrim who has been in Jerusalem?' (York plays, 40, 70)

<sup>&</sup>lt;sup>28</sup>The *s*-ending also appears on preterite forms of 'be' (*was*).

<sup>&</sup>lt;sup>29</sup>Note that despite appearances, cases like (i) and (ii) are not to the point, since both *arte* and *haste* as well as *arte* and *caris* are the regular (fully inflected) 2sg forms of the relevant verbs.

(15) For thou *is* one and *is* abill and aught to be nere. for thou is one and is able and ought to be near (York plays, 32, 33)

3sG subjects always trigger *s*-forms (V+*s*, *has*, *is*); there is no trace of the NSR, that is, type of subject and position of the subject relative to the verb do not matter, as shown in (16):

- a. Or ellis *this brande* in youre braynes sone *brestis* and *brekis*. Or else this fire in your brain soon bursts and breaks
   'Or else this wrath in your brain soon bursts and breaks out.'
   (York plays, s2941)
  - b. Here sirs howe *he sais*, and *has* forsaken His maistir to this woman Hear sirs how he says and has forsaken his master to this woman here twyes

here twice

'Hear sirs, what he says and how he has betrayed his master twice with this woman here.' (York plays, s2793)

As already briefly mentioned above, the effects of the NSR can be most readily observed with plural (pronominal) subjects. While nominal 3PL subjects usually require *s*-marking in the present tense, as shown in (17), the verb appears in its bare form when the subject is a pronoun adjacent to the verb. This is illustrated in (18).

- (17) a. Say, Jesu, *the juges and the Jewes hase* me enioyned say Jesus the judges and the Jews has man pleased 'Say, Jesus, the judges and the Jews have pleased man.' (York plays, s3120)
  - b. To mischeue hym, with malis in there mynde haue thei menyd, To harm him with malice in their mind have they meant And to accuse hym of cursednesse *the caistiffis has* caste.
    and to accuse him of sinfulness the captives has uttered.
    'To harm him with malice in their mind they complained and to accuse him of sinfulness the captives have uttered.' (York plays, s5243)

 <sup>(</sup>ii) Thou *arte* combered in curstnesse / and *caris* to this coste. thou are troubled in cursedness and cares to this cost
 'You are troubled with sin and dread this price.'
 (York plays, 26, 171)

- c. This matter that thowe moves to me is for *all these women* bedene This matter that though moves to me is for all these women bidding That *hais* conceived with syn fleshely that has conceived with sin fleshly
  'This matter that though moves to me if for all these bidding women that have conceived in fleshly sin.' (York plays, s1511)
- (18) a. Sir kyng, we all accorde / And sais a barne is borne Sir king we all accord and says a bairn is born
   'Sir king, we all accord and say a child is born.' (York plays, 16, 209–210)
  - b. Therefore some of my peyne ye taste / And spekis now Therefore some of my pain you<sub>[2pl]</sub> taste and speaks now nowhare my worde waste, nowhere my word waste
     'Therefore some of my pain you taste and meak new newhore

'Therefore some of my pain you taste and speak now nowhere my word waste.'

(York plays, 41, 87)

c. Howe these folke spekes of our chylde. *They say and tells* of great How this folk speaks of our child. They say and tells of great maistry authority.

'How this folk speaks of our child. They say and tell of great authority.'

(York plays, 15, 79)

In traditional descriptions of the inflectional system of the *York plays* it is sometimes taken for granted that NSR effects as in (18) are the norm with plural subject pronouns that are not adjacent to the verb (cf. e.g. Burrow & Turville-Petre 2005: 272). However, it seems that the agreement system is more variable. For example, there are also cases where the verb fails to be adjacent to the subject and still lacks *s*-marking as illustrated in (19).<sup>30</sup>

<sup>&</sup>lt;sup>30</sup>In general, cases where pronouns are not adjacent to the verb are quite rare. It is therefore difficult to estimate the status of patterns such as (18) and (19). One might speculate that in at least some of those cases, the zero ending is used to facilitate rhyming as in (19c). Alternatively, cases of zero marking under non-adjacency might be taken to foreshadow the loss of the position-of-subject constraint, eventually leading to general verbal zero marking with

(19) a. Wherefore we dresse vs furth oure way / And make offerand to God wherefore we dress us forth our way and make offerings to God this day this day

'Wherefore we go on our way and make offerings to God this day.' (York plays, 17, 228)

 b. Yhe comaunded me to care, als *ye* kenne wele and *knawe*, To You commanded me to care as you<sub>[2pl]</sub> know well and know to Jerusalem on a journay, with seele; Jerusalem on a journey with good-fortune

'You commanded me to come, as you well understand and know, to Jerusalem on a journey, with good fortune.' (York plays, 30, 336)

c. That lurdayne that *thei* loue and *lowte* / To wildirnesse he is that rascal that they love and venerate to wilderness he is wente owte gone out
'That rascal that they love and venerate he went out to the wilderness.'
(York plays, 22, 32)

Particularly interesting in this regard is the behaviour of the plural of 'be', which is realized by variants of *are*. It turns out that independently of the category (nominal/pronominal) and the position of the subject (adjacent/non-adjacent to the verb), the plural form of 'be' is almost always *are*, that is, forms of 'be' are usually not subject to the NSR.<sup>31</sup> The different behaviour of 'be' and lexical verbs is illustrated by the examples in (20).

(i) Thei that *is* comen of my kynde [...] they that is come of my kind (York plays, 44, 128)

pronominal subjects (as in many present-day dialects). The extension of the zero marker could then perhaps be analysed as an analogical change made available by the overall rarity of cases where the pronoun fails to be adjacent to the verb.

<sup>&</sup>lt;sup>31</sup>It should be pointed out, however, that there are few examples, such as (i), where NSR effects do show up with non-adjacent forms of 'be'. At least with plural subjects, these are vastly outnumbered by cases where the regular plural form *are* appears under non-adjacency.

- (20) a. Sir knyghtis that *are* in dedis dowty, *Takes* tente to vs, Sir knights that are in deeds doughty takes entente to us
   'Sir knights who are doughty in deeds devote themselves to us.' (York plays, 38, 417)
  - b. Men that *are* stedde stiffely in stormes or in see And *are* in will men that are placed unwavering in storms or in sea And are in will wittirly my worschippe to awake, And thanne *nevenes* my name in fully my worship to awake And then call my name in that nede,

that need

'Men who are unwavering in storms or at sea and are fully in will to awake my worship and then call my name in that need.' (York plays, 44, 137–139)

c. All that *are* in newe or in nede and *nevenes* me be name, All that are in harm or in need and call me by name 'All of them are in harm or in need and call me by my name.' (York plays, 44, 144)

So there is a major difference between the plural forms of lexical verbs and 'be': With lexical verbs, nominal subjects differ from pronominal subjects in that the former always trigger *s*-marking on the verb (both in the singular and the plural), while the latter take part in the NSR. With 'be', however, nominal and pronominal subjects behave alike: Singular forms trigger *is*, while plural subjects invariably trigger *are*. In the following section, we will discuss the theoretical relevance of this asymmetry. We would also like to point out that 1sG forms seem to play a special role in that they are by and large (see above for some exceptions) exempt from the NSR, in contrast to the system listed in Table 9.2. Table 9.8 summarises our findings regarding the inventory of inflectional endings found with present tense verbs in the *York plays* ("pron." stands for "pronoun", "adjac." stands for "adjacent"; recall that "- $\emptyset$ " is a shortcut for zero marking and forms that end in *-e*).

# 4 The NSR in the York plays: Towards an analysis

An adequate analysis of the type of NSR as exhibited by the *York plays* should capture the following basic system-defining characteristics: (i) the effect of subject type/position of the subject on verbal agreement marking; (ii) the fact that apart from some minor exceptions (which probably reflect differences in authorship,

	lexical V	have	be			
	+pron, +adjac.					
1sg	-Ø	have	am			
2sg	-s (-st, -Ø)	has, hast(e)	art, arte			
3sg	-S	has	is			
1pl	-Ø	have	are			
2pl	-Ø	have	are			
3pl	-Ø	have	are			
	+	pron, –adjac.				
1sg	-Ø (-s)	have (has)	am (is)			
2sg	-s (-Ø)	has, hast(e)	is?			
3sg	-S	has	is			
1pl	-s (-Ø)	has (have)	are			
2pl	-s (-Ø)	has (have)	are			
3pl	-s (-Ø)	has (have)	are			
	_	pron, –adjac.				
1sg	_	_	_			
2sg	_	_	_			
3sg	-S	has	is			
1pl	_	_	_			
2pl	_	_	_			
3pl	-S	has	are			

Table 9.8: Verbal inflection in the York plays (present tense indicative)

or language change in progress), the NSR seems to be confined to plural forms; (iii) the observed differences between 'be' and other verbs (only 'be' signals regular number agreement independently of type and position of the subject). In what follows, we will present a syntactic analysis of these findings that makes use of the notion that inflectional heads may lack phi-content when they enter the syntactic derivation, which Roberts (2010) calls "blank generation". The basic idea is that the absence of agreement features on the T-head may be repaired in different ways, either via insertion of default inflection (i.e., *-s* in many NSR varieties), or by incorporation of adjacent subject pronouns, leading to the presence of phi-features on T, which can then be spelled out by (marked/more specified) zero agreement.

However, before we turn to the specifics of that approach to the NSR, we would like to discuss in some more detail a set of morphological aspects pertaining to the agreement system as found in the *York plays*, including the inventory of markers and their featural specifications (see §4.2 for the question of how richness of inflection might be linked to the featural content of the relevant underlying inflectional heads in the syntax).

#### 4.1 Morphological aspects

The *York plays* exhibit a mixed system, where the NSR is more or less confined to the plural part of the paradigm (with some few exceptions with 1sG) and has not yet spread to 'be'. In the inventory of present tense markers we still find 2sG forms extended by *t*, similar to earlier stages of English. The extended forms are rare with lexical verbs, but are the dominant pattern with auxiliary verbs (*hast(e)*, and in particular *art(e)*). With auxiliaries, they serve to preserve the distinction between 2sG and plural (and 3sG) forms, which is blurred with lexical verbs (due to the loss of final *t* in the 2sG).<sup>32</sup> The evidence for distinctive 2sG forms provided by auxiliaries precludes the development of a general impoverishment rule suggested above (here repeated in 21), which leads to system-wide syncretism of 2sG and 3sG forms (in varieties that have preserved *thou*).

(21)  $[+hearer] \rightarrow \emptyset / \_pronoun_{[NOM]}$ 

To capture the fact that syncretism of 2sg and 3sg is confined to lexical verbs, we propose the following slightly modified version of (21), which applies only

 $<sup>^{32}</sup>$ Note that it is not entirely clear whether the 2sG forms extended by *t* represent a retention or are the result of dialect contact (e.g., the MED lists *hæfes* as the 2sG of 'have' in Northumbrian OE).

to lexical verbs and deletes the verbal agreement feature [+hearer] when the finite verb is adjacent to a 2sG subject pronoun. As a result of (22), finite verbs that agree with 2sG subjects in the syntax lack positive values for [person] and [number] at the point of vocabulary insertion (assuming a realisational model of grammar, where phonological exponents of abstract morphosyntactic features are inserted postsyntactically, cf. e.g. Halle & Marantz 1993).<sup>33</sup>

(22)  $[+hearer] \rightarrow \emptyset / V_{V_{\text{response}}} \text{ pronoun}_{[NOM]}$ 

The system of present tense indicative markers for lexical verbs can thus be described by basically the same set of vocabulary items that we posited for the system in Table 9.2 (following standard assumptions, more specified exponents/ markers take precedence over less specified exponents due to the elsewhere condition, Kiparsky 1973):

(23) a.  $[+phi] \leftrightarrow -\emptyset$ b. elsewhere  $\leftrightarrow -s$ 

After deletion of [+hearer] (due to the impoverishment rule in 22), both 2sg and 3sg forms are spelled out by the default inflection *-s* (recall that we assume that "3sg" corresponds to the absence of (positive) specifications for [person] and [number]). In this way, (22), in combination with the inventory of agreement markers in (23), accounts for the lack of NSR effects with 2sg (and 3sg) subjects.

A slightly different set of vocabulary items is used for present tense indicative forms of 'have'. We take it that the extended form *hast(e)* still signals 2sg. To account for the fact that *hast(e)* covaries with the reduced and ambiguous form *has*, we assume that the same feature set can be spelled out by *has* (probably as a result of phonological erosion (reduction of the final consonant cluster *st*), which happens to be homophonous with the elsewhere marker.

- (24) a.  $[+hearer, -PL] \leftrightarrow hast(e), has$ 
  - b.  $[+phi] \leftrightarrow have$
  - c. elsewhere  $\leftrightarrow$  *has*

The present tense paradigm of 'be' has preserved even more distinctions (three persons in the singular, and the distinctive plural form *are*). Moreover, NSR effects are virtually non-existent with 'be',<sup>34</sup> and it is the only verb that exhibits

<sup>&</sup>lt;sup>33</sup>Alternatively, one might assume that the *-s*-marker found with 2sg lexical verbs is still a genuine 2sg form, which only happens to be accidentally homophonous with the default *-s* found in other contexts (i.e., in the 3sg and plural).

<sup>&</sup>lt;sup>34</sup>Recall that there are very few instances where *is* occurs with (non-adjacent) 1sG and 2sG subjects.

proper number agreement with nominal subjects. The inventory can thus be described as follows:

- (25) a.  $[+\text{speaker}, -PL] \leftrightarrow am$ b.  $[+\text{hearer}, -PL] \leftrightarrow art(e)$ c.  $[+pl] \leftrightarrow are$ 
  - d. elsewhere  $\leftrightarrow$  *is*

Note that the inventory in (23–25) single out *s*-marked forms as the elsewhere case. In the next subsection, we will address the question of why *s*-marked forms gain a wider distribution in contexts where the verb fails to be adjacent to a pronominal subject. In addition, we will argue that the absence of NSR effects in connection with 1sG (in contrast to 2sG and 3sG) and all forms of 'be' cannot be attributed to morphological properties, i.e., the inventory of vocabulary items plus impoverishment, and should thus receive a syntactic explanation.<sup>35</sup>

#### 4.2 Syntactic aspects

In this section, we will present an analysis of the agreement system displayed by the *York plays* that is based on Roberts's (2010) proposal that functional heads may enter the syntactic derivation without featural content (so-called "blank generation"). We will argue that a slightly modified version of Roberts's approach to the NSR provides enough leeway to account for the mixed or hybrid character of the agreement system found in the *York plays* (in particular, the special behaviour of 'be'), in contrast to previous theoretical analyses. We take it that the lack of NSR effects with 'be' and 1sG subjects reflects a genuine syntactic difference and should not be captured by purely post-syntactic/morpho-phonological mechanisms (in contrast to what we have proposed for the absence of relevant effects with 2sG and 3sG). More precisely, the facts suggest that in these cases, subjectverb agreement is established by a syntactic operation (e.g., Agree; Chomsky 2000) that leads to feature matching between the phi-content of a relevant functional head (T/INFL) and the subject, independently of type and position of the latter.

<sup>&</sup>lt;sup>35</sup>An anonymous reviewer raised the question whether the asymmetry between 'be' and other verbs could not simply be analysed as a lexical difference, in the sense that the paradigm of inflected forms of 'be' is richer than the paradigms of other verbs. However, a lexical solution fails to account for the fact that the difference between 'be' and lexical verbs is syntactic in nature: With lexical verbs, the agreement alternation (that is, the NSR) is governed by syntactic factors (type and position of the subject), while no such effects are observed with 'be'.

Roberts (2010) outlines an analysis of the NSR that is based on the idea that in the relevant varieties, T/INFL lacks a phi-set of its own (blank generation). As a result, T/INFL enters the syntactic derivation without agreement features. it can only acquire such features via incorporation of (clitic) subject pronouns.<sup>36</sup> The presence of (positively specified) agreement features in T/INFL (resulting from the incorporation of clitic pronouns) is then signalled by zero marking on the verb, while *-s* is inserted as a default inflection when T/INFL lacks agreement features (cf. 23).<sup>37</sup> To account for the adjacency effect, Roberts assumes that incorporation must go hand in hand with phonological cliticisation of the subject pronoun to the verb.<sup>38</sup> In other words, a T/INFL head without an inherent phiset may acquire agreement features in the course of the derivation when the conditions in (26) are met.

- (26) a. incorporation of the subject pronoun:  $[_T T D_{[+phi]}]$ 
  - b. phonological cliticisation: (pronoun X V) (where X is null or another clitic)

This account provides a straightforward description of "pure" NSR systems similar to the one given in Table 9.2 where all verbs (including auxiliaries) take

(i) That we *hym* tharne sore may vs rewe, that we him lose sure may us regret
'We will certainly regret that we lost him.' (York plays, 42, 14)

This can be accounted for if we assume that both the subject and object pronoun are part of a clitic cluster that attaches to the verb.

<sup>&</sup>lt;sup>36</sup>A related, but purely post-syntactic, analysis of the NSR is proposed by Trips & Fuß 2010, who posit the following agreement rule that operates on the output of the syntactic derivation:

<sup>(</sup>i) -Ø marks the presence of positive specifications for [person] or [number] in the minimal phonological domain the finite verb is part of; -s is inserted elsewhere.

Similar to an approach in terms of blank generation, (i) assumes that the relevant agreement features are provided by weak subject pronouns under adjacency with the verb. However, notice that the special behaviour of 'be' seems to call for a (partially) syntactic treatment of subject-verb agreement in the *York plays*. See below for further discussion and a synthesis of the two accounts.

<sup>&</sup>lt;sup>37</sup>Recall that we assume that '3sG' corresponds to the absence of (positively specified) person and number features, cf. e.g. Harley & Ritter (2002).

<sup>&</sup>lt;sup>38</sup>Interestingly, it seems that the only elements that may regularly intervene between a subject pronoun and a zero-marked verb are (weak) object pronouns as in (i).

the marked (zero) ending only in connection with adjacent non-3sG (clitic) pronouns, while -s occurs elsewhere. In addition to the adjacency condition, Roberts' analysis also correctly predicts that stressed, coordinated and modified forms (which are not clitics) trigger default inflection on the verb:

- (27) a. They've recently comed, *has them*. (Yorkshire English; Pietsch 2005b: 88)
  - b. Him and me *drinks* nought but water. (Roberts 2010: 6)
  - c. Us students *is* going. (Belfast English; Henry 1995: 24)

However, something more must be said to capture (a) the fact that the pronoun's phi-set is spelled out twice (as the pronoun itself and as zero marking on the verb), and (b) the observation that in many NSR dialects, the marked zero inflection also appears in inversion contexts, where the finite verb precedes an adjacent subject pronoun:

(28) So sir, *slepe* ye, and *saies* no more.so sir sleep you.pl and say no more(York plays, 30, 148)

Under the assumption that incorporation of the pronoun is a purely syntactic process, the fact that it may precede (compare 18) or follow the zero-marked verb (as in examples like 28) does not seem to receive a satisfying explanation. If incorporation is analysed as an instance of head movement, we would expect that the relative order of pronoun and finite verb is not variable. As a possible solution, one might suggest that the linearisation of the incorporated pronoun is sensitive to the syntactic position of the finite verb in the sense of a second position/Wackernagel effect that is only triggered when the verb has moved to  $C^{0}$ . However, such an account would be quite stipulative. In what follows, we would like to argue that a more principled explanation becomes available if we take a closer look at the nature and cause of the assumed incorporation process. What we would like to propose is that in the NSR varieties, incorporation of the pronoun is in fact a postsyntactic repair operation that is triggered to patch up a T head that enters the morpho-phonological component without phicontent. The rationale behind this idea is that in a language with at least some morphological agreement, a phi-less T-head creates a problem at the interface to the morpho-phonological component.<sup>39</sup> This problem can be repaired either by

<sup>&</sup>lt;sup>39</sup>Arguably, no such repair is needed in languages that completely lack agreement features (e.g., Indonesian).

the insertion of default inflection (a last resort prior or during vocabulary insertion), or by "incorporation" of an adjacent phi-set that can then be spelled out by an appropriately marked agreement formative. The latter option is arguably more specific/complex and therefore preempts repair via default inflection (due to the elsewhere condition). To account for the fact that both the pronoun and the phi-set on T are spelled out (the latter usually via the zero marker in the NSR varieties), we assume that the pronoun's phi set is copied onto the finite verb/T under adjacency (i.e. when both elements are part of the same minimal prosodic domain). Crucially, this repair operation (giving rise to zero inflection) can apply in both inversion and non-inversion contexts as long as the pronoun is directly adjacent to the finite verb (note that this modification of Roberts' original account combines the idea of blank generation with certain aspects of the postsyntactic approach proposed by Trips & Fuß 2010, cf. footnote 37).

Some additional tweaking is needed to account for the intricacies of the version of the NSR that is found in the York plays. First of all, it is evident that in contrast to other verbs, 'be' cannot be subject to blank generation. Rather, 'be' is the phonetic realization of a special T/INFL node that comes with its own phi-features (in contrast to T/INFL linked to other verbs). As a result, 'be' may agree with non-pronominal subjects as well. Note that the special behaviour of 'be' is a major challenge for theoretical approaches that analyse agreement/nonagreement as the result of different subject positions (as e.g. de Haas & van Kemenade 2015). The fact that regular number agreement occurs with nominal subjects (which otherwise do not trigger agreement) shows that the structural position of the subject is not relevant. Rather, it seems that 'be' (in contrast to other verbs) can detect the phi-features of any kind of subject (independent of its position and categorial nature) due to the fact that Tbe always carries an unvalued set of phi-features that triggers a syntactic Agree operation. Thus, we take the asymmetry between 'be' and other verbs to suggest that blank generation may be parameterized so that it affects only certain types of inflectional heads.

Basically the same approach can be used to account for the absence of NSR effects with 1sG subjects. Again, we assume that T is not subject to blank generation in this case. Of course, this raises the more general question of how and why blank generation of inflectional heads is triggered. What we would like to propose is that the absence of agreement features on T is intimately linked to the breakdown of the (morphological) agreement system in Northern Old/Middle English. Recall that as a result of phonological erosion (and probably language contact with Scandinavian), -s (or rather, variants of it) became the only overt agreement marker in Northern varieties, eventually leading to a binary agreement system that does not any longer signal featural distinctions apart from [+/-phi]. We

take it that this is the prototypical situation that brings about wholesale "blank generation" of T/INFL.<sup>40</sup> In the *York plays*, however, we still find a slightly richer system of endings. In addition to the fact that 'be' has preserved more inflectional distinctions than other verbs (including a systematic distinction between 2sG and 2PL), the zero ending is still closely linked to 1sG, in that it unambiguously signals [+speaker, -plural] with singular subjects and in cases where the subject fails to be adjacent to the verb (presumably reflecting an earlier pre-NSR stage where 1sG was the only feature combination that was clearly marked on the verb, by zero marking; cf. Table 9.2). It seems thus plausible to assume that blank generation of T is blocked in contexts where agreement marking can still be linked to featural distinctions that are more specific than a binary [+/–phi] contrast. Our approach to the NSR in the *York plays* is summarized in (29):

- (29) a. NSR effects (plural forms): blank generation of T, repair via (a) default inflection (→ -s), (b) incorporation of adjacent subject pronouns (→ Ø);
  - b. *no NSR effects/'be' & 1sG*: no blank generation of T, regular syntactic agreement;
  - c. *no NSR effects/2sG & 3sG*: impoverishment and underspecification of markers ( $\rightarrow$  -s).

This approach captures basic properties of the agreement system exhibited by the *York plays*. However, note that in addition to these general patterns, we have also observed a number of alternative agreement options. Some of these are presumably residues of a former system (such as the few cases of 2sg *-st* on lexical verbs), while others represent innovations that compete with some of the options in (29), such as NSR effects in connection with 1sg (which can perhaps be analyzed as extensions of blank generation to 1sg contexts), and cases where the position of subject constraint seems to be neutralized, leading to general zero marking with pronominal subjects (which foreshadows a development that has

(i) [Person, Number]  $\rightarrow \emptyset / T_{\_}$ 

However, note that such an approach raises a number of questions concerning the interplay between presyntactic and postsyntactic impoverishment that we cannot discuss here. We leave this issue for future research.

<sup>&</sup>lt;sup>40</sup>On a more technical note, one might assume that blank generation of T/INFL results from another type of impoverishment rule that deletes person and number features from T/INFL before the latter enters the syntactic derivation (cf. e.g. Müller 2006 on the notion that impoverishment rules may also operate presyntactically):

taken place in a number of NSR dialects).<sup>41</sup> The existence of this type of linguistic variation suggests that the particular version of the NSR that is found in the *York plays* represents an intermediate stage that eventually gave way to a more balanced agreement system where blank generation of T/INFL is not (lexically) confined to certain contexts.

#### 5 Some remarks on the historical origin of the NSR

So far, we have presented a theoretical analysis of the NSR in terms of "blank generation" of inflectional heads. From a diachronic point of view, we have seen that in OE, special inversion contexts show an unexpected *-e* affix which can be interpreted as foreshadowing the NSR, and that this rule actually occurred in some ME texts. In this section, we will bring these observations together and argue that after the breakdown of the OE agreement system, the NSR developed via a combination of generalized V2 in the northern varieties and agreement weakening in inversion contexts (which turned into the NSR after the loss of V2).<sup>42</sup>

The starting point for our diachronic analysis is Northumbrian OE, where only 1sG is unambiguously marked by verbal agreement (via  $-e/\emptyset$ ). Elsewhere, we find some form of -s marking, which alternates with the dental markers in 3sg contexts and in the plural part of the paradigm. The question then is how and why new zero markers were introduced into the northern paradigm. We believe that the rise of new zero-marked plural forms is closely related to the phenomenon of agreement weakening in OE. Following Roberts (1996), we analyze OE agreement weakening in terms of contextual allomorphy of 1PL/2PL forms which can be attributed to syntactic factors, namely the structural position of the finite verb (similar to complementizer agreement in present-day West Germanic dialects): (i) The reduced form is used only when the verb moves to C (in contexts with fronted operators such as wh, negation etc.). In contrast, full agreement obtains in all other contexts, where the verb occupies a lower inflectional head (Infl/T) (cf. e.g. Cardinaletti & Roberts 2002; Pintzuk 1999; Hulk & van Kemenade 1995; Kroch & Taylor 1997; Haeberli 1999; Fischer et al. 2000, and many others). As a result, agreement weakening is confined to inversion contexts where the finite

<sup>&</sup>lt;sup>41</sup>A fuller description and quantitative analysis of the agreement options in the *York plays* is beyond the scope of this paper. We leave it for future investigation.

<sup>&</sup>lt;sup>42</sup>Some authors (cf. Hamp 1976; Klemola 2000; Filppula et al. 2002; de Haas 2008) have claimed that the rise of the NSR was promoted by language contact with the Brythonic Celtic languages, which exhibit a similar distinction between pronouns and non-pronouns. See e.g. Pietsch (2005a), de Haas (2011) and Benskin (2011) for critical discussion.

verb immediately precedes a 1PL/2PL subject pronoun. In the other cases where the finite verb is in a lower position we find regular agreement with both subject pronouns and full subject DPs. This is illustrated with the following structures:

- (30) Original (southern) OE pattern
  - a. [<sub>CP</sub> Op [<sub>C'</sub> C+V<sub>fin</sub> [<sub>TP</sub> subj.pron. [<sub>T'</sub> T [<sub>VP</sub> ... ]]]]]  $\rightarrow$  agreement weakening
  - b.  $[_{CP} XP [_{C'} C [_{TP} [_{T'} T+V_{fin} [_{VP} DP subject ...]]]]] \rightarrow regular agreement$
  - c.  $[_{CP} XP [_{C'} C [_{TP} subj.pron. [_{T'} T+V_{fin} [_{VP} ...]]]] \rightarrow regular agreement$

The evidence available suggests that this kind of systematic (syntactic) agreement weakening was originally confined to southern varieties of OE, while northern texts show only occasional examples of reduced agreement endings (i.e., schwa or -Ø) in inversion contexts (cf. e.g. Berndt 1956; Cole 2014 on Northumbrian OE). In other words, it does not seem to be possible to analyze the NSR as a direct continuation of OE agreement weakening (but recall that Northumbrian OE exhibits a related pattern where the *s*-marker appears under adjacency with a subject pronoun). However, it seems likely that the agreement patterns that eventually turned into the NSR entered northern grammars via dialect contact with southern varieties (cf. Pietsch 2005b: 53f. for discussion). In the northern varieties the original OE pattern shown in (30) was then generalized to all contexts with adjacent plural subject pronouns (cf. Rodeffer 1903; Pietsch 2005b).43 But why did this only happen in the northern varieties? To answer this question, let us take a closer look at grammatical factors that shaped the impact of dialect contact and possibly led to the rise of the NSR in the northern varieties. It has been claimed by a number of authors (cf. e.g. Kroch & Taylor 1997; Trips 2002) that there are major syntactic differences between northern and southern early ME varieties.<sup>44</sup> In particular, the northern varieties had developed generalized V2 which means that the finite verb consistently occurred in C regardless of the

<sup>&</sup>lt;sup>43</sup>Rodeffer's proposal is criticized by Berndt (1956), who argues that quantitative data from Northumbrian OE texts indicate that there is no direct link between agreement weakening in OE and the NSR (more precisely, Berndt argues that the evidence available to us suggests that agreement weakening had already been in decline in the northern varieties before *-s* was generalized to all persons and numbers; see Pietsch 2005b: 50ff. for comprehensive discussion and a critical assessment of Berndt's arguments).

<sup>&</sup>lt;sup>44</sup>Moreover, the NSR could not have developed in the southern varieties for purely morphological reasons: the loss of plural /-n/ in the ME period served to neutralize the contrast between full and syncopated forms formerly introduced by OE Agr-weakening.

nature of the initial constituent. As a result of this change, the syntactic differences between subject pronouns and phrasal subjects seem to be less clear-cut than in OE (the only remaining diagnostic is the placement of the subject relative to certain high adverbs, cf. de Haas 2011, de Haas & van Kemenade 2015 for details):

(31) a. [CP XP [C' C+V<sub>fin</sub> [TP subject [T' T [VP ...]]]]
b. [CP subject [C' C+V<sub>fin</sub> [TP t<sub>subj</sub> [T' T [VP ...]]]]]

So as soon as the northern learners were confronted with southern agreement weakening, they could neither attribute it to a special position of the verb (due to generalized V2) nor, arguably, to a special position for subject pronouns since the evidence for differential subject positions had become blurred. What we would like to propose is that, at this point, learners did not discard the pattern (presumably because it was too robustly attested in the input), but rather reanalysed it in terms of a structure where the radically impoverished inflectional head was endowed with phi-features via incorporation of the subject pronoun. This gave rise to an early version of the NSR that initially distinguished between 1PL/2PL pronouns and all other subjects. The reanalysis of southern agreement weakening as incorporation of subject clitics led to the loss of syntactic restrictions on the distribution of reduced endings, and agreement weakening could be extended to all contexts with adjacent subject pronouns (VS and SV). The result was that the syncopated 1PL/2PL forms were not any longer confined to operator contexts, which widened the scope of agreement weakening to all 1PL/2PL contexts, including preverbal pronouns in both main and embedded clauses:

(32) ... we go-∅ by trouthe, noghte by syghte, þat es, we lyff-∅ in trouthe, we go by truth not by sight that is we live in truth noghte in bodily felynge; not in bodily feeling (ROLLTR,36.752)

A further result was that the rule was extended to 3PL contexts:

 (33) ... be penance bat *bai suffer* ... the penance that they suffer
 (ROLLEP, 86.368)

This extension can possibly be attributed to the fact that in the Northern ME varieties the original OE 3PL pronoun *hio/heo* was replaced by the Scandinavian

form  $\delta ai$  (which later spread to all varieties). In inversion contexts, this innovation led to cluster reduction of  $[s + \delta]$  to  $[\delta]$  for phonetic reasons (which was possibly promoted by analogical pressure, 1PL/2PL, cf. Pietsch 2005a: 56).

A closer look at morphological aspects of this change reveals that we can indeed talk about a "markedness reversal" (Pietsch 2005a) since the "weak" syncopated southern OE forms turned into the marked inflections in the NSR dialects. When the zero affix entered the northern grammars via dialect contact with the southern varieties, it was pressed into service as a marked agreement formative on the model of the zero inflection that occurred with 1sg subjects. The observation that NSR effects appeared first in connection with lexical verbs is perhaps related to the fact that the underspecified *s*-marker had already gained a wider distribution here, which facilitated a reinterpretation of the zero inflection as a marked agreement formative that contrasted with default -*s*.

After the initial reanalysis, independent changes led to the extension of the zero affix first from 1PL/2PL to 3PL, then to 1sG and – in some varieties – 2sG, when the former 2PL *you* replaced the original 2sG form *thou*. Note that the latter changes led to a more balanced and less complex agreement system combining general "blank generation" of T/INFL with a binary inventory of agreement markers ([+phi]  $\emptyset$  vs. [-phi] -s).<sup>45</sup> The evidence from the *York plays* suggests that the development of this system, which corresponds to Table 9.1, proceeded via a set of intermediate stages where blank generation of T/INFL was restricted to certain verbs or verb classes and parts of the verbal paradigm that had ceased to show distinctive agreement marking.

### 6 Conclusions

In this paper, we have discussed a set of open questions concerning the synchronic analysis and diachronic development of the NSR in northern varieties of English. We have presented a set of new data from the Northern ME *York plays*, which exhibit an early stage of the NSR where its effects are confined to plural forms of lexical verbs and 'have', while 'be' shows regular number agreement with all kinds of subjects. We have argued that the agreement system found in the *York plays* suggests a theoretical analysis of the NSR in which inflectional heads enter the syntactic derivation without a phi-set (due to pre-syntactic impoverishment leading to "blank generation", Roberts 2010) and acquire agreement features

<sup>&</sup>lt;sup>45</sup>See Fuß (2010) for an analysis of relevant analogical changes in terms of a learning strategy that favours a minimal inventory of inflectional markers/features (based on the notion of *minimize feature content*, Halle 1997).

([person] and [number]) via the incorporation of clitic subject pronouns. Heads that have been endowed with positive specifications for [person] and/or [number] in the course of the syntactic derivation are spelled out by the zero marker. Elswehere, the underspecified form -s is used. Based on this account, we have then suggested a new scenario for the historical development of the NSR, arguing that, after the breakdown of the OE agreement system, the NSR developed via dialect contact between northern and southern varieties. More precisely, we have proposed that syncopated verb forms (resulting from Agr-weakening in the southern dialect) were integrated into the northern grammar as marked agreement formatives that contrasted with -s. We have linked the rise of the NSR to the interplay of a set of morphosyntactic properties of Northern ME (including generalized V2 and the advanced loss of inflections), which made available a reanalysis where southern Agr-weakening was attributed to syntactic incorporation of subject pronouns, which supplied a radically impoverished T/INFL-head with agreement features. This contact-induced change paved the way for an extension of the NSR to adjacent pronouns more generally, including preverbal and singular forms.

## Abbreviations

1	first person	NME	Northern Middle English
2	second person	NSR	Northern subject rule
3	third person	OE	Old English
DM	Distributed Morphology	OHG	Old High German
EModE	Early Modern English	0110	e
ME	Middle English	PL	plural
NEG	negation	SG	singular

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