The Northern Subject Rule

Eric Fuß (Goethe-Universität Frankfurt) & Carola Trips (Universität Mannheim)
WOTM 5, 26.06.2010

1. Introduction

- <u>Generalized -*s* in the present tense</u>: Major difference between Standard English and northern varieties of English:

	Standard English	Northern dialects of English
1sg	sing	sing-s
2sg	sing	sing-s
3sg	sing-s	sing-s
1pl	sing	sing-s
2pl	sing	sing-s
3pl	sing	sing-s

Table 1: Verbal inflection (present tense), Standard English vs. Northern dialects

- <u>Northern Subject Rule (NSR)</u>: In many (Central) Northern varieties (in particular, Northumberland, Cumberland, Durham, Westmorland), the realization of verbal agreement (i.e., -*s*) is sensitive to:[1]

  (i) type of subject (pronouns vs. DPs);
  (ii) position of subject:

(1)   *Northern Subject Rule (NSR)*
       A finite verb takes the ending -*s* except when it is directly adjacent to a non-3sg pronominal subject (i.e., *I/you.sg/we/you.pl/they*).

	Standard English	Northern dialects of English	
		pron. subjects (adjacent to V)	DP subjects
1sg	sing	sing	-
2sg	sing	sing (but: thou sing-s)	-
3sg	sing-s	sing-s	sing-s
1pl	sing	sing	-
2pl	sing	sing	-
3pl	sing	sing	sing-s

Table 2: Verbal inflection (present tense), Standard English vs. northern dialects + NSR

- As a result, the NSR dialects exhibit a three-way distinction dependent on type and position of subject:

---

[1] Cf. e.g. Murray (1873), Berndt (1956), Montgomery (1994), Schendl (1996), Corrigan (1997), Börjars & Chapman (1998), Klemola (2000), Pietsch (2005). Similar differences between pronominal and full DP subjects can be observed in other varieties of English: (i) <u>present-day varieties</u>: Afro-American Vernacular English (cf. Corrigan 1997, Montgomery 1997, Tagliamonte 2002, Chambers 2004), Northern Irish varieties (Henry 1995, Pietsch 2005) and Scottish varieties (Pietsch 2005); (ii) <u>historical stages of English</u>: Northern and some Midlands varieties of Middle English (ME; McIntosh et al. 1986, McIntosh 1988), Old and Middle Scots (Meurman-Solin 1993), and (to a limited degree) Early Modern English (EModE; Schendl 1994, 1996).

(2) a. The birds (only) **sings**.
    b. They **sing**.
    c. They only / often **sings**.
    d. They **sing** and **dances**.
    e. they that **sings**

- The effects of the NSR can also be observed 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?

- Inversion has a different effect on agreement with full subjects (consistent use of -*s*, cf. Pietsch 2005:110).
- In many varieties, the NSR also governs the distribution of the past tense forms *was* / *were*:[2]

(4) a. They **were** supposed to [...]
    (Pietsch 2005:100)
    b. [...] they never **was** so strict, at that time, anyway.
    c. [...] they both **was** yoked onto it.
    (Pietsch 2005: 101)

- <u>Observation</u>: Linguistic variation in most present-day varieties:

Little or no variation:
(i)   3sg subjects invariably trigger the presence of -*s*;
(ii)   Personal pronouns (apart from 3sg and 2sg *thou*) do not trigger -*s* when adjacent to the verb.
Variation:
All other subjects trigger -*s* variably (non-adjacency of subject and verb favors the use of -*s*; see Pietsch 2005 for details).

- The NSR figures prominently in traditional dialectological and sociolinguistic studies (for an overview cf. Tagliamonte 2002, Chambers 2004, Pietsch 2005), but from a theoretical point of view no convincing explanation and analysis has been put forward so far.
- <u>This paper</u>: Post-syntactic analysis of NSR effects.
- <u>Basic idea</u>: -*s* vs. -∅ mark the absence / presence of positively specified agreement features (person/number) in the minimal phonological phrase the finite verb is part of.

---

[2] (4c) shows that floating quantifiers such as *both* or *all* also give rise to the adjacency effect characteristic of the NSR.

2. Previous accounts

2.1 The syntax of NSR effects

- The probably most comprehensive syntactic account of a related phenomenon is Henry (1995), focusing on what she calls 'singular concord' in Belfast English.

(5) a. The teachers is/was busy.
         (Henry 1995:27)
     b. They are/*is going.
         (Henry 1995:33)

- Basic idea: Link between morphological case marking and the subject's capability of triggering agreement on the verb:
    (i)   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. *-∅* in all other contexts);
    (ii)   Full DP subjects occupy SpecTP, from which they cannot trigger verbal agreement ⇒ insertion of the default ending *-s* (pure tense marker):[3]

(6) a. [$_{CP}$ [$_{AgrsP}$ They [$_{Agrs'}$ are [$_{TP}$ [$_{T'}$ T [$_{VP}$ going]]]]]]
     b. [$_{CP}$ [$_{AgrsP}$ [$_{Agrs'}$ [$_{TP}$ The teachers [$_{T'}$ is [$_{VP}$ busy]]]]]]

- Conceptual problem: Position of the finite verb is dependent on the position of the subject.
- Empirical problem: While this approach accounts for the type-of-subject condition, it does not have much to say about the adjacency condition which characterizes all other NSR varieties.[4]

2.2 Morphological aspects

- Basic question: What's the feature specification of *-s/-∅* in the NSR dialects?
- General problem: "Markedness paradox" (Pietsch 2005): *-s* is clearly the marked inflection in Standard English; the situation in the NSR dialects is more complex:
    (i)   phrasal/non-adjacent subjects: *-s* as a default marker;
    (ii)   Subject pronouns adjacent to the verb: *-s* seems to mark 3sg.
- Previous approaches:
    (i)   *-s* with phrasal/non-adjacent subjects is a default inflection or pure tense/mood marker (Berndt 1956, Henry 1995, Pietsch 2005); problems: (a) accidental homophony of default *-s* and 3sg *-s*; (b) feature content of *-∅*?
    (ii)   *-s* signals a difference in the categorial status of the subject (DP vs. pronoun, Pietsch 2005); problems: (a) *-s* with (adjacent) 3sg pronouns (and 2sg *thou*); (b) additional explanation necessary for position-of-subject constraint.
    (iii) *-s* is an agreement suffix that may not co-occur with pronouns that have been reanalyzed as prefixal agreement markers (Börjars & Chapman 1998); problems: (a) feature specification of *-s* unclear; (b) no account for the position-of-subject constraint (in *they often talks, they* must be a genuine pronoun; but then it is unclear why that form cannot be used in **they talks*).

---

[3] Henry seems to assume that 3sg *-s* and default *-s* are separate markers, which happen to be homophonous.
[4] But see de Haas (2008) for an account of the NSR based on Henry's analysis.

3. A post-syntactic approach to the NSR

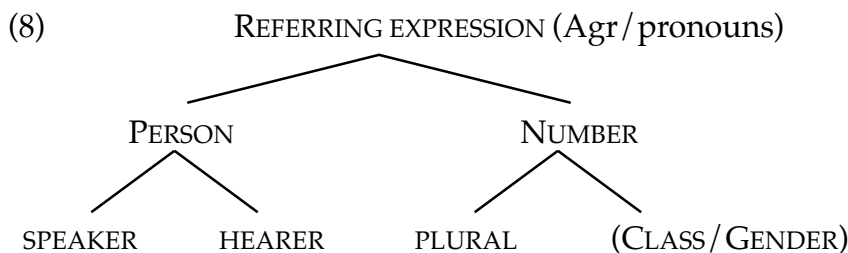|	Northern dialects of English	
	pron. subjects (adjacent to V)	elsewhere
1sg	sing-∅	sing-s
2sg	sing-∅	sing-s
3sg	sing-s	sing-s
1pl	sing-∅	sing-s
2pl	sing-∅	sing-s
3pl	sing-∅	sing-s

Table 3: Verbal inflection (present tense), NSR dialects

(i) Observations: Different agreement patterns dependent on type/position of subject:
  (i) DP subjects: *-s* ending does not signal any person/number distinctions;
  (ii) Pronominal subjects (under adjacency): *-s* ending seems to signal the same set of distinctions as in Standard English (3sg vs. all other person/number combinations).

- Basic claims:
  (i) In the NSR dialects under discussion, there is only a single *-s* affix with a uniform specification (default marker/elsewhere case);
  (ii) The zero marker signals the presence of positive values for person or number features.[5]
  (iii) Agreement is established in the post-syntactic components of grammar (cf. e.g. Embick & Noyer 2001, Ackema & Neeleman 2004, Bobaljik 2008):
    (a) Post-syntactic agreement rules that operate on feature bundles that are part of the same phonological phrase (cf. Ackema & Neeleman 2004); or
    (b) Insertion of dissociated agreement morphemes (copies of the subject's phi-set) under adjacency (Embick 1997, Embick & Noyer 2001).

- Adjacency effect:

(7) -∅ marks the presence of positive specifications for [person] or [number] in the minimal phonological phrase the finite verb is part of.

- *-s* with 3sg pronouns: 3sg pronouns are characterized by the absence of (positive) specifications for [person] and [number][6] ⇒ **insertion of the elsewhere marker *-s***

- *-s* with phrasal subjects: Phrasal subjects are mapped onto a separate phonological phrase (Cinque 1993). Their feature content is therefore not visible to the workings of the relevant agreement operations ⇒ **insertion of the elsewhere marker *-s***

- The analysis makes available a new perspective on 3sg *-s* in Standard English: *-s* is not explicitly specified for [person] and [number], but rather sensitive to the presence/absence of positive feature values for [person] or [number] (see Haeberli 2002 for a related analysis).

---

[5] Alternatively, we might assume that the *-s* ending marks the absence of positive specifications for person or number in the immediate phonological phrase the finite verb is part of. While this analysis seems to be a technical possibility, it fails to capture the elsewhere/default character of *-s* in the relevant varieties (e.g., under non-adjacency etc.).

[6] See Benveniste (1950, 1966), Halle (1997), Noyer (1997), Harley and Ritter (2002), Cysouw (2003).

- Open questions:
  (i)   Use of a disjunctive feature specification in (7);
  (ii)   Variation in the use of *-s* in the context of phrasal subjects/non-adjacency;
  (iii) Conditions that favor the use of *-s* (e.g., subject gaps, inversion with full subjects, cf. Pietsch 2005:109ff. for details)?

- Ad (i): To avoid the use of disjunctive feature specifications (cf. e.g. Blevins 1995 for discussion), we can make use of the idea that inflectional features are organized into a feature geometry (Noyer 1997, Harley and Ritter 2002, Georgi 2010):[7]

(8)   REFERRING EXPRESSION (Agr/pronouns)

          PERSON   NUMBER

   SPEAKER   HEARER   PLURAL   (CLASS/GENDER)

- Basic assumptions:
(i) Only positive values are present (e.g., "3rd person" = absence of [person]);
(ii) A higher node is active only if one of its dependents contains positive feature values.
- Vocabulary items (verbal agreement)/NSR dialects:

(9)   -∅   ↔   [R(EFERRING EXPRESSION)]
        /-z/ ↔   elsewhere

- Ad (ii): Grammar competition (Kroch 1989, 1994)?
  (i)   Little or no variation in those contexts where the agreement systems of Standard English and the relevant dialects overlap;
  (ii)   Variation in contexts where there is a conflict between the two systems.
- Ad (iii): Beyond the scope of this paper, but see the appendix for some relevant observations concerning historical stages of English.

4. Concluding summary
- Synchronic analysis of the NSR in terms of an agreement rule which operates post-syntactically and establishes agreement between elements that are part of the same (minimal) phonological phrase.
- The zero marker signals positive values for [person] or [number]; *-s* is analyzed as the elsewhere case.
- Position-of-subject constraint: No agreement can be established when the adjacency of verb and pronoun is disrupted by intervening material.
- Type-of-subject constraint: Full phrasal subjects are mapped onto a separate phonological phrase and thus do not trigger agreement on the verb.

---

[7] This was pointed out to us by Gereon Müller (p.c.). See Harley and Ritter (2002) for a more elaborate feature geometry.

Appendix: The historical development of the NSR

A.1 Facts

- <u>Historical stages in the rise of the NSR</u>:
  - (i) During the transition from OE to northern ME, 2sg *-es*, 3sg *-eð* and pl *-að/-as* fell together in *-(e)s* (rise of an underspecified inflectional marker);
  - (ii) After the loss of vowels in the final syllable, northern ME exhibited an opposition between 1sg *-∅* and all other contexts (*-s*);
  - (iii) Extension of *-s* to 1sg; **NSR**: introduction of the zero marker in plural contexts (lexical verbs + adjacency): first with 1pl/2pl, later with 3pl;
  - (iv) Analogical extension to forms of *be* (including *was/were*);[8] replacement of *thou is* with *you are* (originally a plural form) in the EModE period (not in all dialects).

	Old English	Northern ME I	Northern ME II	Northern ME III/ EModE	
1sg	sing-e	sing-e	sing-∅	sing-s	I sing-∅
2sg	sing-es(t)	sing-es	sing-s	sing-s	you sing (< thou sing-s)
3sg	sing-eð	sing-es	sing-s	sing-s	he/she/it sing-s
1pl	sing-að	sing-es	sing-s	sing-s	we sing-∅
2pl	sing-að	sing-es	sing-s	sing-s	you sing-∅
3pl	sing-að	sing-es	sing-s	sing-s	they sing-∅ (< they sing-s)

Table 4: Historical development of verbal inflection, Northern dialects

- NSR is not attested in late (northern) OE records (dating from the mid-10th century); it appears to be firmly established in the works of Richard Rolle (early (northern) ME, 1290–1349):

(10) *Some þe devell deceyves þurgh vayne glory, þat es ydil joy: when any has*
some the devil deceives through vain glory that is idle joy when any has
*pryde and delyte in þamself of þe penance þat **þai suffer**, of gode dedes*
pride and delight in themselves of the penance that they suffer of good deeds
*þat **þai do**. of any vertu þat **þai have**; es glad when **men loves** þam, sari*
that they do of any virtue that they have is glad when men love them sorry
*when **men lackes** þam, haves envy to þam þat es spokyn mare gode of þan of*
when men lack them have envy to them that is spoken more good of than of
þam;
them (CMROLLEP, 86.368)

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

(12) *and God comfortes his lufers mare þan **þai wene** þat **lufes** hy noght*.
and God comforts his lovers more than they think that love him not
(CMROLLEP,63.44)

---

[8] Apparently, the use of *is* and *was* in the plural was never as categorically 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 2005).

A.2 Towards an analysis

- <u>Basic claims</u>: After the breakdown of the OE agreement system, the NSR developed via a combination of generalized V2 in the northern varieties + agreement weakening in inversion contexts, which was also at work in OE (and turned into the NSR after the loss of V2).

- <u>Observation</u>: (late) OE exhibits agreement variation/weakening in inversion contexts (Quirk & Wrenn 1955:42, Campbell 1959:296, van Gelderen 2000): In cases where a 1pl/2pl pronoun follows the inverted finite verb, regular agreement is suspended (present indic. *-að*, past indic. *-on* replaced by schwa):[9]

(13) a. Ac   hwæt **wille** we þonne secgan [...]
     but what want we then   say
     (Alfred, *Boethius*, 22.23; van Gelderen 2000: 191)
  b. Nu **hæbbe** ge gehyred [...]
     now have   you heard
     (*Ælfric, Catholic Homilies*, 280.4; van Gelderen 2000: 193)

- <u>C-agreement in OE</u>: Contextual allomorphy of 1pl/2pl forms dependent on the structural position of the finite verb (cf. e.g. Roberts 1996):[10]
  (i) C^0 in contexts with fronted operators (wh, negation etc.);
  (ii) A lower inflectional head ($Infl^0/T^0$) in all other contexts (cf. e.g. Cardinaletti & Roberts 1991/2002; Pintzuk 1999; Hulk & van Kemenade 1995; Kroch & Taylor 1997; Haeberli 1999, Fischer et al. 2000, and many others):

(14) a. $[_{CP}$ Op $[_{C'}$ C+V$_{fin}$ $[_{TP}$ subject pronoun $[_{T'}$ T $[_{VP}$ ... $]]]]]$ $\Rightarrow$ **agreement weakening**
  b. $[_{CP}$ XP $[_{C'}$ C $[_{TP}$ $[_{T'}$ T+V$_{fin}$ $[_{VP}$ DP subject ...$]]]]]$ $\Rightarrow$ **regular agreement**
  c. $[_{CP}$ XP $[_{C'}$ C $[_{TP}$ subject pronoun $[_{T'}$ T+V$_{fin}$ $[_{VP}$ ...$]]]]]$ $\Rightarrow$ **regular agreement**

- <u>Northern varieties</u>: The OE pattern in (13) was generalized to all contexts with adjacent non-3sg subject pronouns, leading to the zero ending after the loss of final schwa (cf. Rodeffer 1903, Pietsch 2005).[11]

- <u>Why only in the northern dialects?</u> In contrast to the southern OE dialects, the northern varieties developed generalized V2 (cf. Kroch & Taylor 1997, Trips 2002):

(15) $[_{CP}$ XP $[_{C'}$ C+V$_{fin}$ $[_{TP}$ subject pronoun/DP subject $[_{T'}$ T $[_{VP}$ ... $]]]]]$

---

[9] Similar observations hold for early OHG (1pl), cf. Braune & Reiffenstein (2004:262), and present-day Dutch (Ackema & Neeleman 2004):
(i) a. Jij   loop-t   dagelijks met   een hondje over straat.
       you walk-2SG daily   with a   doggy   over street
   b. Dagelijks loop-∅ jij   met   een hondje over straat.
       daily   walk   you with a   doggy   over street
       (Ackema and Neeleman 2004: 193)

[10] <u>Alternative analysis</u>: Syncopation for purely phonological reasons (assignment of word stress): 1pl/2pl pronouns are clitics that attach to the verb; to ensure that word stress falls on the first/penultimate syllable (most often the verb stem), the inflectional ending is replaced by schwa, which cannot bear stress (see Haiman 1971 and Haiman and Benincà 1992 on a similar constraint in Rhaeto-Romance varieties).

[11] 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 (2005:50ff.) for comprehensive discussion and a critical assessment of Berndt's arguments.

- <u>Result</u>: The context that induced agreement weakening (V$_{fin}$ in C) was much more frequent than in the southern variants (i.e., syncopated forms were not confined to operator contexts, but occurred in all contexts with 1pl/2pl subjects). ⇒ **Extension of "agreement weakening" to all 1pl/2pl contexts**

- <u>Extension to 3pl</u>: In ME, the Northern varieties replaced the original OE 3pl pronoun *hīo/hēo* with the Scandinavian *ðai* (which later spread to all varieties). This innovation led to cluster reduction of [s+ð] to [ð] for phonetic reasons (which was possibly promoted by analogical pressure (1pl/2pl), cf. Pietsch 2005:56).

- After the loss of generalized V2, learners could not any longer attribute "agreement weakening" to properties of the C-head ⇒ **reanalysis in terms of a post-syntactic agreement rule that is sensitive to adjacency and distinguishes between (non-3sg) pronouns and non-pronouns**

- <u>Speculation</u>: Rise of the NSR was promoted by language contact with the Brythonic Celtic languages, which exhibit a similar distinction between pronouns and non-pronouns (cf. Hamp 1976, Klemola 2000, Filppula, Klemola and Pitkänen 2002, de Haas 2008):

(16) a. *gwelsan (nhw) ddraig.*
        saw-3PL (they) dragon
        'They saw a dragon.'
     b. *gwelodd/*gwelsan   y dynion   ddraig.*
        saw-3SG/saw-3PL   the men   dragon
        'The men saw a dragon.'
        (Welsh; Borsley and Roberts 1996:40)

- <u>"Markedness reversal"</u>: 'weak' syncopated OE forms turn into the marked inflections in the NSR dialects (signaling positive feature values):
a) *-s* ending generalized to all contexts in the northern dialects;
b) Reanalysis of OE agreement weakening leads to zero ending in the NSR dialects: (i) 1pl/2pl; (ii) extension to 3pl; (iii) extension to 2sg (2pl *you* >>> 2sg);
c) Extension of -∅ to 1sg in NSR contexts facilitates a reanalysis of *-s* as the elsewhere marker (with -∅ signaling positive values for [person] and [number]).

References

Ackema, Peter and Ad Neeleman. 2004. Beyond Morphology. Interface Conditions on Word Formation. Oxford: Oxford University Press.Embick, David. 1997. Voice and the Interfaces of Syntax. Doctoral dissertation, University of Pennsylvania.

Benveniste, Emile. 1950. La phrase nominale. *Bulletin de la Societé Linguistique de Paris*, 46: 19-36.

Benveniste, Emile. 1966. *Problèmes de linguistique générale*. Paris: Editions Gallimard.

Berndt, Rolf. 1956. *Form und Funktion des Verbums im nördlichen Spätmittelenglischen: Eine Untersuchung der grammatischen Formen und ihrer syntaktischen Beziehungsbedeutugen in der großen sprachlichen Umbruchsperiode*. Halle: Niemeyer.

Bierwisch, Manfred. 1967: Syntactic features in morphology: General problems of so-called pronominal inflection in German. In: *To Honour Roman Jakobson*, 239-270 The Hague/Paris: Mouton.

Blevins, James. 1995. Syncretism and paradigmatic opposition. *Linguistics and philosophy* 18, 113-152.

Bobaljik, Jonathan. 2008. Where's phi? Agreement as a post-syntactic operation. In: Daniel Harbour, David Adger, and Susana Béjar (eds.), *Phi-Theory: Phi Features across Interfaces and Modules*, 295-328. Oxford: Oxford University Press.

Borsley, Robert and Ian Roberts. 1996. *The syntax of the Celtic languages: a comparative perspective*. Cambridge: Cambridge University Press.

Börjars, Kersti & Carol Chapman. 1998. Agreement and pro-drop in some dialects of English. *Linguistics* 36, 71-98.

Braune, Wilhelm and Ingo Reiffenstein. [15]2004. *Althochdeutsche Grammatik I*. Tübingen: Niemeyer.

Campbell, A. 1959. *Old English Grammar*. Oxford: Oxford University Press.

Cardinaletti, A. and Roberts, I. 2002. Clause structure and X-second . In: G. Cinque (ed.), *Functional Structure in DP and IP: the Cartography of Syntactic Structures*, 123-166. Oxford: Oxford University Press.

Chambers, Jack. 2004. Dynamic typology and vernacular universals. In: Bernd Kortmann (ed.), *Dialectology Meets Typology*. Berlin: Mouton de Gruyter.

Cinque, Guglielmo. 1993. A null theory of phrase and compound stress. Linguistic Inquiry 24, 239-298.

Corrigan, Karen. 1997. The syntax of South Armagh English in its socio-historical perspective. PhD thesis, University College Dublin.

Cysouw, M. 2003. *The paradigmatic structure of person marking*. Oxford: Oxford University Press.

de Haas, Nynke. 2008. The origins of the Northern Subject Rule. In: Marina Dossena, Maurizio Gotti, Richard Dury (eds.), *English Historical Linguistics 2006, Vol. III: Geo-Historical Variation in English*, 111-130. Amsterdam: John Benjamins.

Embick, David. 1997. *Voice and the Interfaces of Syntax*. Doctoral dissertation, University of Pennsylvania.

Embick, David and Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32, 555-595.

Filppula, M., Klemola, J. and Pitkänen, H. 2002. English and Celtic in contact: the state of the art in research . In M. Filppula, J. Klemola and H. Pitkänen (eds), *The Celtic roots of English*, 10-29. Joensuu: University of Joensuu.

Fischer, O., A. van Kemenade, W. Koopman, and W. van der Wurff. 2000. *The syntax of Early English*. Cambridge: Cambridge University Press.

Gelderen, Elly van. 2000. The role of person and position in Old English. In Olga Fischer, Anette Rosenbach & Dieter Stein (eds.), Pathways of Change. Grammaticalization in English, 187-206. Amsterdam, Philadelphia: John Benjamins.

Georgi, Doreen. 2010. Chameleon probes in Mordvin. Ms., University of Leipzig.

Haeberli, Eric. 1999. *Features, categories and the syntax of A-positions. Synchronic and diachronic variation in the Germanic languages*. Doctoral dissertation, University of Geneva.

Haeberli, Eric. 2002. *Features, Categories and the Syntax of A-Positions. Cross-Linguistic Variation in the Germanic Languages*. Dordrecht: Kluwer.

Haiman, John. 1971. Targets and paradigmatic borrowing in Romantsch. *Language* 47.4, 797-809.

Haiman, John and Paola Benincà. 1992. *The Rhaeto-Romance Languages*. London and New York: Routledge.

Halle, Morris. 1997. Distributed Morphology: Impoverishment and Fission. In *MIT Working Papers in Linguistics 30: PF: Papers At the Interface*, B. Bruening, Y. Kang, and M. McGinnis (eds.), 425-450. Cambridge, Mass.: Department of Linguistics and Philosophy, MIT.

Hamp, E. 1976. Miscellanea Celtica. *Studia Celtica* 10/11, 54-73.

Harley, Heidi and Elizabeth Ritter. 2002. Structuring the bundle: A universal morphosyntactic feature geometry. In *Pronouns – Grammar and Representation*, H. J. Simon and H. Wiese (eds.), 23-39. Amsterdam: John Benjamins.

Henry, Alison. 1995. *Belfast English and Standard English: Dialectal Variation and Parameter Setting*. Oxford: Oxford University Press.

Hulk, Aafke and Ans van Kemenade. 1995. Verb second, pro-drop, functional projections and language

change. In Adrian Battye and Ian Roberts (eds.), *Clause structure and language change*. Oxford: Oxford University Press, 227-256.

Jespersen, Otto. 1942. *A Modern English Grammar on historical principles. Part VI. Morphology*. Copenhagen: Munksgaard.

Klemola, Juhani. 2000. The origins of the Northern Subject Rule: A case of early contact? In: Hildegard Tristram (ed.), *The Celtic Englishes II*. Heidelberg: Winter.

Kroch, Anthony. 1989. Reflexes of grammar in patterns of language change. *Journal of Language Variation and Change* 1.3, 199-244.

Kroch, Anthony. 1994. Morphosyntactic variation. In *Proceedings of the Thirthieth Annual Meeting of the Chicago Linguistics Society*. *Vol. II*, K. Beals, J. Denton, B. Knippen, L. Melnar, H. Suzuki, and E. Zeinfeld (eds.), 180-201. Chicago: Chicago Linguistics Society.

Kroch, Anthony and Ann Taylor. 1997. Verb movement in Old and Middle English: Dialect variation and language contact. In *Parameters of Morphosyntactic Change*, A. van Kemenade and N. Vincent (eds.), 297-325. Cambridge: Cambridge University Press.

McIntosh, A. 1988. Present indicative plural forms in the later Middle English of the North Midlands . In A. McIntosh (ed), *Middle English dialectology: essays on some principles and problems*, 116-22. Aberdeen: Aberdeen University Press.

McIntosh, A., M. L. Samuels, and M. Bensik. 1986. *A linguistic atlas of late mediaeval English, volume 4* . Aberdeen: Aberdeen University Press.

Meurman-Solin, Anneli. 1993. *Variation and Change in Early Scottish Prose: Studies based on the Helsinki Corpus of Older Scots*. Helsinki: Suomalainen Tiedeakatemia.

Montgomery, Michael. 1994. The evolution of verb second in Scots. In: Alexander Fenton, Donald McDonald (eds.), *Studies in Scots and Gaelic: Proceedings of the Third International Conference on the Languages of Scotland*, 81-95. Edinburgh: Canongate.

Murray, James. 1873. *The Dialect of the Southern Countries of Scotland.* London: Philological Society.

Noyer, Rolf. 1997. *Features, Positions, and Affixes in Autonomous Morphological Structure.* New York: Garland.

Pietsch, Lukas. 2005. *Variable Grammars: Verbal Agreement in Northern Dialects of English*. Tübingen: Niemeyer.

Pintzuk, Susan. 1999. *Phrase Structures in Competition: Variation and Change in Old English Word Order*. New York: Garland.

Quirk, Randolph & C.L. Wrenn. 1955. *An Old English Grammar*. London: Routledge.

Roberts, Ian. 1996. Remarks on the Old English C-system and the diachrony of V2. In Ellen Brandner and Gisella Ferraresi (eds.), *Language change and Generative Grammar*. Opladen: Westdeutscher Verlag, 154-167.

Rodeffer, John. 1903. *The Inflection of English Present Plural Indicative with Special Reference to the Northern Dialect*. Baltimore: John Murphy.

Schendl, H. 1996. The 3rd plural present indivatice in Early Modern English: Variation and linguistic contact . In D. Britton (ed), *English historical linguistics 1994: Papers from the 8th International Conference on English Historical Linguistics*, 143-60. Amsterdam/Philadephia: Benjamins.

Schendl, H. 2000. The third person present plural in Shakespeare's folio: a case of interaction of morphology and syntax. In Christiane Dalton-Puffer and Nikolaus Ritt (eds.), *Words: Structure, Meaning, Function: A Festschrift for Dieter Kastovsky*, 263-76. Berlin: Mouton de Gruyter.

Tagliamonte, Sali. 2002. Comparative sociolinguistics. In: Jack Chambers, Peter Trudgill & N. Schilling-Estes (eds.), *Handbook of Language Variation and Change*, 729-763. Oxford: Blackwell.

Trips, Carola. 2002. *From OV to VO in Early Middle English*. Amsterdam: John Benjamins.