HISTORICAL LINGUISTICS 2009

CURRENT ISSUES IN LINGUISTIC THEORY

AMSTERDAM STUDIES IN THE THEORY AND HISTORY OF LINGUISTIC SCIENCE – Series IV

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Volume 320

Ans van Kemenade and Nynke de Haas (eds.)

Historical Linguistics 2009. Selected papers from the 19th International Conference on Historical Linguistics, Nijmegen, 10-14 August 2009

HISTORICAL LINGUISTICS 2009

SELECTED PAPERS FROM THE 19TH INTERNATIONAL CONFERENCE ON HISTORICAL LINGUISTICS, NIJMEGEN, 10–14 AUGUST 2009

Edited by

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Foreword & Acknowledgements

The papers presented in this volume all grew out of presentations given at the 19th International Conference on Historical Linguistics, held at Radboud University Nijmegen, 10–14 August 2009. In the general sessions of the conference and the workshops, over 200 papers were presented. 22 of the presenters submitted their papers for this volume. The submissions were subject to a rigorous reviewing process, ultimately resulting in the papers included in this volume.

We strove to attract a wide array of work on historical and comparative linguistics to Nijmegen, representing the international state of the art in the field and including work on language families, individual languages, and current issues in historical and comparative linguistics. There was some emphasis on novel theoretical insights from various subfields and new methodologies exploring language relations.

For help in the preparation of the volume, including the refereeing, we thank the series editor, E.F.K. Koerner and the following colleagues: Jóhanna Barðdal, Geert Booij, Matthias Gerner, Bettelou Los, Pieter Muysken, Margit Rem, Chris Reintges, Rodie Risselada, Paul Roberge, Anna Roussou, Ioanna Sitaridou, John Charles Smith, Lieke Verheijen, Nigel Vincent, David Willis, and Fred Weerman. Anke de Looper at John Benjamins has been of great practical assistance during the genesis of the project.

We would here also like to take the opportunity of thanking the large number of people who helped in pulling together the conference at Nijmegen. John Charles Smith (secretary of the International Society of Historical Linguistics) and Joe Salmons (previous conference organizer) were very helpful in providing background information. The local committee helped with many aspects of the organization and was invaluable in the reviewing of abstracts; thanks therefore to Griet Coupé, Marion Elenbaas, Haike Jacobs, Bettelou Los, Margit Rem, and Angela Terrill. Sabine Visscher designed the logo, made the website, was our primary e-mail reader in the run-up to the conference and our student helper during it, assisting extensively with the registration and many chores. She did a superb and meticulous job throughout. Thanks also to Meta Links for her help during the conference. A very special thanks is due to Jacqueline Berns at the Aula of Radboud University. She would say she is paid to organize conferences, but her assistance before and during the ICHL conference went well above the call of duty. Thanks are also due to the Centre for Language Studies and the Faculty of Arts, both of Radboud University, for their financial support.

Editors' introduction

Introduction

The International Conference on Historical Linguistics has always been a forum that reflects the general state of the art in the field, and the 2009 edition (ICHL 19) of the conference fully allows the conclusion that the field is a thriving one. Here, we will sketch the state of the art as illustrated by some core issues as they emerged at the conference. We will divide this discussion into three subsections: the first discusses a number of topics and domains of language and grammar that are at the heart of issues in language change; the second is about sociolinguistics, contact and the role of second language acquisition; the third is on methodologies that are currently being developed to facilitate historical linguistic research on a larger database than was possible until recently, and to circumvent the data-gap that is inevitable in our historical record, giving us some of the most exciting work that is currently being done. Such methods and more traditional ones illustrate the issue of making the best of bad data in historical linguistics. It seems worth emphasizing here that this is a primary area where progress is currently extremely fast. The final section discusses more specifically the articles in this volume.

Crosscutting the issues and methodologies in historical linguistics and language change, the coverage of languages and language families at the conference was very substantial. There was, as always, a strong focus on the Indo-European languages, with a workshop on the origin of non-canonical subject marking in Indo-European, another one on information structure in historical linguistics featuring work in Germanic languages, Russian, and ancient Greek, and much work on other Indo-European languages across other workshops and in thematic sessions in the general program. This included a substantial representation of Germanic languages including Afrikaans, on Latin and the Romance languages, and Balto-Slavic and Slavic languages. Other language families that were prominently represented were the Meso-American and South-American languages, and the Austronesian and Oceanic languages, with some focus on Papua New Guinea. The conference also featured a day-long workshop on grammaticalization in the languages of East Asia.

2. Change in domains of language and grammar

The traditional topics in the study of historical linguistics and language change were very amply represented at the conference. These included sound change, various types

of morphosyntactic change, and pragmatic change. We devote separate subsections to each of them.

2.1 Sound change

Sound change is, of course, a classic in any general conference on historical linguistics and was the topic of a day-long workshop which was in part inspired by an intensive and dynamic discussion on sound change on the HISTLING list in the fall of 2007. The study of sound change is in many ways the foundation upon which modern (post-18th century) historical linguistics has been built, yet much about it still remains unaccounted for. The framing issues for this day-long workshop were how sound change is to be defined, how it achieves regularity (if it ever does), how it is to be separated out from other changes with similar effects, whether innovation is to be distinguished from spread in studying and understanding sound change, and what is at stake in characterizing it in a precise way. The workshop presentations addressed some of these fundamental issues for the study of sound change: there was groundwork urging an approach towards sound change from the point of view of linguistic change in general, as a necessary prerequisite for an understanding of what it is. Several presentations on the fine phonetic and phonological detail of sound change placed these factors against the backdrop of the role of co-articulation and articulatory phonology more generally. Cognitive work argued that the regularity of sound change resides in the cognitive process of generalization from phonetic, phonological and lexical variation. Finally, there were several sociolinguistic presentations on the spread/diffusion of sound change in the speech community.

2.2 Morphosyntactic change

Morphosyntactic change is taken here overall to refer to a range of types of change that are related to the interaction of syntactic change (word order, argument selection and argument realization) with changes in inflectional morphology (the morphological expression of grammatical categories such as tense, mood, aspect, case, agreement, clause typing, clause linking) and derivational morphology (valency changing morphology). Classical issues in this broad area concern the syntactic effects of the loss of inflectional morphology, as seen in word order on the one hand, and in grammaticalization on the other hand. We will first briefly address these types of change.

2.2.1 Loss of inflection and word order

There is a rich recent flow of work on this issue from a variety of theoretical perspectives, including formal syntactic theories, primarily generative syntax (Chomsky 1981; 1995 and after), and Lexical Functional Grammar (e.g. Bresnan 2000). The generally recognized key mechanism in this approach is reanalysis, which may be broadly defined as the language learner's/speaker's attribution of a novel structure to an existing surface form.

An example of this is the English suffix -hood as in motherhood, an abstract noun marker which at one point was an innovative formation deriving from the earlier independent word *hād* meaning "state, condition". Reanalysis thus involves the creation of a new association of form and content. Ever since Lightfoot (1979), the generative approach to syntactic change has considered that the key mechanism of change is reanalysis. Typical examples of syntactic reanalyses recurring in the literature are for instance word order changes such as the transition from OV to VO word order; and the loss of strategies of finite verb fronting. At the heart of the approach is the attempt to make sense of such reanalyses as shifts in the balance between inflectional morphology and syntax, from the point of view of a theoretical framework that makes tight claims about how this relationship can be modelled in structural terms. A much discussed change typical of the approach is the loss of Verb-not order in English, with a lexical finite verb preceding the negator not, as in be fadyr of Heuen spared not his owne sonne "the Father of heaven did not spare his own son". This word order is taken to reflect a verb fronting strategy, which was keyed to the presence of verb morphology for tense and agreement. With the loss of much agreement inflection over the late Middle English period, the verb fronting strategy was lost for lexical verbs, and the pre-not position became exclusively reserved for finite auxiliaries. The relation between agreement and verb fronting strategies is thus modeled theoretically, either derivationally as in generative work, or by means of mapping between various levels of expression as in Lexical Functional Grammar (LFG). The development of historical work in this vein has therefore closely followed various incarnations of minimalist and lexical functionalist theorizing, spearheaded in particular by theoreticians, and counterbalanced by extensive theoretically informed corpus-based work (see, e.g. Allen 1995; 2008; Battye & Roberts 1995; van Kemenade & Vincent 1997; Pintzuk, Tsoulas & Warner 2000; Butt & Holloway King 2001; Lightfoot 2002; Battlori, Hernanz, Picallo & Roca 2005; Crisma & Longobardi 2009). It is worth emphasizing that the key element in these approaches is the insight that syntactic variation between languages (and historical stages of languages) is essentially morphological in nature, i.e. it is in the way in which grammatical categories are expressed, by syntactic means such as word order, by morphological means such as case on nouns, tense, mood and aspect on verbs, or, alternately, by means of periphrastic expressions for these same grammatical categories (adpositions, auxiliaries, adverbs).

This broad line of work was amply represented at the conference, with work offering a variety of descriptive issues and topics in many different languages across the general program and a number of workshops.

2.2.2 Grammaticalization

One of the most intensively studied types of morphosyntactic change, again from a variety of perspectives, is grammaticalization, the reanalysis from a category with a measure of lexical properties to one with a purely grammatical function. The rich literature on grammaticalization, starting with Meillet (1912) and repioneered over the

past three decades by Elizabeth Traugott and others (Lehmann 1982, 1985; Traugott & Heine 1991; Hopper & Traugott (1993/2003)) emphasizes the interrelation between the semantic/pragmatic, phonological, morphological and syntactic entrenchment of grammaticalizing forms. While in the 1990s and 2000s, there was emphasis on casting grammaticalization as a (usage-based) theoretical framework, with heated debate over the cognitive mechanisms that drive grammaticalization, and over its purported unidirectionality, grammaticalization was also increasingly approached from various theoretical angles as the morphosyntactic change it also is, involving the reanalysis of lexical elements to grammatical elements, and spinning off from loss of inflectional morphology. As such it has also come to be approached from the perspective of formal theories (e.g. van Kemenade 1999; Roberts & Roussou 2003; van Gelderen 2007). The effect of decades of intense study is that grammaticalization, as a pervasive type of change, has become a firm topic in any conference on historical linguistics, and thus ICHL 19 featured a full-day workshop on grammaticalization phenomena in the languages of East Asia, and a further set of presentations across the program focusing specifically on case studies of grammaticalization in a variety of languages.

Argument selection and argument marking

A further domain in which the effects of the interaction between syntactic change and morphological change can be seen to be at work is in the area of argument selection and argument marking. ICHL 19 featured two workshops that are of special interest to this area. The first was a workshop on the origin of non-canonical subject marking in Indo-European, bringing together work on changes in case marking and argument alignment in the Indo-European languages, and bringing it to bear on the reconstruction of the origin of oblique subjects constructions such as those found in presentday Icelandic. The second was on complementation in diachrony, focusing on the diachronic paths manifested in the argument structure of verbs, as seen in syntactic, semantic/pragmatic as well as morphological changes related to specific verb classes or to the overall verbal domain of a language. A further focus of the workshop was on the system of clausal complementation, in particular on issues regarding finite vs. nonfinite complements and how such patterns evolve diachronically.

Clause typing and clause linkage

The workshop mentioned on complementation featuring in the previous subsection also touches on the morphosyntactic means by which sub-clauses are embedded in the main clause. The fact that there is much morphological and syntactic variation here, even within present-day Standard English, may be evident from the clausal complementation of the present-day English verb believe, whose complement may be variously expressed as finite I believe that he is innocent, I believe he is innocent, and non-finite *I believe him to be innocent*, or verbless *I believe him innocent*. These different grammatical expressions of what is semantically the same clausal complement represent varying degrees of integration with the main clause. This specific topic was at the heart of another workshop on the diachrony of clause linkage, which featured work on the historical development of how sub-clauses of various semantic types are integrated with the main clause in a variety of languages.

2.2.5 *Information structure/pragmatics*

One recent topic that touches on the intersection between morphosyntactic change and pragmatic change is the diachronic study of information structure, the expression of given and new information at the clause level. While this topic has been extensively studied from the perspective of discourse marking (e.g. Brinton 1996), there is a recent industry on changes in the interaction between syntax and information structure, studying from a formal perspective the shifts that occur in how the changing morphosyntactic make-up of a language, e.g. the presence of topic markers, focus markers, or modal particles in the history of English, interacts with the ordering of information (given/new) at the clause level. At the ICHL 19 conference, this work was brought together in a workshop on information structure in historical linguistics, with extensive corpus-based work on older Germanic languages, older Romance languages, and ancient Greek.

A further area that is more explicitly and specifically concerned with pragmatic change was represented in a workshop on procedural meanings in diachrony, where procedural meanings refer to linguistic items/constructions that provide instructions to hearers on how to integrate the elements that contribute semantically to the message within an evolving mental model of the discourse. For example, introducing a clause by the adversative conjunction *but* signals to the hearer to look for an adversative contrast to the previous context. The papers presented in the workshop explored whether the development of markers that carry procedural meaning in language follow characteristic pathways of grammaticalization across languages, and how the meanings associated with such constructions arise from language use.

3. The social setting of language change

Since the development of the field of sociolinguistics spearheaded by Labov, the study of change in progress in the speech community has been an important source of inspiration for historical linguists trying to identify the driving forces of language change in their often impoverished dataset. Precise sociolinguistic mechanisms in historical records can be studied in detail only when there are enough sources which

Beside a substantial number of papers in the general program and across various workshops, a specific set of papers in the ICHL 19 conference that was concerned with language change in a social setting was the workshop on language and migration, which represented work in which the dynamics of (historical) language change through dialect contact was explicitly connected with migration patterns and demographic developments.

projecting these insights into possible scenarios for language change.

3.1 Contact linguistics

The field of contact linguistics is in a separate subsection, though not as a matter of principle, since here too the social setting of language change is of paramount importance: as Salikoko Mufwene reminds us, the ecology of the contact setting to an important extent determines what course language change through contact may take. The thin line between sociolinguistics and contact linguistics is usually taken to lie in the typological distance between the languages involved - we speak of language contact when two clearly different languages are involved and mutual intelligibility between speakers of both languages is less likely. For the same reason, it is in the field of contact linguistics that the issue of imperfect second language learning is central in the discussion: while children learn their first language with depth and perfection, adults learning a second language do not preserve structural conditions with the same fidelity (as adult second language learning is to varying degrees imperfect). The result, depending on a number of factors such as the typological distance between the languages involved, the age of the speakers, and other aspects of the ecology of the contact setting, is loss of structure (loss of inflection) and code-switching between the languages involved. A particularly interesting contribution at the conference was a plenary lecture by Antonella Sorace, in which it was argued that attrition of the native language in language contact, both in the individual speakers' lifetime and across generations, provides one of the keys to understanding language change.

Methodological issues

One of the major challenges in the study of historical linguistics and language change is to achieve an understanding of the linguistic and psycholinguistic processes that underlie the changes observed in the historical data. The dataset is by definition limited, since the study of historical change inevitably has to rely on written records. Written language is, however, a derivative of the language spoken at any given point in time, and is situated at some remove from the natural language that is the object of the linguistic investigation, a position that has long been recognized. Historical linguistics thus also involves the art of making the best use of bad data. While over the past three decades, this has been attempted by means of modeling change in terms of theoretical approaches to the study of language (language typology, sociolinguistics, functional models of language use and modeling in terms of formal approaches as briefly discussed in Section 2), increasingly on the basis of corpus work, a variety of new methodologies is now developing to come to grips with the necessarily impoverished historical record.

This new line of work crucially draws on the rapidly expanding availability of large corpora, and the fast developing area of computational modeling of processes relating to language. These innovative methodologies were prominently welcomed at the ICHL 2009 conference. Charles Yang gave a plenary lecture on how the course of language change can be predicted, arguing that work on child language acquisition has identified learning mechanisms that select grammatical hypotheses in a way closely akin to the Darwinian process of natural selection. Using methods from population genetics allows the formulation of a fitness metric, which in turn facilitates the prediction of how a particular language change will proceed. Michael Dunn and Russell Gray both gave plenary lectures on how methods from evolutionary biology can be employed in the reconstruction of the history of language families, and to distinguish between stable language transmission from one generation to the next, and disruption of that transmission by language contact. Such methodologies can also be extended to an interdisciplinary framework, allowing triangulation with archaeological and genetic data, and providing methods of testing dates and migration paths. Pieter Muysken presented a plenary lecture on the languages of South-America, giving a digest of the descriptive and typological work done so far, and working towards modeling the historical relations between the languages of South America by means of techniques from phylogenetics, as developed by Dunn et al. (2005 and in subsequent work). Phylogenetic methods were also central in the plenary lecture by Giuseppe Longobardi, but his concern was rather with a phylogenetic model of grammars in the Chomskyan sense (where a grammar with a cluster of parameter settings is taken to represent the mental representation of the speaker's knowledge of language). Finally, the conference

featured a workshop on the spatial dynamics of language change, whose focus was to explore methodologies to come to grips with how the geographical distance between languages and dialects can be correlated with their structural properties.

5. Notes/comments on the present selection

This volume is organized in four parts. Part I is devoted to general issues of language change, as well as language-specific or language-family-specific ones that have a potentially wider relevance. Here, Theresa Biberauer writes on a specific class of exceptions to Jespersen's cycle, citing evidence from contact languages. She proposes a syntactic constraint on the progression of Jespersen's cycle, arguing that languages which draw on structurally high negative reinforcers and subsequently grammaticalize these as concord elements will not be able to replace the original sentential negator with this element.

Vit Bubenik studies the reconstruction of experiential constructions in (late) Proto-Indo-European, focusing on the rise of oblique subject typology from the perspective of morphology, semantics and pragmatics, and arguing that a cognitive approach along these lines offers essential insights that purely formal syntactic approaches cannot.

Jadranka Gvozdanović formulates criteria for differentiating inherent and contact-induced changes in language reconstruction. Her analysis of two historical Slavic accent shifts, one fairly generally shared by the Slavic languages, and another restricted to Slovene, shows that the difference in application between both shifts can be explained in terms of different rankings of tone and quantity, the more innovative of which were arguably influenced by the presence of different rankings in neighboring languages.

In perhaps the most controversial contribution to this volume, John Whitman reexamines the importance of reanalysis, and more specifically misparsing, in syntactic change. This is widely held to be a key factor, but in his overview of recent research on the most well-known examples of misparsing, Whitman argues that in these cases, misparsing is either not the best or not the only viable analysis.

Margaret Winters & Geoffrey Nathan investigate the nature of prototype change. They analyze instances of such change in phonology, syntax, and the lexicon and show that similar processes of change play a role across these components. They conclude that while the outcome of changes to prototypes may be different from other changes in set configuration, the underlying processes are the same.

The final chapter in Part I is Yuko Yanagida's study of the syntactic reconstruction of alignment and word order in Old Japanese. Yanagida argues that the Old Japanese split alignment pattern, with nominative-accusative alignment in main conclusive

clauses and active alignment in adnominal clauses, fits into a pattern found more widely across languages. The two alignment patterns can be seen as descendants of distinct nominalization strategies and thus show a development that has also been argued for in proto-Carib syntax.

Part II contains a selection of papers on various aspects of linguistic variation and change in Germanic languages. Jac Conradie makes a case that some peculiarities of the Afrikaans development of the Dutch-Afrikaans verbal prefix *ge*- represent a case of degrammaticalization. Although degrammaticalization is thought to be rare, innovative uses of -*ge* in Afrikaans indicate that it is an instance of this process, for instance its use as a past tense marker (providing it with more semantic content than before), and the possibility of its occurrence in ellipsis (providing an argument that it has word status rather than affix status).

Jack Hoeksema & Ankelien Schippers offer an overview and analysis of changes in long-distance dependencies in the history of Dutch. Their analysis of the history of dependencies in various constructions (*wh*-questions, relative clauses, topicalization and comparatives) shows that resumptive prolepsis is very common in some clause types but not others, and that violations of the *wh*-island constraint have dropped in use since early modern Dutch. Hoeksema & Schippers' diachronic corpus-based study underlines the importance of studying long-distance movement from a broad perspective: relating movement to alternatives such as copying and partial movement is the best way to clarify developments in the selection of these different alternatives.

Eric Hoekstra, Bouke Slofstra & Arjen Versloot present a corpus-based study of changes in the use of the Frisian quantifiers *ea/oait* "ever" between 1250 and 1800. Native Frisian *ea* was replaced by *oait*, based on a Standard Dutch model. This development not only yields insight into a situation of language contact, it clarifies the position of these quantifiers in a system that also comprises negated quantifiers of the 'never' type and universal quantifiers of the 'always' type, which also underwent change in the same period.

Ida Larsson's study on the development of the perfect participle in Swedish brings together contemporary and historical linguistic data in a theoretical framework. Larsson argues that fine-grained distinctions in the classification of participles are necessary to clarify the different stages in development from the resultative to the perfect tense. Using evidence for such distinctions from present-day Swedish, she shows that the relevant distinctions can help account for historical developments in Old Norse and Old Saxon.

Eric Magnusson Petzell adds an interesting argument to the debate on triggers of verb placement in his corpus-based analysis of the interaction of OV word order and finite verb movement in the history of Swedish. He shows that the changes in frequency of various OV orders in early modern Swedish increased the cues that V-to-I

movement did not take place, so that these developments directly contributed to the loss of this type of movement.

Gerard Stell argues that ethnicity is an independent factor of morphosyntactic variation across space, focusing on spoken Afrikaans. Stell's sociolinguistic apparent-time study of several White and Colored varieties of Afrikaans shows that, while some convergence is apparent in the morphosyntax of these varieties, there is still a clear gap between them. Multivariate analysis reveals that this gap is determined by ethnicity more than by socio-economic status, although both concepts are still interwoven in today's South-African society.

Moving on to another part of the Dutch linguistic area, Rik Vosters, Gijsbert Rutten & Wim Vandenbussche present a corpus-based study on orthographic variation in 19th-century Dutch in Flanders. They position orthographic variation in the sociolinguistic landscape of the Low Countries during the brief reunion of Belgium and the Netherlands, focusing also on normative publications, debates about language and language planning initiatives. It is shown that Flemish orthography was singled out as a salient point of Flemish linguistic divergence, and thus became a spearhead for linguistic reform, apparently with some success, as 19th-century Flemish court data show clear signs of convergence with the Northern norm.

Part III contains two contributions on linguistic variation and change in Greek. Adam Cooper & Effi Georgala study dative loss and its replacement in the history of Greek. They argue that two independent syntactic developments led to replacement of the dative by another case on noun phrases in the specifier of the Applicative Phrase. The rise of genitive case in this position arose from the raising of genitive clitic to this position, and was reinforced by phonetic developments. The rise of accusative case, on the other hand, seems to have followed from developments in the properties of ν , which lost its dative feature and only retained accusative case.

Allison Kirk's contribution is on word order variation in two types of whquestions in New Testament Greek. Kirk accounts for the distributional asymmetry between argument and adjunct whquestions (the former being much more restricted in word order options than the latter) by arguing that they have fundamentally different derivations. In this account, argument whquestions like direct object questions involve whqmovement of the argument to the specifier of a Focus projection in the left periphery of the clause with subsequent movement of the finite verb to the Focus head. Adjunct questions like cause/reason questions do not involve whqmovement at all. Rather, the whqphrase is base-generated in a topical Interrogative Phrase in the left periphery of the clause, which does not give rise to verb movement and leaves different word order options for the rest of the clause open.

The concluding part of this volume, Part IV, comprises four studies on linguistic change in Romance. In the first of these, Louise Esher considers the morphological

evolution of Occitan infinitive, future and conditional forms in the light of the notion of 'morphomes', systematic morphological correspondences which exist independently of sound changes and functional correlates. Esher shows that this concept helps to account for the parallel developments of Occitan future and conditional forms, but also qualifies its importance in two ways: these forms do share some functional features, and are sometimes subject to independent changes.

Heather Burnett & Mireille Tremblay review the evolution of the encoding of direction by means of prefixes and particles in the history of French. They test a hypothesis from the theoretical literature which holds that the lexicalization of directional and aspectual prefixes into verbal roots caused the loss of directional particles in French. Burnett and Tremblay's corpus-based quantitative study shows that this hypothesis does not, in fact, hold in their data. In addition, they show how argument structure change is different from parameter change in that it is sensitive to many more factors, including lexical semantics.

Edward Cormany investigates the rise and fall of a short-lived syntactic pattern in Latin, velle-type prohibitions, analyzing it as the result of a morphosyntactic conspiracy. Diachronically, insertion of velle "to wish" was a way to resolve the conflict between the requirement to follow the Sequence of Tenses and the requirement to represent punctual prohibited actions with a perfect form. Synchronically, the rise of velle in prohibitions, as well as its restricted use, can be linked to the ordinary use of its negative counterpart *nolle* 'to not wish' in prohibitions.

Finally, Mari Johanne Hertzenberg studies the use and development of infinitives following habere in Latin. She presents a syntactic analysis of each use of habere + infinitive in terms of Lexical-Functional Grammar, and proposes a pathway for the development of the different uses. Relating the various senses of these constructions and their occurrence in different periods, Hertzenberg ultimately derives modal habere + infinitive constructions from the earlier praedicativum and shows how different senses (ability/capacity, deontic modality, permission, and future) may have developed from each other through generalization.

Concluding remarks

The brief overview of the studies presented in Section 5 illustrates that, while they are less than fully representative of the range of issues and case studies welcomed at the ICHL 19 conference at Nijmegen as discussed in Sections 1-4, they are an expression of ongoing theoretical developments as well as new analytical approaches to the study of historical linguistics and language change. Taken together, they reflect some of the current challenges in the field, as well as the opportunities offered by judicious use of theoretical models and careful corpus-based work. We hope that they will encourage discussion, and will further our understanding of the historical development of these phenomena.

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General and specific issues of language change

Competing reinforcements

When languages opt out of Jespersen's Cycle*

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Drawing on recent developments in Afrikaans and Brazilian Portuguese, this paper proposes a syntactic constraint, alongside previously identified phonological and pragmatic ones, on progression in Jespersen's (1917) Cycle/ JC. In particular, it argues that languages which draw on structurally high negative reinforcers and subsequently grammaticalise these as concord-elements will not replace the original sentential negator with this element, as would otherwise be expected in the context of JC. Languages of this type may, however, employ alternative reinforcement strategies, which in many cases draw on the same lexical stock as JC. A language may thus *appear* to have undergone a JC-related development without actually having done so.

1. Introduction

Arguably one of the most-discussed phenomena in diachronic linguistics is Jespersen's Cycle (JC; cf. Jespersen 1917), given in (1):

$$\begin{array}{cccc} \text{(1)} & \text{I.} & \text{NeG}_1 \\ & \text{II.} & \text{NeG}_1 \dots (\text{NeG}_2) \\ & \text{III.} & \text{NeG}_1 \dots \text{NeG}_2 \\ & \text{IV.} & (\text{NeG}_1) \dots \text{NeG}_2 \\ & \text{V.} & \text{NeG}_3 \end{array}$$

As traditionally presented, JC entails that an initially independently occurring sentential negator (NEG₁; Stage I) may be optionally and ever more frequently reinforced by a particular element (NEG₂; Stage II), which may subsequently become

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obligatory (Stage III), whereafter the original negator (NEG₁) may become optional (Stage IV), with the reinforcer ultimately taking over and being reanalysed as the uniquely required sentential negation-element (NEG₃); at this point, the Cycle may then begin again.¹ Jespersen's own work focused in particular on the considerations leading languages to proceed from Stage II to III, which he identified as phonological: phonological weakening of NEG₁ necessitates the introduction of a strong reinforcing element. Much subsequent work has, however, highlighted the primacy of pragmatic/ expressive considerations, with phonological weakening not being a necessary prerequisite for the introduction of reinforcer-elements (cf. i.a. Dahl 2001; Schwenter 2002, 2005; Kiparsky & Condoravdi 2006; Mosegaard Hansen 2009; Biberauer 2009; L'Arrivée 2010). Some of this more recent literature has also highlighted the fact that reinforcers may be distributionally restricted, serving to emphasise particular types of negation rather than negation across-the-board (cf. Schwenter, Mosegaard Hansen & Biberauer *op.cit.*).

This paper aims to contribute to our understanding of JC and of negation-related developments more generally by focusing in particular on the under-discussed question of the transition from Stage III to IV and beyond. The lesser-studied developments that have taken place in the domain of negation in Afrikaans are its starting-point. Striking among these is the establishment of a clause-final concord-element, nie, which superficially resembles the "real" sentential negator, medial nie ("not"). The first part of the paper highlights the properties of this final element, showing how different it is to familiar concord-elements like French pas or Old English no(g)ht, both of which subsequently became established as "real" negators. Clause-final nie is shown not to be undergoing a change in this direction, although it is also notably not inert and, in fact, appears to be undergoing what might be thought of as a "sub-clausal cycle". Significantly, this sub-clausal cycle is not the only reinforcement-oriented development taking place in colloquial Afrikaans, with distinct elements (g'n quantifying "no" – and *niks* – "nothing") serving to reinforce contradictory (polar) and contrary (scalar) negation respectively. Accordingly, the aim of the paper's second part is to highlight the importance of drawing a distinction between "traditional" Jespersen-type cyclic developments, which may lead to the introduction of a new sentential negator, and non-cyclic reinforcement developments of the discoursesensitive type just mentioned. The focus here is on Brazilian Portuguese (BP), which has been said to be in the process of establishing originally reinforcing clause-final não as NEG₃(cf. i.a. Schwegler 1986, 1991; Lipski 2001). Closer investigation, however,

^{1.} Here and elsewhere we abstract away from the non-trivial question of whether NEG_2 and NEG_1 at Stages II and IV respectively are in fact semantically and/or syntactically negative or not. For recent discussion, see Breitbarth (2009).

shows that this is incorrect (cf. Biberauer & Cyrino 2009a,b). The concluding section considers the significance of the above observations. It is argued that Afrikaans provides particularly clear evidence of the importance of distinguishing cyclic JC-style negative developments – which may also take place in sub-clausal domains – from reinforcement developments, which take place independently of cycles, but which may, as the case of BP very clearly illustrates, draw on the same lexical resources.

The paper is structured as follows: Section 2 introduces the relevant Afrikaans facts, concluding with a theoretical prediction, which is then tested on the basis of BP in Section 3, with Section 4 summarising and concluding.

2. Afrikaans negation meets Jespersen's Cycle

2.1 Background: Afrikaans and its negation system

A South African off-shoot of 17th-century Dutch, which has been in contact with a wide range of (European and non-European²) languages, there has been considerable debate as to the status of Afrikaans: should it be viewed as the youngest member of the West Germanic family or has extensive contact effectively rendered it a creolized system (cf. Ponelis 1993; Roberge 1994 & Deumert 2004 for overview discussion)? This debate is relevant here for two reasons: firstly, various West Germanic languages (notably, Dutch, German and English) have passed through JC, developing new sentential negators during the course of their recorded history; and secondly, the Afrikaans negation system has been shown to differ quite substantially from those in Dutch varieties or, more generally, in the European languages with which Afrikaans was in contact during its formative period (cf. Ponelis & Roberge op.cit and also particularly den Besten 1986 & Roberge 2000). Specifically, none of the European varieties exhibited an obligatorily clause-final negative reinforcer of the kind required in Standard Afrikaans. This is significant as it has become clear that systems in which a reinforcing element surfaces in immediately postverbal position (e.g. pas in French) must be distinguished from those in which the reinforcer is clause-final (cf. i.a. Bell 2004, who refers to the latter type as Bipartite Negation with Final Negator/BNF systems, and deVos & van der Auwera 2009, who illustrate this difference for Bantu). Furthermore, typological research has established that VO-systems featuring clause-final negators are crosslinguistically very rare, with attested systems mostly confined to two areas in the world - central Africa and Austronesia (cf. Reesink 2002 & Dryer 2009). Since

^{2.} French, German, English and seafarer-Portugese are the main European languages with which Afrikaans had contact during the 17th–19th centuries, while Malay and Khoekhoen were the major non-European contact varieties during the same period.

simple-tense main clauses in Afrikaans are VO (cf. *Ek kweek groente* – I grow vegetables), it is clear that progression to JC Stage IV/V would give rise to a typologically marked system. We return to these points below. For the moment, let us consider the structure of Afrikaans negated sentences.

As (2-3) show, Standard Afrikaans contrasts with Standard Dutch in necessarily requiring negative clauses to conclude with clause-final concord-marking *nie* (henceforth *nie*₂ to distinguish it from the "real" negator, nie_1):³

- (2) a. Ik ben niet rijk [Dutch]
 I am not rich
 "I am not rich"
 - b. Ek is nie₁ ryk nie₂
 I is not rich NEG
 "I am not rich" (≠ "I am not not rich")
- (3) a. Zij hebben nooit een auto gehad [Dutch] they have never a car had "They never had a car"
 - b. Hulle het nooit 'n kar gehad nie₂ [Afrikaans]
 they have never a car had NEG
 "They never had a car"

While Modern Dutch is a Stage I language, then, Standard Afrikaans is Stage III. Viewed from a JC perspective, the question arises whether there are any signs of progression to Stage IV/V. This is of course not a given, as the countless stable negation systems at various stages of JC attested world-wide – including some which appear to have remained "immune" to JC throughout their history (cf. Willis 2009) – clearly show. Nevertheless, given the history of Afrikaans's European linguistic relatives and those with which it has been in contact, the question whether Afrikaans might be susceptible to JC changes is worth posing. Viewed from the perspective of JC, the "traditional" expectation for Afrikaans might be schematized as in (4):

(4) nie₁... nie₂ → (nie₁)... nie₂ → nie₃ Modern Afrikaans Future Afrikaans i.e. Stage III → Stage IV where nie₁ becomes optional, ultimately being replaced by nie₂, which becomes a Stage V nie₃

As Biberauer (2009) shows, however, there are no signs of this development in contemporary Afrikaans. The following section summarises the relevant facts.

^{3.} See Biberauer (2008) for discussion of the haplology contexts in which concord-marking *nie* fails to surface.

2.2 Negation in contemporary Afrikaans

2.2.1 The formal properties of 'nie₂'

Significantly in the context of Jespersen's famous characterisation of the circumstances under which reinforcing negation-elements are introduced ((5)), Afrikaans nie_1 can be shown to be strong; by contrast, nie_2 (the concord-element) is weak (cf. Cardinaletti & Starke 1999 for general discussion of strong vs weak elements).

(5) The history of negative expressions in various languages makes us witness the following curious fluctuation: the original negative adverb is *first weak-ened* [my emphasis – TB], then found insufficient and therefore strengthened, generally through some additional word, and in its turn may be felt as the negative proper and may then in course of time be subject to the same development as the original word.

[Jespersen 1917:4]

Evidence of *nie*₁'s strength vis-a-vis *nie*₂'s weakness comes from asymmetries in:

- a. omissibility: nie_2 may be omitted without affecting sense or grammaticality, whereas nie_1 cannot.⁴
 - (6) a. Hy kom nie₁ in (nie₂) he come not in NEG "He isn't coming in"
 - b. *Hy kom in nie₂
 he come in NEG
- b. modifiability:
 - (7) a. *Jy let glad/ hoegenaamd/ absoluut nie*₁ *op nie*₂ you attend altogether/ at-all/ absolutely not up NEG "You aren't remotely paying attention"
 - b. *Jy let nie, op glad/ hoegenaamd/ absoluut nie,
- substitution by a stronger negative form:
 - (8) a. Ons is nie₁ beïndruk nie₂
 us is not impressed NEG
 "We are not impressed"
 - b. Ons is geensins beïndruk nie₂
 us is not-remotely impressed NEG
 "We are not remotely impressed"
 - c. *Ons is nie, beïndruk geensins

^{4.} As Biberauer (2008) shows, it is also always nie_2 which undergoes haplology in contexts where two *nies* would otherwise have surfaced adjacent to one another within a single prosodic phrase.

- d. stressability (here and elsewhere CAPITALS signal focus intonation)
 - (9) a. Ek weet NIE₁ wat hy doen nie₂ I know not what he do NEG "I DON'T know what he's doing/he does" b. *Ek weet nooit/ nie₁ wat hy doen NIE₂⁵

[denial]

The differences between the two *nies* are summarised in Table 1:

Table 1. Summary comparison of the properties of *nie*₁ and *nie*₂

Property	nie ₁	nie ₂
1. Omission → ungrammaticality/meaning change	YES	NO
2. Modifiability	YES	NO
3. Substitution by emphatic negator	YES	NO
4. Stressability	YES	NO

What we see, then, is that nie_1 and the position associated with NEG₁ can be strengthened in various ways, whereas nie_2 cannot. In JC terms, this is particularly significant as it unambiguously indicates, firstly, that the "real" negation-element, i.e. nie_1/NEG_1 in (1), is not a weak element, 6 whereas the concord-element, i.e. $nie_2/$

^{5.} The only contexts in which nie_2 may be stressed are metalinguistic, e.g. where a speaker repeats a preceding utterance which lacked nie_2 in violation of the prescriptive norm (here nie_2 may receive more stress than nie_1 as in (i), without any reinforcement of the negation expressed; contrast the consequence of stressing nie_1 – (9a)), or where a speaker wishes to emphasise the negative nature of the utterance (here both/all negative elements are likely to be emphasised, as in (ii)):

⁽i) Hy is nie₁ moeg NIE₂
he is not tired NEG
"He is not tired"

⁽ii) Hy is NIE_1 moeg NIE_2 he is not tired NEG "He is not coming"

^{6.} There are circumstances under which nie_1 can be reduced – cf. (i). Crucially, however, nie_1 reduction never renders it phonologically weaker than nie_2 (except in the metalinguistic contexts mentioned in the previous footnote):

⁽i) Hy iss-ie moeg-ie/*nie/*NIE he is- not tired- NEG "He isn't tired"

 NEG_2 in (1), is. Clearly, therefore, phonological considerations cannot have triggered the rise of nie_2 . As we will see in Section 2.4.1, discourse-pragmatic considerations may well have played some role, but a rather different consideration appears to have been decisive. For the moment, the key observation is that there is no evidence that nie_2 in contemporary Afrikaans is developing in the way that NEG_2 -elements in better-studied European languages have: there does not appear to be any move in the direction of Stage IV.

Significantly, however, Afrikaans is also not inert in JC terms: as Biberauer (2009) observes, two striking developments in modern spoken Afrikaans (MSA) point to the fact that the negative domain is not entirely stable. These are summarised in the following section.

2.3 Negative developments in Modern Spoken Afrikaans (MSA)

MSA exhibits the following negative-reinforcement strategies:

- (a) expansion of the contexts in which nie, surfaces, and
- (b) nie, replacement.

2.3.1 Expansion of 'nie,' contexts

In addition to its obligatory clause-final position, nie_2 may also, in standard Afrikaans, optionally surface in constituent-negation structures like those in (10–11):

- (10) a. Nie₁ die GELD nie₂, maar die TYD pla hom not the money NEG but the time worry him "Not the MONEY, but the TIME worries him"
 - b. Moeder Natuur het vir nie₁ minder nie₂ as drie
 Mother Nature have for not less NEG than three
 beskermende lae gesorg
 protective layers cared
 "Mother Nature provided no less than three protective layers"
 i.e. negatively focused constituents
 (cf. Donaldson 1993: 410)
- (11) A: Wie het my boek gesien? who have my book seen "Who has seen my book?"
 - B: Niemand nie₂
 no-one NEG
 "No-one"
 i.e. fragment answers

In the spoken Afrikaans of many younger speakers (including myself), nie_2 may additionally feature in emphatic structures like those in (12):⁷

- (12) a. Ek is [nooit (nie₂)] moeg nie₂
 I am never NEG tired NEG
 "I am NEVER tired"
 - b. Sy het [nêrens (nie₂)] tuis gevoel nie₂
 she have nowhere NEG at-home felt NEG
 "There was NOWHERE she felt at home", i.e. She didn't feel at home anywhere"

Biberauer (2009) proposes that (12)-type structures signal that MSA is undergoing a "sub-Jespersen's Cycle": non-clausal constituents, which are at Stage I in Standard Afrikaans, are moving to Stage II in some spoken varieties, namely those where a reinforcing negator may optionally co-occur with the negative element. As we will see in Section 2.4.2, this development has important consequences for nie_2 's categorial specification.

2.3.2 'Nie₁' replacement

As noted in Section 2.2.1, nie_1 can be reinforced by means of lexical substitution ((8b)). Two recently innovated lexical substitutions that are not standardly acceptable, but are widely used in MSA involve the negative quantifiers g'n (>geen – "no") and niks ("nothing"; cf. Biberauer 2009 & Huddlestone 2010 for detailed discussion). These usages are illustrated in (13–14) below:

- (13) A: Wat 'n goeie uitslag!
 What a good result
 "What a good result!"
 - B: Dis g'n 'n goeie uitslag (nie₂); dis 'n volslae ramp!⁹ it's no a good result NEG it's a total disaster "It's NOT a good result; it's a total disaster!"

^{7.} As Biberauer (2009) shows, consideration of the properties differentiating nie_1 and nie_2 makes it clear that the "extra" nie in these structures is nie_2 . Square brackets in each case indicate that this nie_2 must be part of the same prosodic domain as the negative indefinite that it reinforces.

^{8.} See Bayer (2009) for recent discussion of the use of "nothing" as a reinforcing negation element and also for further references.

^{9.} Nie_2 is most naturally omitted in structures of this type; cf. also (15a) and particularly (15b), where native-speakers are notably loathe to accept final nie_2 . By contrast, inclusion of nie_2 is much more natural with niks (cf. (16)).

- B': Dis g'n 'n goeie uitslag (nie₂); dis 'n FANTASTIESE uitslag! it's no a good result NEG it's a FANTASTIC result "It's NOT a good result; it's a FANTASTIC result!"
- (14) A: Wat het gebeur? what has happened "What happened?"
 - B: Jan is niks tevrede met ons voorstelle nie₂
 John is nothing satisfied with our suggestions NEG

 en het Sarie afgedank
 and has Sarah fired

 "John isn't at all satisfied with our suggestions and he's fired Sarah"

As (13) shows, g'n substitutes for nie_1 in what we can broadly think of as presuppositional or, more accurately, "activated" negation contexts, notably denials (cf. Dryer 1996 on 'activation', and also Schwenter 2005 & L'Arrivée 2010 for more fine-grained discussion of this notion in relation to negative structures). This is possible not only with regular, proposition-oriented denials (the B-response in (13)), but also, as shown by the B'-response, with metalinguistically oriented denials. Niks, by contrast, is not restricted by discourse considerations, being possible in 'activated' contexts, but crucially also, as (14) illustrates, in out-of-the-blue contexts. Importantly, it also differs from g'n in expressing what Horn (1989) designates contrary (scalar) negation, whereas g'n expresses contradictory (polar) negation. Evidently, then, the two substitution possibilities have clearly defined domains.

Their distinct functions are also very evident in cases where they co-occur, as the following examples show ([] indicate elements associated with the same prosodic phrase):

- (15) a. Sy is g'n [niks tevrede] nie₂; sy is doodgelukkig she is no nothing satisfied NEG she is dead-happy met die lewe with the life "She's NOT not remotely content; she's dead happy with her life" [i.e. double negation: she's VERY content]
 - b. Sy is [g'n niks tevrede] nie₂; orals is daar fout she is no nothing satisfied NEG everywhere is there fault "She absolutely isn't happy at all; everywhere, she finds fault"

In (15a), *g'n* and *niks* function independently to express both contradictory and scalar negation in a denial-context, whereas in (15b), where these elements form part of a single constituent and *g'n* modifies *niks*, we have an emphatic instance of the negation-type reserved for *niks* (scalar, with activation status not mattering). The same

effects emerge when *g'n* and *niks* and combinations of these elements are reinforced by the strategy discussed in the previous section, "extra" *nie*, reinforcement:

- (16) a. Dit is g'n nie₂ so moeilik nie₂!

 it is no NEG so difficult NEG
 "It's NOT so difficult at all"
 - b. Sy is niks nie₂ tevrede nie₂ she is nothing NEG satisfied NEG "She isn't REMOTELY satisfied"
- (17) a. Dit is G'N [niks nie₂] so moeilik nie₂ it is NO nothing NEG so difficult NEG "It's NOT not so difficult", i.e. it IS difficult
 - b. Dit is [g'n niks nie₂] so moeilik nie₂ it is no nothing NEG so difficult NEG "It's NOT so difficult"

2.3.3 Conclusion

MSA features a range of negative-reinforcement strategies, some of which draw on the NEG₂-element (nie₂). Strikingly, however, none of these developments entail weakening of the still-strong NEG₁-element (*nie*₁) or the rise of structures featuring only *nie*₂. There is no evidence at all of modern Afrikaans proceeding to a following stage of JC within the clausal domain. This could simply reflect the fact that Afrikaans has opted for stability in the JC context, rendering it an uninteresting language from the perspective of researchers interested in understanding the factors contributing to cyclic developments (see van Gelderen 2009, 2011 & van der Auwera 2010 for recent discussion). Our proposal, however, is that this is not so and that Afrikaans in fact points to relevant properties of negation systems that have not previously been considered in researchers' attempts to understand JC. The basis for this proposal is the observation that MSA cannot be viewed as entirely inert in the JC context: while it certainly is not progressing to Stage IV in the clausal domain, changes in the distribution of nie, in sub-clausal domains like those discussed in Section 2.3.1 in particular (but see also (16–17)) suggest that a sub-clausal or "internal" cycle may be underway, with non-clausal constituents moving from Stage I (no reinforcement) to Stage II (optional doubling); additionally, we also observe what might be thought of as a "short cycle (cf. van der Auwera & Neuckermans 2004) in terms of which nie, is instantaneously replaced by a different lexical item. We will return to this latter development, which could, of course, also be viewed in non-cyclic terms simply as a lexical reinforcement strategy, and, in particular, the elements it involves in Section 3 below. Our immediate concern in the following section will be with the question of why nie, appears to have been "diverted" from the development schematized in (4), instead extending its

domain in such as way that it is effectively becoming a generalized concord-element, i.e. one which isn't limited to the domain of *sentential* negation.

2.4 Understanding the peculiar trajectory of 'nie₂' in MSA

Biberauer (2009) proposes that nie_2 's failure to progress within JC as standardly conceived is rooted in its origins. If we consider the etymological origins of the NEG₂-elements in familiar Western European languages, we observe that French drew on a minimiser (pas – "step"), while English, German and Dutch all utilised a lexical item meaning "nothing". Afrikaans, by contrast, employed an element whose origins have been disputed, but most plausibly entailed a discourse-marker of some kind. Let us briefly consider this question (cf. den Besten 1986 & Roberge 2000 for more detailed discussion).

2.4.1 The origins of 'nie,'

Undoubtedly key to understanding the origins of nie_2 is the impression that arises from extant sources that clause-final nie was a late development: while Dutch was introduced at the Cape of Good Hope in 1652, final nie is first mentioned in the report of an early 19th-century field cornet, who attributes it to a Khoi speaker (cf. Roberge 2000: 135ff & Deumert 2002, 2004):

(18) ... toen kwam hij zo ewen parmantig en de kraal en hij het een leeven met mijn broeder hij zegt hij hem zal weis wat hij niet weet niet. Toen heef ik hem gezeit... dat hy moet ophou om met ou gezwint twist te maakt dat het niet zal goet gaat... hij maar altijt staat en vloek en schel mijn en zeg dat ik hem van aavon niet moet los maak niet (Then he [the Hottentot] came so impudently into the kraal and he has a life (disagreement) with my brother; he says that he will show him what he does not know. Then I [Foecee] said to him... that he must immediately stop making trouble with the old fellow, that it will not go well for him. But he [the Hottentot] stood there the whole time swearing and cursing at me and said that I must not let him loose tonight.)

[C.J. Foecee 1810; Cape Town Language Archive 206]

Systematic occurrence of nie_2 in written texts is, however, only attested from the end of the 19th-century, during the era of the so-called *Taalbewegings* (Language Movements), when many of Dutch extraction became concerned to establish the Cape Dutch variety as a linguistic entity distinct from Dutch, with both low and high functions (cf. Ponelis 1993 & Deumert 2002 for overview discussion). What is striking is that the use of nie_2 was anything but categorical even at the time of Afrikaans's standardisation in 1925, with its distinctiveness in relation to Dutch – the language from which proponents of Afrikaans sought to distinguish it – proving decisive in its

selection as a normative feature (cf. again Deumert 2002 for discussion). For researchers concerned with nie_2 's origins, a key question, then, is how its late introduction is to be understood.

Four types of answer have been proposed, namely:

- a. the Afro-Malayo-Portuguese hypothesis, in terms of which Angolan and Malay slaves brought to the Cape by Portuguese sailors were responsible for the introduction of nie_2 . Valkhoff (1966: 13) cites the availability of structures like (19) in the Portuguese of 17th-century sailors (cf. also discussion of Brazilian Portuguese in Section 3):
 - (19) Não retira não not retreat NEG "Don't retreat!"

[ca. 1627]

Why this feature would have taken so long to emerge in the attested Cape Dutch texts and commentaries, however, remains a mystery on this proposal.

- b. the Khoekhoe hypothesis, in terms of which the final negator found in modern Khoekhoe varieties is taken to be the source for nie_2 (cf. in particular the work of Hans den Besten):
 - (20) a. Hi-si// xu-//ã-b ko-se //ʾai tama next summer until spoil NEG_{IND} "It won't spoil till next summer"

[Modern Korana]

b. /'ũ- !num-ts ka na te? beard- get- 2sg MOD ASP NEG_{FUT} "Won't you want to have a beard?"

(cited in Roberge 2000: 137)

In terms of this contact explanation, the attribution of the earliest uses of nie_2 could potentially be accounted for, although it is worth noting that nie_2 in the variety of Afrikaans which is most substantially influenced by Khoekhoen – so-called *Orange River Afrikaans* (cf. Ponelis 1993) – is an *optional* element. Furthermore, it is also worth noting that the final negator in Khoekhoe is the "real" negator (NEG₁), whereas this is not the case in Afrikaans (barring the haplology cases mentioned in Note 3).

c. the 17th-century NC-retaining Dutch dialects hypothesis, which has often high-lighted the double-*nie*-containing Aarschots variety. Den Besten (1986), however, clearly shows that the Aarschots system crucially differs from the Afrikaans one in that its "extra" *nie* surfaces clause-internally rather than clause-finally. Viewed from the perspective of modern Afrikaans, Aarschots effectively has only the non-clausal doubling found in MSA, and not the clause-final doubling associated with the standard.

- d. the spoken Dutch emphatic tag/resumptive hypothesis, in terms of which *nie*₂ originated as a discourse-marker (cf. Roberge 2000 for details of this proposal):
 - (21) a. Het kan niet waar zijn, nee!

 it can not true be no

 "It can't be true, no!"
 - b. Jij komt niet mee, ne?
 you come not with hey
 "You aren't coming, hey/right?"

The specifics of this proposal remain to be worked out, but two clear merits are the fact that it can account for nie_2 's late attestation – tag negators/resumptives are spokenlanguage elements par excellence – and also that a discourse-related origin would seem to bring Afrikaans into line with other so-called Bipartite Negation with Final Negator languages (cf. Bell 2004), i.e. those in which the concord-element is clause-final and a clearly distinct lexical item, as in Afrikaans. As far as we have been able to ascertain, these elements derive either from the anaphoric negator (cf. many of the Romania Nova & Bantu varieties discussed by Lipski 2001 & deVos & van der Auwera 2009 respectively) or from some kind of discourse particle (cf. Hagemeijer's 2007 discussion of Santomé).

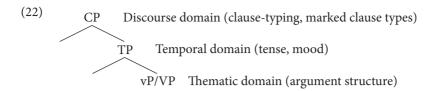
Here it is sufficient to observe that the source of nie_2 clearly was not either a minimiser (like French pas) or a quantifier (like the English, German and Dutch negators). If source considerations are significant, then, we would not expect Afrikaans to behave like any of these languages (contrary to what was sometimes professed by advocates of the Taalbewegings). In the following section, we will see that there additionally appear to be formal reasons why this should be so.

2.4.2 The formal properties of 'nie₂' vis-à-vis other reinforcers

In generative terms, the source of a given element matters in that this will determine the initial structural position associated with this element. Before we discuss this idea in relation to negative reinforcers, let us consider the tripartite clausal architecture typically assumed by modern generativists¹¹:

^{10.} S.J. du Toit (1876) in his *Eerste beginsels van die Afrikaanse taal* ("First principles of the Afrikaans language"), for example, presented the Afrikaans negation system which he wished to promote as standard as follows: *Nes in Frans het ons een dubbele ontkenning in ons tweemaal 'nie'*, i.e. "Just like in French, we have a double negation with our double use of *nie*".

^{11.} See i.a. Ramchand (2008) for discussion of the structure of the thematic domain, which includes certain types of aspectual information, and for further references.



As indicated, the lowest portion of the clause contains its semantic heart, this being the domain in which the predicate and its arguments are inserted into the structure. Above this, is the domain of tense-anchoring, which also hosts mood-related elements, i.e. this is the domain determining how the thematic content it dominates is to be related to the here-and-now. Finally, the top portion of the clause hosts specifically discourse-related elements, like those indicating the declarative, interrogative, imperative, etc. nature of the clause and also elements from lower domains which have undergone fronting for discourse-related reasons (e.g. topicalised or focused elements).

Returning to the negative-reinforcement elements that are our key concern here, we see that both minimisers like *pas* and forms meaning "nothing" would, as verbal arguments (*She took her first step/He ate nothing*), have originated as elements merged within v/VP. Once they had been incorporated into the negation system – where necessary (e.g. for cases like *pas*), being ascribed specifically negative features which they had previously lacked – they might be expected to be analysed as functional negative elements, which cannot be merged as low as the VP (cf. Zeijlstra 2004 for discussion). In terms of dominant generative approaches to grammaticalisation (cf. i.a. Roberts & Roussou 2003, van Gelderen 2004 & Roberts 2007), grammaticalisation commonly entails upward reanalysis. In the specific cases of *pas* and the "nothing" forms we are considering here, this upward reanalysis can be shown not to have changed the general domain in which these elements are inserted: both, for example, *follow* auxiliaries of the type that we would expect to be merged in TP-domain.¹²

Strikingly, one of the lexical substitutions that we see in MSA derives from this domain too: niks ("nothing") would also have originated as a potential object within VP (*Sy verstaan niks* = "She understands nothing"). Application of clausal "height" diagnostics (cf. Note 12) and consideration of the process via which "nothing"-elements develop into negatives (cf. Bayer 2009) once again show that grammaticalised niks remains a vP-element. Given that nie_1 can clearly be shown to be a vP-element (cf. Biberauer 2008), we can therefore understand in formal terms why grammaticalised niks would be a suitable substitute for standardly required nie_1 :

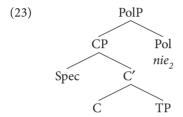
^{12.} This "linear" diagnostic is straightforward in the case of VO languages, but not so for OV Germanic. For convincing argumentation that the "nothing" elements in these languages are nevertheless located within vP, see i.a. Haegeman (1995), Weiss (1998) and Bayer (2009).

both elements are associated with the same clausal domain and might therefore be expected to interact in parallel ways with the other lexical items found in negative structures. In cases where reinforcing elements derive from different domains to that of the standard sentential negator, initial doubling often results, giving rise to JC Stage II and, possibly, III (cf. (1)).

Returning to the MSA reinforcers: g'n derives from the negative existential quantifier, geen ("no"), which we would therefore expect to be associated with the domain of existential closure. In Diesing's (1992) terms, this is VP. If grammaticalisation once again involves upwards reanalysis within the vP-domain, as was the case with the Western European reinforcers deriving from minimisers and "nothing"-elements, g'n's ability to substitute for *nie*, once again emerges as readily explicable. Importantly, this perspective on the negative developments taking place in contemporary Afrikaans entails that the language is, despite superficial appearances to the contrary, undergoing formal changes of a similar type to what occurred in better-studied Western European languages. Specifically, low elements are being reanalyzed as higher, more grammaticalised negative elements, thereby increasing the stock of negation-related functional elements in the language. Crucially, however, the Western European developments led to the introduction of a new type of functional negation-element within the vP-domain: the original negator, ne, was clearly T- or possibly even C-related (cf. i.a. Haegeman 1995; van Kemenade 2000; Roberts & Roussou 2003; Wallage 2005; Ingham 2007 & Breitbarth 2009), whereas the Afrikaans developments have, as we saw above, led to the introduction of further vP-level negation-elements, which may not co-occur with the existing sentential negation marker in vP. Recent research (cf. Mosegaard Hansen 2009 & L'Arrivée 2010) seems to suggest a further parallel between the innovated Afrikaans forms and elements which double an existing negator, namely that both appear to reinforce particular sub-types of negation rather than serving a general reinforcing function in the negative domain. We return to this matter in Section 3 below.

While colloquial Afrikaans can therefore be said to be undergoing reinforcement developments not dissimilar to what took place in languages which have undergone JC, the status of nie_2 in the clausal domain nevertheless unambiguously remains unchanged: it serves as a concord-marker and shows no signs of taking over any of nie_1 's functions. Biberauer (2009) suggests that the key difference between nie_2 and the NEG2-elements which have subsequently established themselves as "real" negators is structural "height": while the latter are all elements drawn from the vP-domain, nie_2 seems to have derived from a discourse-element of some type, i.e. from the CP-domain. Consider (21) again: in terms of (21a), nie_2 may have its origins in the anaphoric negator, nee, an element which can be shown to be attached to the clause without being fully integrated with it (we return to this point in Section 3 below); alternatively, nie_2 may have originated as a tag-element (cf. (21b)), i.e. as an

element that is both not fully integrated, being a loosely adjoined peripheral element, and one whose transparent discourse function – soliciting a hearer-response – clearly marks its association with the discourse domain (CP in (22)). Regardless of its precise origin, then, the argument for nie_2 having originated as a "high" element are strong; Biberauer (2008, 2009) presents a range of formal arguments showing that modern-day nie_2 has remained "high". Specifically, following Oosthuizen (1998), Biberauer (op.cit.) proposes that nie_2 's high left-periperhal position may in fact be the head of a Polarity Phrase (PolP). An approximate structural representation is given in (23):¹⁴



The key point here is that the very high structural position associated with nie_2 contrasts sharply with the much lower position associated with the NEG $_2$ -elements in languages which have undergone JC. On the assumption that sentential negation cannot outscope speech act-related features or, indeed the operator that encodes the illocutionary force of a given sentence, both CP-related features (cf. Han 2001), it is clear that nie_2 could not develop into a "real" negator (NEG $_3$) in the way that pas and similar elements, located lower in the clausal domain, did. This may be a central consideration in understanding Afrikaans's Stage III stability in the clausal domain. ¹⁵

The increase in the domains in which nie_2 may surface points to the fact that nie_2 is in fact developing in the opposite direction to that which one would expect if it were progressing within JC, i.e. instead of becoming "more negative", it appears to be becoming "less negative". Thus we observe that it is, in MSA, able to surface in nonnegative contexts such as those illustrated in (24):

^{13.} Cf. i.a. Speas & Tenny (2003), Sigurðsson (2004) and Giorgi (2010), who have proposed that speaker-/hearer-related elements are merged at the *leftmost* edge of CP.

^{14.} See Biberauer (2008) for more detailed discussion of the structural properties of negative clauses in Afrikaans.

^{15.} If this is correct, we would expect sentential negation markers in languages which superficially appear to have these located within the CP domain (e.g. Celtic) to be low CP elements, which are outscoped by speech-act features.

- (24) a. Hy vertrek sonder dat ek agterkom (nie₂) he leaves without that I realise NEG "He leaves without me realizing it"
 - b. *Hy kon nouliks staan* (*nie*₂) he could barely stand NEG "He could barely stand."

Oosthuizen (1998) interprets structures such as these as evidence that nie_2 realises Pol- rather than Neg-structure. ¹⁶ From a syntactico-semantic perspective, then, nie_2 can be viewed as a bleached element, which differs from pas and former "nothing" sentential negators in familiar West European languages by lacking negative meaning. That it cannot function independently as a negation element (cf. (6)) therefore follows straightforwardly.

Syntactically, nie_2 also exhibits evidence of bleaching. One of the featural consequences of nie_2 surfacing in a wider range of phrasal contexts in MSA than is standardly permitted (cf. Section 2.3.1) is that we can no longer think of it as a purely clausal element – one which we can therefore think of in generative terms as extending the verbal spine (VP/vP, TP and CP in (22); cf. Grimshaw 1991 et seq.) and thus bearing verbal features ([+ V]). From its association with i.a. nouns and adjectives (cf. (10–11)), it is clear that the featural composition of modern-day nie_2 cannot include any (inherent) categorial specification: it is a peripheral concord-element that may co-occur with phrases of various types.

Recalling the discussion of nie_2 's phonological weakness in Section 2.2.1, we therefore see that nie_2 in modern Afrikaans is a syntactically, semantically and phonologically deficient element. Biberauer (2009) consequently proposes that it has grammaticalised "beyond the Cycle", such that we should not expect it to follow the same diachronic path as NEG $_2$ -elements in better-studied European languages. More generally, Biberauer (2009) takes the Afrikaans facts as the basis for the hypothesis in (25):

(25) Languages drawing on an element from a high structural domain to serve the function of NEG₂ will not undergo Stage III to IV/V change.

In the following section, we will discuss one system that initially appears to challenge (25) (cf. Biberauer & Cyrino 2009a,b & Biberauer 2011 for more detailed discussion, and further illustrations).

^{16.} Strikingly, Breitbarth & Haegeman (2010) show that a very similar analysis seems correct for the former NEG₁ element, -*en*, in West Flemish.

3. A test case: Brazilian Portuguese (BP)

Superficially, BP negative structures share quite a few properties with their Afrikaans counterparts:

(26) Ele não₁ comprou a casa (não₂) [oral, standard BP] he not bought the house NEG "He has not bought the house" (Sonia Cyrino, p.c.)

Like Afrikaans, spoken BP negatives may feature two superficially identical negationelements, with the "real" negator surfacing clause-internally and the concord-element in clause-final position. There are, however, also some crucial differences, notably that clause-final *não* is optional and that clause-internal *não* is a weak element, typically realised in clitic form as *num*. Clause-final *não*, by contrast, can never be realised as a clitic (cf. Cavalcante 2007; contra Martins 1997 & Fonseca 2004).

Importantly for our purposes, northern rural varieties of BP permit an additional negation option that is not available in the spoken standard of the south and that appears to falsify (25). Consider (27) (cf. Schwegler 1991; Martins 1997; Alkmim 1999; Camargos 2002; Fonseca 2004; Schwenter 2005; Cavalcante 2007):

(27) Ele comprou a casa não he bought the house NEG "He has not bought the house"

Here we see that it is possible to negate a northern BP sentence by employing what appears to be just the clause-final negator, or $n\tilde{a}o_2$ in (26). If this is indeed the case, (25) clearly cannot be correct, suggesting that structural height may not, after all, be a relevant consideration in determining onward progression beyond Stages II and III. Researchers who have previously suggested that northern BP is in the process of progressing to Stage V include Schwegler (1986, 1991) and Schwenter (2005) and, more speculatively, Lipski (2001). Biberauer & Cyrino (2009a,b), however, dispute this analysis, arguing that (25) is, in fact, supported by the negative developments in BP. The main components of their proposal are summarised in Sections 3.1 and 3.2.

3.1 A closer look at the northern BP data

A striking fact about final $n\tilde{a}o$ -containing structures is that they are systematically interpreted differently from structures featuring only the prescriptively sanctioned medial $n\tilde{a}o$. Consider the following examples:

(28) a. A Maria não₁/ num vai no teatro the Mary not not.CL go in-the theatre "Mary is not going to the theatre"

- b. A Maria não₁/ num vai no teatro não₂ the Mary not not.cl go in-the theatre NEG "Mary is (emphatically) NOT going to the theatre"
- c. A Maria vai no teatro não₂
 the Mary go in-the theatre NEG
 "Mary isn't going to the theatre (as you thought/suggested), no"

While (28a) can (but need not) be interpreted as a simple declarative, (28b–c) cannot be interpreted in this way. In both of these cases, what is expressed is marked negation: with two $n\tilde{a}os$ present, the structure is necessarily interpreted as reinforced in a manner parallel to what we see in Afrikaans "extra" nie_2 -containing structures (cf. Section 2.3.1), whereas with just the final $n\tilde{a}o$ present, the structure is obligatorily interpreted as one which specifically negates a presupposition, e.g. a denial. Strikingly, this latter type is most common in response to yes/no-questions (see below), whereas the former type is additionally also acceptable in thetic contexts (e.g. following a question like What is going on?).

Interpretive considerations aside, the final $n\tilde{a}o$ in (28b)- and (28c)-type structures also differ in phonological terms: while independently occurring $n\tilde{a}o$ may be emphatically stressed, this is not possible with the final $n\tilde{a}o$ in doubling structures (Sonia Cyrino & Gertjan Postma, p.c.).

Also striking is the fact that (28b)- and (28c)-type structures exhibit a range of further distributional asymmetries. Thus (28b)-type structures are acceptable in both matrix and embedded clauses, whereas (28c)-type structures are restricted to matrix clauses. This is illustrated in (29):

- (29) a. Ele disse que ele num/ não₁ comprou a casa não₂ he said that he not.CL/ not bought the house NEG "He said that he hasn't bought a house"
 - b. *Ele disse que ele comprou a casa não₂

Further, (28b)-type structures are impossible in simple *yes/ no*-interrogatives (30a), whereas (28c)-type structures are not (30b); the only constraint on the latter is that they are only licensed in presupposition-entailing questions, a condition met in (30b):

- (30) a. Você num/ não₁ comprou a casa não₂? [simple yes/no-Q] you not.CL/ not bought the house NEG "Haven't you bought the house?"
 - b. Você comprou a casa não₂? [presuppositional yes/no-Q] you buy the house NEG
 "You DIDN'T buy the house?! (I thought you had!)"