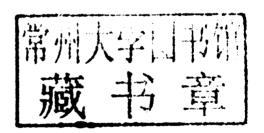
# Word-Order Change as a Source of Grammaticalisation

Susann Fischer

# Word-Order Change as a Source of Grammaticalisation

Susann Fischer University of Hamburg



John Benjamins Publishing Company Amsterdam/Philadelphia



The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences – Permanence of Paper for Printed Library Materials, ANSI 239.48-1984.

### Library of Congress Cataloging-in-Publication Data

Fischer, Susann, 1964-

Word-order change as a source of grammaticalisation / Susann Fischer.

p. cm. (Linguistik Aktuell/Linguistics Today, ISSN 0166-0829; v. 157)

Includes bibliographical references and index.

 Language and languages--Word order. 2. Grammar, Comparative and general--Word order. 3. Languages, Modern--Word order. I. Title.

```
P295.F57 2010
415--dc22 2010007274
ISBN 978 90 272 5540 2 (Hb ; alk. paper)
ISBN 978 90 272 8818 9 (Eb)
```

© 2010 - John Benjamins B.V.

No part of this book may be reproduced in any form, by print, photoprint, microfilm, or any other means, without written permission from the publisher.

John Benjamins Publishing Co. · P.O. Box 36224 · 1020 ME Amsterdam · The Netherlands John Benjamins North America · P.O. Box 27519 · Philadelphia PA 19118-0519 · USA

## Acknowledgements

This book is a revised version of my Habilitationsschrift, which was accepted at the University of Stuttgart in July 2008. I would like to thank Artemis Alexiadou for her constant encouragement, her advice and detailed comments during the time it took me to complete this work, as well as Klaus von Heusinger and Georg Kaiser who agreed to be co-evaluators. Parts of this material have been presented in numerous places over the past few years: DIGS, Campinas; DGfS, Bamberg; diversos Simposis Internacionals "Vers una sintaxi històrica del Català", La Nucia; NEREUS, Universitat Autonoma Barcelona; Romanistentag, University of Saarbrücken; Workshop on Language Change: Grammaticalisation and Beyond, University of Ulster; Workshop on Theoretical Morphology, University of Leipzig; Cursos de Verano, Universidad Internacional Menéndez Pelayo; University of Leiden; University of Freiburg; and the University of Konstanz. I would like to thank the audiences at those presentations for their questions, comments and most of all criticisms. Special thanks go to Gunnar Hrafn Hrafnbjargsson without whom it would have been impossible to write the various parts on Icelandic. Of course the usual disclaimers apply.

Furthermore, I would like to thank Werner Abraham and Elly van Gelderen for giving me the opportunity to publish my work in their series, Kees Vaes and Martine van Marsbergen for guiding me through the publishing process, and Kirsten Brock for proofreading and correcting the English of this book.

Finally I would like to thank my colleagues at the Institute of Linguistics: English Studies at the University of Stuttgart who made the six years I worked there a wonderful linguistic and personal experience.

# Table of contents

Ack	knowledgements				
CHA	APTER 1				
Introduction					
1.	D (				
2.	Hypotheses and aims of the book 2				
3.	Diachronic data and electronic corpora 9				
	3.1 The electronic corpora used 10				
	3.2 Differences between the two phenomena investigated 11				
СНА	APTER 2				
Dif	ferent views on grammaticalisation and its relation to word-order 13				
1.	Introduction 13				
2.	Historical views on grammaticalisation 14				
	2.1 The 18th and 19th centuries 14				
	2.2 The 20th century 17				
	2.2.1 Word-order change, reanalysis and grammaticalisation 21				
3.	Current views on grammaticalisation 23				
	3.1 Language change and the mechanisms of grammaticalisation 24				
	3.2 A case study: Explaining the change in the English modal system 26				
	3.2.1 English modals and the functionalist approach 27				
	3.2.2 English modals and the structural/formal approach 30				
	3.2.3 Reconciling the two approaches 34				
4.	Word-order and grammaticalisation 35				
CHA	APTER 3				
	storical overview of oblique subjects in Germanic and Romance				
1.	Introduction 39				
2.	A brief typological overview of the languages under investigation 41				
	2.1 The Old Germanic languages: Icelandic and English 41				
	2.2 The Old Romance languages: Catalan, French, and Spanish 44				
	2.3 Typological synopsis 47				

3∙	Subjecthood 49					
	3.1 Testing subjecthood 51					
	3.2 Previous explanations and the problems they face 57					
	3.2.1 The "double case approach" 57					
	3.2.2 The "single case approach" 58					
	3.2.3 The "person matching approach" 59					
	3.2.4 Summing up 62					
4.	A diachronic perspective on oblique subjects 63					
	4.1 The Old Germanic languages 63					
	4.1.1 Old Icelandic 64					
	4.1.2 Old English 67					
	4.2 The Old Romance languages 74					
	4.2.1 Old Catalan 75					
	4.2.2 Old French 77					
	4.2.3 Old Spanish 83					
5.	Summary 85					
	APTER 4					
His	storical overview of stylistic fronting in Germanic and Romance 87					
1.	Introduction 87					
2.	The properties of stylistic fronting 90					
	2.1 Clause-boundedness 90					
	2.2 Focus 91					
	2.3 Relativized minimality 91					
	2.4 Head movement 92					
	2.5 The subject gap 93					
3.	Previous explanations and the problems they face 96					
	3.1 Obligatory movement vs. optional movement 96					
	3.2 XP vs. X° movement 98					
	3.3 Rethinking the trigger of stylistic fronting 100					
4.	The diachronic perspective on stylistic fronting 102					
	4.1 The Old Germanic languages 102					
	4.1.1 Old Icelandic 103					
	4.1.2 Old English 106					
	4.2 The Old Romance languages 114					
	4.2.1 Old Catalan 115					
	4.2.2 Old French 118					
	4.2.3 Old Spanish 122					
5.	Summary 126					

Accounting for the differences and similarities between the languages under				
investigation 129				
1. Introduction 129				
2. Word-order, V movement and EPP checking 130				
2.1 in the modern languages 130				
2.2 in the old languages 133				
2.3 Summary 137				
3. Arguments in favour of an additional functional category 138				
3.1 Verb-third orders in matrix clauses 139				
3.2 Postverbal clitics in embedded sentences 140				
3.3 Stylistic fronting without the subject gap 143				
3.4 Stylistic fronting and oblique subjects 145				
4. Narrow syntax and semantic effects 147				
4.1 Semantic effects 147				
4.2 Feature-driven movement 154				
5. A conclusion 159				
CHAPTER 6				
Explaining the changes: Minimalism meets von Humboldt and Meillet 16				
1. Introduction 161				
2. Diachronic instability and the generative tradition 161				
3. Grammaticalisation, minimalism, and the change in word-order 164				
3.1 Explaining the loss of stylistic fronting and oblique subjects 167				
3.2 Morphological changes follow syntactic changes 172				
4. Conclusion 175				
References 17				
Name index				
Subject index				

CHAPTER 5

### Introduction

### ı. Preface

Grammaticalisation is generally seen as the change whereby lexical elements become grammatical elements and/or whereby grammatical elements become even more grammatical elements (Meillet 1912, Kuryłowicz 1965, C. Lehmann 1995, among others). In more recent approaches, this may be formulated as the process whereby lexical categories change to functional categories (Roberts 1999, S. Fischer 2002, Roberts & Roussou 2003, van Gelderen 2004). In all these approaches, grammaticalisation is seen as a unidirectional, irreversible process, which is often claimed to start out in phonology or morphology, and to have subsequent effects on syntax, i.e. word-order. Most of these approaches consider word-order change to be the outcome of grammaticalisation but never the source of grammaticalisation (Claudi 1994, Roberts & Roussou 2003, among many others); some even go as far as to suggest that "word-order changes are not to be included in the usual understanding of grammaticalisation" (Hopper & Traugott 1993: 23).

In this book I will argue and present evidence in favour of the view that a different perspective is also possible, a perspective where word-order change does indeed need to be included in our understanding of grammaticalisation.

Grammaticalisation under this perspective is clearly seen as a loss of functional categories or a loss of the phonological realisation of functional categories (cf. Roberts 1999, S. Fischer 2002, Roberts & Roussou 2003, van Gelderen 2004). However, I will argue that this loss of functional material is not triggered by the loss of case or verbal morphology, i.e. by the loss of morphological cues, as has been argued by Roberts & Roussou (2003), but instead that the loss of morphology is triggered by the change in word-order. First word-order changes, and only afterwards do we lose morphology because it becomes superfluous.

At first glance, this view does not seem to be very attractive. In particular, it seems to be in conflict with the very common explanation of phonological erosion due to internal or external changes because of sociolinguistic or psycholinguistic reasons or language contact (cf. Detges 2001, Haspelmath 2004). This phonological erosion is thought to lead in a second step to a loss of morphology, i.e. morphological triggers (cf. C. Lehmann 1995, Roberts and Roussou 2003), and continues in a subsequent step to change in word-order. However, recent developments in

linguistic theory make a new perspective possible: in a linguistic environment where grammaticalisation is seen as a regular case of parameter change (Roberts & Roussou 2003: 3, van Gelderen 2004), where morphology has been transferred to syntax, and where phonological features are added only after spell-out, i.e. Distributed Morphology (cf. Halle & Marantz 1993; see also subsequent work in and on this framework including Embick & Noyer 2001, 2004), it seems to be consistent to see grammaticalisation from the opposite perspective, i.e. first the change in word-order, and subsequently the changes in phonology and morphology. This viewpoint is not new, however: Meillet (1912 [1965]) already opens up the possibility that the domain of grammaticalisation might be extended to the change of word-order in sentences (Meillet 1912 [1965: 147]). Von Humboldt (1822 [1972]) in his approach takes the change in word-order as the first step towards the emergence of grammatical elements, which is nowadays summarised under the term grammaticalisation; a similar view is defended in Givón (1971, 1979) and also in Kiparsky (1995).

As will be shown in this book, at present Modern Icelandic offers positive proof of the view that word-order changes precede the loss of morphology. A look at Icelandic data will reveal that this language has developed a very rigid word-order and is currently losing oblique subject constructions and stylistic fronting without having lost any of the relevant morphological markings. A comparison of the historical development of the Germanic and Romance languages with respect to the phenomena of oblique subjects and stylistic fronting will provide the same evidence: word-order changes often precede morphological changes. This comparison of the development of languages belonging to two different branches of the Indo-European family will bring to light the fact that the loss of oblique subjects<sup>1</sup> and the loss of stylistic fronting in both branches can only be accounted for if we adopt a traditional view of grammaticalisation as advocated by Meillet and von Humboldt.

### 2. Hypotheses and aims of the book

This book will present a new perspective on the interaction between word-order and grammaticalisation by investigating the changes that stylistic fronting and non-nominative subjects have undergone in Romance (Catalan, French, Spanish) and Germanic (English, Icelandic). The initial goal is to provide an explanation of why non-nominative subjects, stylistic fronting and related verb-third effects

<sup>1.</sup> Note that different terms are used in order to refer to oblique subjects. Next to oblique subjects, one also finds non-nominative subjects and quirky subjects. However, they all describe the same phenomenon.

disappeared in some but not all of the above-mentioned languages; the ultimate goal is to achieve a better understanding of grammaticalisation as an epiphenomenon of regular parameter change.

Looking at the Old Germanic languages as compared to the Old Romance languages, the situation can be characterised by the following facts: stylistic fronting is attested in Old English and Old Icelandic, as well as in Old Catalan, Old French and Old Spanish; the same holds for the phenomenon of non-nominative subjects, which are attested in Old English and Old Icelandic, as well as in the Romance languages Old Catalan, Old French and Old Spanish. For a first impression of the two constructions under investigation, examples of stylistic fronting and non-nominative subjects in the different medieval languages are given in the following.

### Stylistic fronting

Stylistic fronting (SF) is standardly understood as a process by which an element is moved in front of the finite verb in those sentences where the position in front of the verb (SpecIP) is not occupied by an overt subject NP. The arguments and explanations regarding why this process applies in some languages but not in others are manifold and so far no generally accepted analysis has been presented that can explain the process in the different languages in which it appears. In the examples below<sup>2</sup> the (a) sentences represent the canonical word-order and the (b) sentences illustrate the word-order after SF has applied.<sup>3</sup>

Se deofol ba forleas þæt he hæfde gelæht... (1) a. **OE** the devil then blames that he has forleas bæt he **gelæht** hæfde \_\_\_ b. Se deofol ba the devil then blames that he laughed has 'Then the devil blames him for laughing.... (2) a. at herjat i ríki hans OIce var that was.3sG harried in kingdom his herjat var i ríki that harried was.3sg \_\_ in kingdom his 'that was tormented in his kingdom'

<sup>2.</sup> Examples of this type will be discussed at great length in chapters 3 and 4, where full references on the sources of the sentences will be given.

<sup>3.</sup> In order to show which examples stem from which language I will use the following abbreviations: OE = Old English, ME = Modern English, OIce = Old Icelandic, MIce = Modern Icelandic, OCat = Old Catalan, MCat = Modern Catalan, OF = Old French, MF = Modern French, OSp = Old Spanish, MSp = Modern Spanish.

<sup>4.</sup> I will indicate the category fronted by SF in **bold** letters, and the launching site for the movement with an underlined space \_\_.

### Oblique subjects

For quite some time it was argued that real "quirky subjects" exist only in Icelandic (Freidin & Sprouse 1991, Maling 1990), but in the meantime it has been shown that non-nominaive subjects occur in many other languages as well (cf. Aikhenwald, Dixon & Onishi 2001, Bhaskararao & Subbarao 2004). In general we can say that quirky subjects are NPs in a preverbal/sentence-initial position with a lexically selected non-nominative case that cannot be derived from thematic roles. These NPs behave like ordinary subjects with respect to different syntactic phenomena, e.g. control (6b, 8b), ECM (Exceptional Case Marking) (7b), and coordinate subject deletion (9b), (10) among others, even though they don't agree with the verb in phi-features.

O<sub>E</sub>

'and he has abandoned his properties, houses and palaces'

- (6) a. Me hungreh ...
  me.OBL go.hungry.3sG
  'I am hungry'
  - b. pa ongan pone oferhydygan pyrstan then started.3sg them.ACC overthoughtful thirst.3pL on deap on death 'Then they started to heedfully thirst for death'

<sup>5.</sup> Nevertheless, they can be argued to be semantically determined, although in a negative sense, since they never denote *Agent*.

(7)	a.	Ei mun þig hér mat skorta not will you.ACC here food lack 'You are not going to lack food here'	OIce
	b.	Ingólfur sagði þeim vera mál að setjast um kyrrt Ingólfur said them.DAT be time to sit on still 'Ingolfur said that it was time for them to settle down'	
(8)	a.	Senyor, dix l'emperador-, bé.m plau.  Sire, says the'emperor-, good.me.OBL pleases.3sG  'Sire, the emperor says, I like it well'	OCat
	b.	No em recorda jamai [PRO] haver llest not me.OBL remember never [PRO] have read algun hom ésser estat pus ardit. some man be been more angry 'I don't remember having ever known anyone to be angrier'	
(9)	a.	me remembre me.OBL remember.3sG 'I remember'	OF
	b.	quant de ce li sovient et membre when of this him.OBL recall.3SG &OBL remembers 'when he remembers and recalls this'	
(10)	of de of	los que uos pesa a mi duele el coraçón the that you regret to me.OBL hurt.3sg the heart todo lo que Dios quiere y gusta all it that God.NOM; loves andOBL; like.3sG much as you regret this my heart hurts of all that God loves and	OSp likes'
es unde	r in	on contrasts notably with that in the modern languages. In the languestigation, stylistic fronting is still active in Modern Icelandic (12 ven up in English (11), Catalan (13), French (14) and Spanish (15	), but
(11)	*T	hen the devil blames that he <b>laughed</b> has	ME
(12)		í sem fyrstur er að skora mark] fær sérstök verðlaun e that first is to score goal gets special price	MIce
(13)	-	ue fet li ha nat made him have.3sG	MCat
(14)		arlé as a ton amant ooken have.2sG to your lover	MF

(15) \*Dejado ha \_\_\_ heredades, casas y palacios left has.3sg \_\_\_ properties, houses and palaces

Concerning the non-nominative subjects, the picture is rather more complex. They are not a feature of Modern English, their only appearance being in two idiomatic expressions (16a,b), but they do appear in Modern Icelandic (17). In the Modern Romance languages Catalan (18) and Spanish (19) they are also used, however the syntactic status of these non-nominative subjects in Modern Romance has changed considerably. For example they do not allow subject deletion (18b). PRO can only be marked by nominative, i.e. be coreferential with nominative marking; all other case markings result in ungrammaticality (19b). In Modern French the verbs that used to assign a non-nominative subject have either been lost (20a) or have changed so that they now appear together with a nominative subject and a reflexive clitic (20b).

- (16) a. Me thinks
  me.OBL think.3sG
  'It seems to me'
  - b. Woe is me misery is.3sg me.OBL 'I'm miserable'
- (17) Hana pyrstir.
  her.ACC.sG thirst.3sG
  'She is thirsty'

(18) a. A mi m'agrada anar libre to me me'like go free 'I like to be free'

> b. \*La Mercè<sub>i</sub> ama la música e \*(a la Mercè<sub>i</sub>) li the Mercè<sub>i</sub> loves the music & \*(to the Mercè.OBL<sub>i</sub>) her agraden les matemàtiques likes.PL the mathematics 'Mercè loves music and likes mathematics'

- (19) a. A Marcós le gusta la músical to Marcos him like the music 'Marcos likes music
  - b. \*Es difícil PRO gustarle las matemáticas is.3sG hard PROOBL to.like.him the mathematics 'It is hard for one to like mathematics'

ME

MSp

MIce

MCat

MCat

MSp

MSp

7

(20) a. \*me remembre me.OBL remember 'I remember'

MF

b. Je me souviens
 I me.REF remember
 'I remember'

It has constantly been argued that stylistic fronting depends on the subject gap (Holmberg 2000, Maling 1980, 1990) and/or on the verb-second property of these languages (Maling 1980, 1990). Others have sought to show that the loss of stylistic fronting is connected to the loss of verb movement to I° (Falk 1993, Hrafnbjargarson 2004a/b) and/or to the loss of verbal morphology (Mathieu 2006a). With respect to non-nominative subjects, it has mainly been argued that the existence and behavioural properties of quirky subjects depend on factors such as lexical case phenomena and on how nominative case is assigned, via Spec-head agreement or via canonical government (Barðdal 1999, Sigurðsson 1997, Wunderlich 2001, Fanselow 2002, among many others). The loss of non-nominative subjects in a language is then explained by the loss of case morphology and the loss of the ability of assigning lexical case (Lightfoot 1979, Allen 1995), or by a change in the subject properties of these languages (Wunderlich 2001). In addition, the loss of non-nominative subjects and the loss of stylistic fronting in a language have generally been explained independently of each other.

I will show that stylistic fronting and quirky subjects depend neither on verbal nor on case morphology but instead on the availability of additional functional material. I propose, contrary to what has been claimed, that both quirky subjects and stylistic fronting have a semantic impact; concerning stylistic fronting I suggest that it is not a mere phonological displacement but has to take place in narrow syntax. I argue that it is a feature-driven movement operation into a functional category above AgrSP/TP and below CP, namely into F(ocus)/F(oregrounding)P in order to check an uninterpretable feature [F] in this category. Oblique subjects always have an inherent F(ocus)/F(oregrounding) feature; compared to nominative subjects, oblique subjects put into the foreground or focus the physical and/or emotional experience of the subject. Therefore, they always move to SpecFP in order to check the uninterpretable [F] in F°.

The change that occurred with respect to SF and oblique subjects is explained by the loss of this functional category, i.e. by the change in word-order. The change in word-order can be accounted for if we adopt a theory of language acquisition and markedness along the lines of Clark & Roberts (1993) and Roberts & Roussou (2003). Stylistic fronting and oblique subjects, which passed all the accepted tests, disappear because the trigger was no longer categorical. Over a long period

structures with and without stylistic fronting existed side by side to indicate the same meaning, i.e. true optionality had entered the system. After having had access to both word-orders for an extended period of time, the learner preferred the structure with less movement; as a consequence stylistic fronting disappeared and the syntactic status of oblique subjects changed. Only after word-order had changed was the morphology lost because it had become superfluous.

The purpose of this book is thus threefold. First, I will provide a qualitative evaluation of the changes that occurred with respect to non-nominative subjects, stylistic fronting and related verb-third effects in the history of certain Romance (Catalan, French, Spanish) and Germanic languages (English and Icelandic).

Second, I will argue that the phenomena of quirky subjects and stylistic fronting are highly interconnected. Both phenomena have a semantic impact in the Germanic and Romance languages, and both make use of an additional category F(oregrounding)/F(ocus)P. Hence, if we find stylistic fronting in one of these languages, we also find quirky subjects that pass all syntactic subject tests (cf. Keenan 1976), and vice versa. This leads to the prediction that if a language loses stylistic fronting, it will also lose the availability of syntactic non-nominative subjects.

Third, in order to account for the loss of SF and non-nominative subjects, I will propose an account in which grammaticalisation is seen as a regular case of parameter change: those languages that have lost these phenomena have lost the possibility of making use of one additional functional category. The loss of oblique subjects and stylistic fronting is taken as a clear example of grammaticalisation. However, in contrast to previous and recent approaches to grammaticalisation, I will show that it is not the loss of morphology that triggers grammaticalisation with the subsequent effect of a word-order change, but that a word-order change, i.e. the loss of a marked structure, sets off grammaticalisation in the functional categories. This is then followed by changes in the morphology. I thus conform to Meillet's and von Humboldt's view of grammaticalisation, i.e. that changes in word-order can be both effects of and triggers for grammaticalisation. Furthermore, I will show that even though grammaticalisation is taken as a parameter change, it still fulfils the requirements of grammaticalisation theory: the parameter change is unidirectional, and therefore follows pathways of change, exactly as is expected for cases of grammaticalisation.

This book is organised as follows: the rest of this chapter addresses some of the methodological issues raised by work dealing with the study of grammatical change and comments on the selection of the data bases that constitute the empirical basis of this work. Chapter 2 gives a brief overview of the history of grammaticalisation theory and how word-order changes are regarded in the different approaches. It will present the different processes involved, the topics studied in this connection,

and discuss two popular approaches of recent years. The main aim of Chapter 2 is to locate my view of grammaticalisation among the existing theories. Although we find excellent overviews of the history of grammaticalisation in C. Lehmann (1995) and Hopper & Traugott (1993), I revisit the different approaches to work out the different views on grammaticalisation and its relation to word-order. Chapter 3 presents the basic assumptions about oblique subjects and discusses the most prominent existing analyses. In this chapter data is provided that clearly shows that all the languages under investigation make use of syntactic oblique subjects. The main aim of Chapter 3 is to demonstrate that the languages under investigation have real syntactic oblique subjects and to show that the properties which have up till now been held responsible for allowing oblique subjects in a language cannot explain their appearance in all the languages examined here. Chapter 4 investigates stylistic fronting. I will evaluate the most prominent approaches and discuss the different constraints to which SF has been argued to be subject. I will show that SF was an option in all the old languages even though for most of these languages under investigation the subject gap and/or the checking of the EPP (Extended Projection Principle) feature do not seem to be defining characteristics of SF. Chapter 5 develops an analysis within a Minimalist framework that is able to capture the availability of stylistic fronting and quirky subjects and to explain all the data that have so far remained unexplained in other approaches. Finally, in Chapter 6 I will propose an account of the loss of stylistic fronting and oblique subjects by portraying grammaticalisation as the loss of the phonological realisation of functional categories. It will be shown that the loss of functional material is independent of the loss of case or verbal morphology; instead, some changes that we observe in the morphology of the languages seem to be a result of the change in word-order.

### 3. Diachronic data and electronic corpora

One of the most difficult tasks to accomplish when studying syntactic change has always been to determine whether an older stage of a language displays certain types of constructions that no longer exist in the modern language. Since the study of diachronic data is based exclusively on evidence from written corpora, we are faced with a lack of negative evidence that is impossible to overcome. In addition, we are faced with philological difficulties, such as the questions of whether texts reliably represent a certain historical period or geographic dialect, and whether written texts represent all the properties of the spoken language in a linguistic

<sup>6.</sup> One of course cannot ask any native speaker or use judgements based on our own intuitions of whether a certain grammatical construction would have been acceptable or not.

community. However, in recent years the task of linguists interested in diachronic syntax has become easier, since many of the historical manuscripts are now electronically available. This means that the historical data that we consult is not reduced to one or two manuscripts, but that large and often representative corpora of the different periods can be consulted. In addition, it is of course much easier to find specific constructions in electronic corpora. Fifty years ago, a linguist still needed to read his or her way through every page of an old manuscript in the search for a certain construction; today we can often conduct – depending on the kind of corpus – an electronic search for the same construction within minutes. Nevertheless, many problems remain due to the differences between the available electronic corpora and because of the methodological differences involved in searching for different constructions.

### 3.1 The electronic corpora used

For this book, several different electronic corpora have been used for the different languages.

To investigate Old Catalan, the corpus of S. Fischer (2002) and the corpus CICA (*Corpus informatizat del català antic*) were used. CICA is the most extensive Old Catalan corpus currently available, with more than 4 million words of prose and poetic texts, assembled by the University of Valencia and the University of Alicante. It has unfortunately not yet been tagged and/or syntactically parsed. Hence one can search for lemmas and specific two-word sequences but not for syntactic constructions. Fischer (2002) is a rather small corpus of about 8000 sentences of prose text that ranges from Old to Modern Catalan, but the corpus is coded with respect to different syntactic constructions, among these stylistic fronting and oblique subjects. This is why both corpora were used.

In order to investigate quirky subjects and stylistic fronting in Old French, the Nouveau corpus D'Amsterdam: Corpus informatique de textes littéraires d'àncien français (1150–1350), was used. The Amsterdam Corpus of Old French Literary Texts was compiled at the beginning of the 1980s by a group of scholars under the direction of Anthonij Dees and resulted in the Atlas des formes linguistiques des textes littéraires de l'ancien français (1987). The electronic version of the texts was provided by Piet van Reenen (Free University of Amsterdam). It contains about 200 different texts, some of them in several versions, which adds up to a total of almost 300 text samples with more than three million words (tokens). The new

<sup>7.</sup> More detailed information on this corpus is available at http://lexicon.uab.cat/cica/.