

1 Word order change under a diachronic generative syntax perspective

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1.1 Introducing the topic

Word order is at the core of natural language grammatical systems. It interacts with all their structural components, linking syntax with sound (prosody) and meaning (semantics/pragmatics), manifesting the characteristic “displacement property” (Chomsky 2005) that lies behind the opposition between base-generated and derived word orders, and feeding variation across the geographic and temporal axes. Deepening our understanding of word order phenomena seems to require being able to articulate the successful but often separate efforts of typologists, historical and theoretical linguists so as to take full advantage of both large-scale cross-linguistic surveys and the more circumscribed and in depth analyses of theory-oriented research. This book aims to be a contribution to that objective, taking linguistic change and generative syntax as its underpinning pillars. It offers thirteen fine-grained studies in word order change set within the framework of diachronic generative syntax.

The sample of languages investigated is diverse and displays significant historical depth. Different branches of the Indo-European family are represented both through classical and living languages (namely, a wide range of Early Indo-European languages, Latin, Italian, European Portuguese, Brazilian Portuguese, Irish, Dutch and English). Besides, three chapters are dedicated to Hungarian and one chapter deals with Egyptian. The wide temporal range covered by the book’s chapters allows for apparently contradictory but actually thought-stirring approaches to complex, enduring issues such as the evolution from synthetic to analytic grammatical systems. While Ledgeway (chapter 14) treats the evolution from Classical Latin to Early Romance as a model instance of the synthetic to analytic drift, Reintges and Cyrino (chapter 10) characterize present-day Brazilian Portuguese as a language in which analyticization is an emergent grammatical property (due to the ongoing state of the change), distant as it is from Early Romance. This apparent dissonance (between authors that share a macroparametric view of the synthetic to analytic drift) only indicates that work in the domain of diachronic generative syntax should contribute to further refining widely used conceptual categorizations through detailed inquiry into the properties of particular linguistic systems, without losing the broad picture. The coherent body of original research on word order change assembled in this book seeks to go precisely in that direction.

The essays in the book use the tools provided by the generative theory of grammar to look into the constrained ways in which older linguistic variants give rise to new ones in the course of time, with the aim of contributing insights into the properties of natural language and the ways those properties constrain language change. Two ingredients of the generative framework make it especially appropriate to deal with word order phenomena, namely *movement* as a syntactic operation (embedded in the theory of grammar) and a richly *articulated clausal architecture* composed with lexical but also abstract functional categories. The latter might be thought of as constant across

languages or instead partially variable (an unsettled theoretical issue), while the former underlies the distinction between base-generated and derived word orders. If one assumes that clausal architecture may vary across languages (and across constructions), variation in clause structure (i.e. activation/non-activation, conflation/expansion, structural position and featural make-up of functional categories) interacts with movement operations creating the different options for linearization that result in word order variation.

Word order variation emerges along a number of different axes (temporal, spatial, social, cultural, etc.) and according to different media (oral, written, printed, etc.). This book is primarily concerned with the articulation between the temporal and spatial axes, and aims to take full advantage of a comparative inquiry as a tool to uncover non-trivial generalizations and new research problems. While each chapter in the book addresses specific issues and identifies others for future research, the book as a whole incites and allows the reader to consider more general questions motivated by the different contributions it includes. To give a few examples: are the notions of parameter and macroparameter necessary to understand word order variation?, what does word order change tell us about clause structure?, how does it give evidence against the existence of non-configurational languages?, how does it support the view that syntactic systems, like phonological systems, to a certain extent select from a universal set of categories those that belong to a particular grammar?, how might other parallelisms between phonology and syntax be fruitfully drawn on for the purposes of diachronic/historical investigation? (e.g., the notion of *chain reaction*, drawn from historical phonology, could be applied to syntax and maybe replace the concept of macroparameter to deal with such sets of changes as the drift from synthetic to analytic languages).

In the next section we will focus on the relation between movement operations and word order by assembling the pieces of information offered by the book's authors. We will show that the works here published indicate, when considered together, that word order change might be mainly the effect of the interaction between clause structure and syntactic movement, thus identifying these two components of grammar as the main factors behind word order variation (while, at the same time, significantly lessening the role traditionally attributed to morphology in driving word order change). We hope to be able to show that what at first glance may seem trivial turns out not to be so. We will thus identify some research issues that emerge from the type of approach to word order change here envisaged.

1.2 Clause structure, syntactic movement and word order change

We will start this section with two examples drawn from Portuguese (and borrowed from outside the book). The first example will describe an instance of change in constituent order as the effect of loss of movement, whereas the second will show how the emergence of syntactic movement associated with particular lexical items may give rise to new options for word order. We will then refer to the studies offered in the chapters 2 to 14 in relation to the dichotomy loss/gain of movement (over time) and will try to put forth some descriptive generalizations on the conditions underlying each of

the possibilities. These generalizations will in turn lead to some research questions specifically addressing word order change.

Contemporary European Portuguese displays VP-scrambling (i.e. short scrambling) as a strategy to establish appropriate information focus configurations by extracting out of the sentence-final position to which focus-stress is assigned the constituents that are not given informational prominence (Costa 1998, 2004). Object scrambling in contemporary European Portuguese maintains the basic VO order of the language, since the verb regularly moves to T(ense). Old Portuguese, on the other hand, allowed both VP-scrambling and IP-scrambling (i.e. middle scrambling) with parallel information-structural motivation. Old Portuguese middle scrambling derived the type of OV order illustrated in (1) below. In (1a-c) the position of the clitic pronouns (in bold) unambiguously shows that the scrambled objects have not moved to the sentential left periphery; so does the fact that in (1d) the object follows the negative word *nunca* ('never'), that would trigger proclisis if the sentence contained a clitic pronoun.¹

- (1)a. sse pela uētujra **uos** alguẽ a dita vĩa enbargar
if by chance you_{CL.DAT} someone the said vineyard blocks
'If it happens that someone blocks the said vineyard from you'.²
- b. mas nunca achou quem **lhe** delle novas algũas dissesse
but never found who him_{CL.DAT} of-he news some-PL would-say
'But he couldn't find anybody who would tell him any news from him'.
- c. ainda **vos** oje muito pesar averrá
still you_{CL.DAT} today much sorrow will-come
'Today it will still come much sorrow to you'.
- d. E nunca outros panos ouve
and never other garments had-3SG
'And he never had any other garments (after then)'.³

Martins (2002, 2011) accounts for the loss of middle scrambling in sixteenth century Portuguese (with the consequence that OV sentences such as (1a-d) ceased to be derived) as a consequence of a change in clause structure. Specifically, it is proposed that in Old Portuguese the functional category T would make available multiple specifier positions, which could be targeted by scrambled constituents. When this property of T was lost, middle scrambling was also lost with the result that object scrambling stopped being a possible source of the OV order. Independently of the particular technical implementation of the analysis, what should be retained here is the possible relation between the contraction of clause structure and loss of movement, a type of relation that will reappear in some of the instances of word order change

¹ See Martins (2002, 2011, forthcoming).

² Legal document, year 1296. Cf. Martins (2001: 377).

³ Examples (1b-d) belong to the medieval literary text *Demanda do Santo Graal*, which is part of the thirteenth-century Portuguese translation from French of the Post-Vulgate Arthurian Cycle. Cf.: WOChWEL's POS-tagged and Parsed Old Portuguese texts (A. M. Martins, coord; CLUL/FCT). <http://alfclul.clul.ul.pt/wochwel/oldtexts.html>.

investigated in the book (cf. chapters 2, 3, 4). The reverse path is a logical possibility and is actually also described in the book (cf. chapter 5). Whenever, in the course of time, clause structure expands instead of contracting, new structural positions appear as possible targets for movement operations, which can then emerge anew instead of being lost. If this type of analysis proves to be right, word order change will be giving evidence for the theoretical viewpoint that (certain dimensions of) clause structure may vary across languages and language varieties, and providing indicators to identify the loci of possible variation.

The second case of word order change in the history of Portuguese we will summarily refer to here illustrates the emergence of syntactic movement motivated by the pragmaticization of certain lexical items. Diachronically, it bears an indirect relation to the change relative to object scrambling. In Old Portuguese the deictic locatives *lá* ('here') and *cá* ('there') regularly display locative interpretation and occupy the regular positions of verbal arguments in the clause structure. From the sixteenth century on, they start to reveal other pragmatic/semantic values, each of them associated with a particular higher position in the functional architecture of the clause, thus featuring a case of upward reanalysis through the functional hierarchy in the sense of Roberts and Roussou (2003). The change is better described as a case of pragmaticization than grammaticalization because the primitive argumental locative value has been preserved while the association with higher positions in the functional system originated the new non-argumental values. The sentences in (2) below exemplify, from a. to d. respectively, the regular locative interpretation of postverbal argumental *lá*, the emphatic contribution of non-argumental *lá* (which then surfaces in preverbal position in declaratives but in postverbal position in imperatives because imperative verbs move higher) and the workings of *lá* as a metalinguistic negation marker. In this last case, illustrated in (2d), *lá* is consistently postverbal (and adjacent to the verb) but at the same time standard tests for verb movement give evidence that the verb has moved into the CP field.⁴

- (2)a. e viverom *la* muito
and lived there much
'And they lived there for a long time'.⁵
- b. se não andavam sobre aviso *lá* ia a cepa e a cepeira
if not were-3PL on guard *lá* went the vine and the grapevine
'If they were not on their guard, they would have lost everything!'
- c. conta *lá* outra história
tell-IMPERATIVE-2PL *lá* another story
'Please, tell us another story!'⁶

⁴ In Brazilian Portuguese, the corresponding sentence to (2d) would display *lá* in preverbal position, which is consistent with the general observation in the literature that Brazilian Portuguese (in contrast with European Portuguese) has lost verb movement into the C domain. Cf. chapter 10.

⁵ Thirteenth-century *Demanda do Santo Graal*. See footnote 3.

⁶ Examples (2b-c) are taken from the sixteenth-century plays of Gil Vicente. Cf.: *Gil Vicente, Todas as Obras*. CD-ROM.

- d. Quem foi? Eu sei lá, senhora mãe!
who was? I know lá lady mother
'Who did it? I don't know, mother. How shall I know?'⁷

Martins (2012, 2014) associates non-argumental emphatic *lá* with Spec,TP (which is analyzed as a dedicated position for deictic items) and metalinguistic negation *lá* with movement of the deictic locative from Spec,TP to Spec,CP. The relation between the development of the non-argumental values of the deictic locatives and the changes with respect to object scrambling is proposed to be an indirect one. The EPP feature of T(ense) was in Old Portuguese of an unselective nature allowing the projection of multiple specifiers (which could host several scrambled constituents) but evolved into being highly selective, limiting Spec,TP to one single position only accessible to deictic items. Hence, after middle scrambling was lost as a cross-categorial movement operation, deictic locatives could still target Spec,TP, instantiating a residual highly constrained type of middle scrambling (Costa and Martins 2010). Scrambled preverbal deictic locatives in Spec,TP could then be reanalyzed as emphatic markers in contexts allowing ambiguity between argumental and non-argumental interpretations of the deictic. Once Spec,TP allowed external merge of non-argumental deictic locatives, it was prone to become the anchor for further movement into higher positions in the functional hierarchy. This case of word order change featuring the development of CP-reaching metalinguistic negation markers from basic deictic locatives indicates that syntactic movement may emerge in relation with the development of polymorphism by particular lexical items. As for changes making a position targeted by syntactic movement become more restrictive (as with middle scrambling in Portuguese, that came to be restricted to deictics) or instead less restrictive, the studies presented in this volume show that both directions might indeed be expected (see chapters 6 and 7). Most chapters in the book deal with cases of word order change motivated by some change in the properties of a functional category associated with syntactic movement, as will be specified further on. However, none of the chapters handles a case such as the change that the Portuguese deictic locatives underwent over time. This seems to indicate that investigation into the diachronic development of so-called 'discourse particles' is the domain more prone to reveal similar cases of emergence of movement to the sentential left-periphery (but see Reintges 2011a on Coptic TAM particles).

The essays on word order change by Mitrović (chapter 2), Cardoso (chapter 3) and Bacskai-Atkari (chapter 4) all discuss instances of word order change motivated by a specific contraction of clause structure. Mitrović explains the evanescence of the enclitic (Wackernagel's second-position) type of coordinate construction in Indo-European as the effect of the loss of an independent particular kind of coordinate phrase, within an analysis where coordination involves a structure with three coordinate heads. After the change took place, Indo-European languages came to display only initial coordination instead of the earlier two competing structures. Cardoso investigates

⁷ Example taken from a nineteenth-century novel by Júlio Dinis. Cf.: *Corpus do Português (1300s-1900s)*, Mark Davies and Michael Ferreira (2006-) – <http://www.corpusdoportugues.org>.

Portuguese discontinuous noun phrases in the context of restrictive relative clauses. She shows that changes in word order between Old and Modern Portuguese were driven by the loss of a left-peripheral position for contrastive foci within relatives and possibly other types of subordinate clauses. The reduction of the left-peripheral space of relatives significantly constrained the options for linearization of the relevant type of noun phrases. Bacsikai-Atkari accounts for changes in the relative order between complementizers in Hungarian subordinate clauses as the consequence of the diachronic reanalysis of the two C-heads originally available for complementizers into one single C-head. As a result of the change, variation in the relative position of complementizers was replaced by a fixed order. Common to all the cases of word order change initiated by contraction of clause structure is the fact that it limits word order flexibility barring certain options for linearization that were available at an earlier period. This is so because clausal contraction goes hand in hand with the loss of syntactic movement.

Egedi's study (chapter 5) deals instead with word order change originated by the expansion of the functional structure of the Hungarian DP. Egedi accounts for the change from the Demonstrative-Possessor-Possessum order found in Middle Hungarian into the Possessor-Demonstrative-Possessum order found in Modern Hungarian as the effect of the reanalysis of adjunction positions as new left-peripheral layers of the extended noun phrase. Demonstratives became DP-specifiers instead of adjuncts and a higher Topic phrase emerged at the left-periphery of the DP where the Possessor moves. Word order change related to changes in the functional architecture of the clause (or some of its components, like the DP) may bring about new and important evidence to determine what are the possible dimensions of variation in clause structure across languages and within a particular grammar. A better understanding of this problem will in turn help us to correctly diagnose those instances of word order change that truly involve some reconfiguration of clause structure.

Besides clausal contraction/expansion, a structural position associated with syntactic movement may in the course of time become of a different nature and so trigger movement in a more constrained or less constrained way. Hegedűs (chapter 6) and Bernstein (chapter 7) deal with this type of change. Hegedűs shows that although Hungarian evolved from an SOV to a SVO language, verbal particles and predicative constituents other than particles still surface in preverbal position. The author accounts for this unexpected fact by showing that what was originally a preverbal argument position was reanalyzed as a preverbal predicative position where complex predicates are formed in overt syntax. At a first step of the change, only particles kept moving to the preverbal position; then, by Modern Hungarian, the still obligatory movement of particles triggered the generalization of predicate movement, making all predicates preverbal in neutral sentences. Hence movement to the preverbal position was first restricted, then expanded.

Bernstein deals with residual verb second in Appalachian English and African American English. She shows that while in Older Scots verb movement to C was general (like in most current Germanic languages), in Appalachian English (like in African American English) it came to be restricted to modals or finite auxiliaries occurring in transitive expletive constructions and negative auxiliary inversion.

Bernstein suggests that over time the verb-second configuration came to be triggered only by features associated with Focus.

The study by DiGirolamo (chapter 7) also deals with instances of movement to the clausal left-periphery, but features diachronic stability instead of change. The author shows that Old Irish sentences displaying non verb-initial orders are the outcome of argument fronting to the sentential left periphery for information-structural purposes just like in Modern Irish (Irish being invariably a VSO language). Thus the paper handles a case of stability in word order over time, finely uncovering textual evidence in the domain of Information Structure. DiGirolamo's investigation suggests, against a common claim in the literature, that information structurally marked positions should not be seen as diachronically unstable and thus prone to (neutral) reanalysis over time (cf. the explanations for the hypothetical emergence of V2 in Late Latin/Proto-Romance proposed by Roberts 2012a; Ledgeway 2012; Wolfe 2015).

Like Bernstein, Galves and Gibrail (chapter 9), Reintges and Cyrino (chapter 10) and Postma (chapter 11) also discuss cases of word order change involving the loss of verb movement into the CP domain (i.e. 'verb-second'). Postma attributes it to a change in the properties of TP in Low Saxon, which could no more be crossed by rich verbal forms. Reintges and Cyrino show that TAME particles (encoding Tense, Aspect, Mood, Evidentiality) emerge in Coptic Egyptian as part of the analyticization drift of the language; as these particles are merged in high positions through the functional skeleton of the clause, they block verb movement past the lower T(ense) head.⁸ An essential question to address in this context is why the loss of verb movement to C should be so common diachronically and the opposite change featuring the emergence of verb movement to C apparently so rare across languages (as a cursory review of the ten DiGS volumes published between 1990 and 2017 would readily illustrate⁹). If this diachronic contrast is confirmed (which requires broadening the empirical coverage of diachronic generative inquiry beyond the Indo-European family), it can be used as an indicator to evaluate diachronically-oriented approaches to the verb-second property. Consider, for example, the idea that input generalization (in the process of language acquisition) plays a crucial role in the emergence of V2 from non V2 grammars. We would then expect the emergence of V2 grammars to be more strongly attested because V2 syntax restricted to particular constructions is quite common across languages, which could thus be the source for analogy-based overgeneralizations.¹⁰ Also the idea that information structural positions like topic and focus can be reanalyzed as targets of

⁸ The paper by Galves and Gibrail, which combines corpus work with textual and theoretical analysis, does not identify what may have caused the loss of the verb second property attributed to Classical Portuguese.

⁹ The acronym DiGS stands for the *Diachronic Generative Syntax* conference. The published DiGS volumes are: Battye and Roberts (1990); Van Kemenade and Vincent (1997); Pintzuk, Tsoulas and Warner (2000); Lightfoot (2002); Batllori, Hernanz, Picallo and Roca (2005); Crisma and Longobardi (2009); Jonas, Whitman and Garret (2012); Galves, Cyrino, Lopes, Sandalo and Avelar (2012); Biberauer and Walkden (2015); Mathieu and Truswell (2017), corresponding respectively to DiGS I, III, V, VI, VII, IX, VIII, XI, XII, XV. See <http://personalpages.manchester.ac.uk/staff/george.walkden/digs/>.

¹⁰ Cf.: Roberts (2012), Ledgeway (2012), Wolfe (2015), and references therein, on the diachrony of V2 systems, as well as Kiparsky (2012) on analogical extension in syntactic change, a perspective that diverges from Lightfoot's (1999) cue-based theory of syntactic change.

unselective, generalized movement to the clausal left periphery faces a similar problem, as many languages would seemingly have the potential to develop V2 grammars. Hence, either there is a problem with the proposed models of change to account for the diachronic emergence of V2 or the problem is our current understanding of V2 itself. That is to say, perhaps we still do not have a clear understanding of the nature of the features that trigger movement to the left-periphery in V2 grammars and this limits our understanding of diachronic change in this domain. Be it as it may, the fact that changes involving verb-second mostly feature V2 loss must be telling us something about the verb-second property itself, even if we still cannot put our finger on it.¹¹

Against the apparently more usual diachronic path of loss of verb movement, Garzonio and Poletto (chapter 12) demonstrate that the past participle moves higher in Modern Italian than in Old Italian. The authors assume that Old Italian was a verb-second language across the CP, *v*P and DP phases (a matter of parametric setting). When the verb second property was lost, the focus head within the left periphery of the *v*P no longer needed to be filled by the past participle, which then starts to move out of the *v*P and reach the aspectual low IP field.

Apart from the dichotomy loss/gain of movement, both Danckaert (chapter 13) and Ledgeway (chapter 14) invoke different types of movement and constraints on it to deal with changes in Latin word order. But while Danckaert pinpoints a particular (indirect) trigger for syntactic reanalysis (namely the independent evolution of the negator *non*, from phrasal marker to head to clitic incorporated in T), Ledgeway argues for a fully macroparametric approach. As Latin widely displays surface head-final word orders but both Danckaert and Ledgeway adopt Kayne's (1994) assumption that phrases are universally head-initial (when basic, non-derived, word order is considered), the discussion in both papers deals with the type of movement operations to which Latin resorts to derive word orders that later will become unavailable. Grammatical constraints on movement (universal or parameterized) are considered to account for the loss of complement-to-specifier movement (Ledgeway) and the VOAux pattern (Danckaert). The success of this type of approach in handling the diachronic drift from head-final to head-initial orders may offer interesting independent support for Kayne's antisymmetry theory (hence, in a sense, against a true head-initial/head-final parameter). Thus the study of word order change is also a means to test the descriptive adequacy and explanatory potential of competing analyses relative to the dichotomy basic/derived constituent orders, and related 'movement' issues.¹²

¹¹ The 'merge over move' economy principle (Chomsky 1995, 2000) does not seem to be of any help here. See Castillo, Drury and Grohmann (2009), and Motut (2010) for a critical appraisal of this economy principle.

¹² A reviewer finds it surprising that this introductory chapter does not address the subject of "competing grammars" (an E-language issue) and, more broadly, "the nature of optionality" (not clearly an E-language or I-language issue), "given its centrality in the domain of word-order change". There are two reasons for our option of leaving this subject out of the scope of the volume's introduction. Firstly, as the reviewer acknowledges, the essays in this volume do not discuss or make any significant contribution to further our understanding of "competing grammars and the nature of optionality", a subject that is not specifically tied to the topic of word order. Secondly, it is our belief that if empirical investigation can lead to advances in the relevant respect, it will come from scrutiny into variation in present-day languages not from the study of syntactic change. What we will be able to learn from current language variation may

1.3 Book structure and chapter outline

The chapters in this volume are organized into four parts, motivated by the issues discussed above, namely: I Targets for movement (changes in the functional architecture of the clause); II Triggers for movement (change in nature or stability); III Verb movement into the left-peripheries; IV Types of movement and constraints on it (word order change in Latin). An outline of the contents of each part and chapter is provided below.

1.3.1 Part I – Targets for movement

The four chapters in the book's Part I deal with word order change in different types of syntactic structures (coordination, relatives, embedded clauses, determiner phrases) and different language families, either focusing in a particular language (Hungarian, European Portuguese) or instead taking a broad cross-linguistic perspective (Early Indo-European languages and their descendants). The common feature to the four chapters is that they all account for changes in word order as the effect of a reconfiguration in clause structure, which either subtracts (chapters 2-4) or adds (chapter 5) targets for movement. When considered together these four studies indicate that this type of syntactic change is not unidirectional as the functional structure of the clause can both contract or expand over time in certain constructions.

Chapter 2, by Moreno Mitrović, presents a study of word order change in coordinate constructions across a wide range of Indo-European languages. Early Indo-European languages had two available patterns of coordination at their disposal: one in which the coordinating particle was placed in first and another in which it was placed in the second position with respect to the second coordinand (so-called 'Wackernagel effect'). Diachronically, the two competing configurations reduce to the one with the initially placed coordinator that all contemporary Indo-European languages display. This is accounted for as the result of the loss of 'Wackernagel movement' (i.e. encliticization to the element realized in first position) and the development of a lexicalized J(unction)-morpheme, which represents the conflation of two previously separate functional heads. The analysis succeeds in explaining the bimorphemicity signature of initial conjunctions by deriving the morpheme count as a fusional exponents of two functional heads.

of course be highly helpful to understand particular instances of diachronic variation. Consider word order. Often, what *prima facie* appears to be free variation turns out to be the syntactic expression of semantic, pragmatic or discourse distinctions. But the contrasts can be very subtle, so that elucidating them may require access to native speakers' intuitive knowledge, which is generally not available to diachronic research. As for analyses based on the concept of competing grammars, there is an additional problem. Historical records will usually provide enough evidence for prestige grammars but not for non prestige ones (a classical example is the very limited set of sources for the study of Vulgar Latin, although Latin is extensively documented). A competing grammars hypothesis to deal with syntactic change will therefore be always faced with the problem of extremely lacunar evidence. Last but not least, current syntactic theory is not sufficiently constrained to clearly determine that a certain array of data cannot be derived by one single (internal) grammar. Therefore, we also do not have solid theoretical ground to evaluate between hypotheses based on the concept of competing grammars and other approaches to the nature of (apparent) optionality.

Chapter 3, by Adriana Cardoso, investigates syntactic change regarding the availability of split noun phrases in relative clauses in the diachrony of Portuguese. In earlier stages of the language an element that is thematically dependent on the head noun (either as a complement or as a modifier) may not appear adjacent to it but in a relative clause internal position. In Contemporary European Portuguese noun phrase discontinuity also arises in relative clauses, but only with the modifier/complement in the rightmost position. The word order with the modifier/complement at the left periphery of the relative clause is not allowed. The change is explained as being due to the loss of a left-peripheral position for contrastive focus within relative clauses (and possibly other types of subordinate clauses). Hence, the contraction of clause structure and the concomitant loss of movement are taken to constrain the possibilities of phrasal discontinuity found in earlier periods.

Chapter 4, by Julia Backsai-Atkari, examines word order variation and change in the high CP-domain of Hungarian embedded clauses containing the finite subordinating C head *hogy* ‘that’. It is argued that the complementizer *hogy* developed from an operator of the same morphophonological form, meaning ‘how’, and that its grammaticalization path develops in two steps. In addition to the change from an operator, located in a specifier, into a C head (specifier-to-head reanalysis), the fully grammaticalized complementizer *hogy* also changed its relative position on the CP-periphery, ultimately occupying the higher of two C head positions (upward reanalysis). Other complementizers that could co-occur with *hogy* in Old Hungarian eventually underwent similar reanalysis processes. Hence the possibility of accommodating two separate C heads in the left periphery was lost and variation in the relative position of complementizers was replaced by a fixed order.

Chapter 5, by Barbara Egedi, studies the determination and the distribution of possessive constructions from Old to Modern Hungarian. The grammaticalization of the definite article in well-defined contexts had structural consequences, the most salient of which is the emergence of a new strategy for demonstrative modification, which is called *determiner doubling* throughout the paper. Word order variation arises due to the determiners' interference with the possessor expressions at the left periphery of the noun phrase. The newly added demonstratives first adjoined to the determiner phrase in a somewhat looser fashion: their combination with the dative-marked possessors resulted in a word order specific only to the Middle Hungarian period (Demonstrative-Possessor). At a later stage, demonstratives got incorporated into the specifier of the DP, with the Possessor undergoing DP-internal topicalization, thus landing in a phrase-initial specifier position. This new structure displays the fixed word order Possessor-Demonstrative, as a result of the left-periphery of the DP being expanded to accommodate a Topic position.

1.3.2 Part II – Triggers for movement

The issue of what triggers specific instances of movement is an area of generative syntax where little progress has been achieved since the book *Triggers* was edited by Breitbarth and Van Riemsdijk (2005). The triggers of observed and well-established displacement operations are often unclear, which turns out to be especially unfortunate

for diachronic research. The three chapters in the book's part II are relevant to the topic of 'triggers', even if this is not the main focus of any of them. These chapters suggest that a better insight into the nature of triggers we help us understand why the nature of the items moving into a certain functional position may change over time (chapter 6 on Hungarian) or why, for example, a hypothetic topic feature shows diachronic instability when it is the trigger behind verb-second (chapter 7 on varieties of English) but not when it is the trigger of movement with (clear) semantic-pragmatic import (chapter 8 on Irish).

Chapter 6, by Veronika Hegedűs, examines the distribution of verbal particles in Old Hungarian, and argues that despite the word order change from SOV to SVO in Hungarian, the particle-verb order did not change because the previous pre-verbal argument position was reanalyzed as a pre-verbal predicative position where complex predicates are formed in overt syntax. Predicative constituents other than particles show significant word order variation in Old Hungarian, apparently due to optionality in predicate movement (while variation found with particle-verb orderings can be attributed to independent factors). It is proposed that after the basic word order was reanalyzed as VO, internal arguments and secondary predicates could appear post-verbally and it was the still obligatory movement of particles that triggered the generalization of predicate movement, making all predicates pre-verbal in neutral sentences at later stages. This process involves a period of word order variation as predicate movement gradually generalizes to all predicate types.

Chapter 7, by Judy Bernstein, examines verb-second (V2) cross-linguistically in closely related varieties of English, namely: Older Scots, displaying general V2; present-day Appalachian English and African American English, displaying residual V2. Discontinuous subjects (analyzed as instances of transitive expletives) and negative auxiliary inversion are shown to involve verb-movement to Focus in the two present-day varieties of English, unlike the general V2 found across Germanic, which the author assumes to involve TopicP. The area of overlap among V2 phenomena in the varieties of English studied is FocusP, which encodes the V2 associated with *wh*-elements in all three varieties (Older Scots distinguishes between Topic, for regular V2 and transitive expletives, and Focus, for *wh*-elements). It is suggested that the loss of general V2 might be understood as a change in triggers: "In some varieties of English, such as Appalachian English and African American English, Topic triggers may have given way to Focus triggers".

Chapter 8, by Cara DiGirolamo, deals with the interface between Syntax and Pragmatics by examining argument fronting in Old Irish non-poetic Glosses. The author argues, against previous literature, that Old Irish (a VSO language like Modern Irish) had a set of productive argument fronting positions with distinct information structural properties, which can be analyzed in terms of a Rizian articulated left- periphery. These fronting positions are shown to be the direct ancestors of fronting positions in Modern Irish. Relying on lexical and contextual indicators of discourse function, three Information Structure patterns are identified: aboutness topic, contrastive topic and focus. Aboutness and contrastive topic appear to be both left dislocation structures. Focus is most commonly expressed through clefts, although clefts in Old Irish can be

morphologically opaque. Modern Irish has all these structures besides a non-clefted focus structure (i.e. focus-fronting), which possibly originated in the Old Irish morphologically opaque clefts. Hence the author concludes that Irish maintained the pragmatics and syntax of its topic and focus structures, although simple focus fronting has become a more productive structure over time

1.3.3 Verb movement into the left-peripheries

The four chapters in the book's Part III are quite diverse in their goals but all handle instances of verb-second at some stage of the languages investigated (Portuguese, Egyptian, Dutch and Italian). None of the authors is concerned with the issue of triggers for movement and all assume invariable clause structure. Loss of verb movement into the left-peripheries is understood as a side effect of other changes (chapters 10, 11) or is just not the issue (chapters 9, 12). Interestingly, chapter 12, proposes that the loss of verb-second in Italian frees the past participle to move higher than the low (vP) left-periphery, where in Old Italian it satisfied the V2 property of the language at the v-phase level. Therefore, the effect on word order of the loss of verb-second can, in certain cases, be the reverse of what might be expect. Indirectly, the issue of triggers comes to mind again. If the past participle must move to the aspectual low IP field in Modern Italian, as the authors assume following Cinque (1999), was the current trigger for movement inexistent in Old Italian or could it be satisfied in some other way?

Chapter 9, by Charlotte Galves and Alba Gibrail, focuses on Classical Portuguese and its change to Modern European Portuguese, bringing to the debate new data concerning transitive sentences, with the aim to prove that Classical Portuguese was a verb-second language. The data are drawn from the *Tycho Brahe Parsed Corpus of Historical Portuguese* (texts written by Portuguese authors born 1502-1836). It is argued that both constituent order syntax and the information structure functions of word order in transitive sentences (SVO, VSO, VOS) support the characterization of Classical Portuguese as a verb-second language. Specifically, the authors argue that it is the fact that the verb occupies a high left-peripheral position in clause structure that makes a high position for post-verbal subjects available as well. This can explain why post-verbal subjects in Classical Portuguese are not obligatorily associated with an information focus interpretation, but may receive a familiar topic interpretation. The empirical evidence discussed in this chapter is intended to support the claim that there was a syntactic change from Classical to Modern European Portuguese, rather than a discursive reinterpretation of the same syntax.

Chapter 10, by Chris Reintges and Sonia Cyrino, discusses the syntactic consequences of analyticization from a macroparametric perspective, focusing on the restructuring of the verbal tense system in two genetically unrelated languages: Coptic Egyptian and Brazilian Portuguese. The global effects of synthetic-to-analytic drift are thus examined in two different diachronic scenarios: one in which the process has almost, though not entirely been completed (Coptic Egyptian), and another one in which the process is still under way (Brazilian Portuguese). Coptic has gone very far in abandoning its former synthetic features and thus exhibits a high degree of analyticity. In Brazilian Portuguese, the analyticization process is in an advanced state, with

synthetically inflected tenses exhibiting a decreasing productivity and gradually being replaced by the corresponding auxiliary verb constructions in the spoken language. The restrictions on verb movement observed diachronically in both languages are a side effect of ongoing analyticization, as the presence of auxiliaries or TAME particles in the IP space bars verb movement to these or higher positions. The shrinking of the available movement space leads to the exclusion of word orders previously derived by verb movement and may also diminish positional options of adverbial modifiers.

Chapter 11, by Gertjan Postma, is a theory-informed quantitative corpus study of infinitival fronting in a (peculiar) type of Infinitival V2 construction found in Old-Frisian and Middle-Dutch (and preserved in some coastal Dutch dialects until the 19th century). Based on the idea that infinitival fronting is the non-finite counterpart of the embedded subjunctive constructions (which the quantitative investigation confirms), the author proposes that both the loss of subjunctives and the rise of *laten*-support (the parallel of English *do*-support) are tied to changes in TP (viz. “Rich verbal forms {may not/may} cross TP”). Concretely, before the fifteenth century, in Dutch, subjunctives and infinitives found in the relevant constructions move out of TP reaching C or Mod. In the second half of the fifteenth century, infinitives are being reanalyzed as sitting in T. Hence, in infinitival fronting constructions, a separate verbal auxiliary form (*laten*) is created as a spellout of C. But, for unclear reasons, *laten*-support is a transient phenomenon (i.e. a ‘failed change’) that might have been the trigger of the reshuffle of auxiliaries in general as ordinary verbs.

Chapter 12, by Jacopo Garzonio and Cecilia Poletto, considers the distribution of VO and OV orders in Old Italian when the object is represented by a quantified constituent. The investigation takes into consideration cases of VO/OV variation with complex analytic verb forms where V is the past participle and O contains a universal or a negative quantifier. It is shown that while OV with non-quantified DPs and complex QPs is optional, universal bare quantifiers always precede the past participle. The authors propose that bare quantifiers undergo obligatory movement to a dedicated aspectual projection in the IP space, which is a function of their internal structure. Moreover, the authors argue that the modern stage of the language has preserved the movement of the quantifier, but this is not always visible because of a change in the movement properties of the past participle. In generalized verb-second Old Italian, the past participle remains trapped inside the *v*P left-periphery while in Modern Italian it moves outside the VP raising to a position inside the aspectual layer of projections, which crucially is higher than the one targeted by bare quantifiers.

1.3.4 Types of movement and constraints on it

The two chapters in the book’s Part IV bring us back to the issue of directionality in syntactic change. Both chapters deal with Latin and use roll-up movement (i.e. movement from complement to specifier) to derive certain orders that characterize Latin syntax. But whereas chapter 14 deals with the loss of roll-up movement (comparing Latin with Romance DPs), chapter 13 deals with the emergence of roll-up movement (comparing Vaux structures in Classical and Late Latin). So, again (as with the chapters in Part I), syntactic change with effects on word order is not unidirectional. Even a

typologically less common type of movement, like complement to specifier, can either be lost or emerge over time.

Chapter 13, by Lieven Danckaert, investigates the loss of the word order pattern ‘VOAux’ in Latin. This order was fully productive in Classical Latin, but in the Late Latin period (from 150 until 600 AD) the relevant pattern is only rarely attested, despite both of its ‘ingredients’, i.e. a head-initial VP (VO) and a head-final TP (VPAux) still being productive. The author proposes that in Classical Latin such clauses are derived by EPP-driven A-movement of the extended VP, targeting a position FP in the middle field, which is higher than TP and NegP. The decline of VOAux is then explained by postulating that VPAux-orders in Late Latin are reanalysed as being derived through roll-up movement, which is the result of an independent change in the grammar, namely the incorporation of the preverbal negator *non* ‘not’ into the T-head, through a process of procliticization. That is to say: in Classical Latin, negated clauses with an auxiliary and a non-finite lexical verb, which typically feature the order ‘VP-Neg-Aux’, provided the language learner with evidence that VPAux-clauses did not involve roll-up movement. Once the negator *non* incorporates into the verbal head in T, there is no longer any strong indications that a VPAux-clause does not involve roll-up movement. This opens the way for reanalysis. Exclusion of VOAux then follows from the *Final-Over-Final Constraint* (Biberauer, Holmberg and Roberts’s 2014), which applies to roll-up movement and predicts that head-final projections dominate only other head-final projections.

Chapter 14, by Adam Ledgeway, discusses under a macroparametric perspective discontinuous syntactic constituents produced by edge-fronting, which represent one distinctive feature of Latin regarding Romance. The author proposes that the head parameter can account for the observed contrast: whereas Romance is consistently head-initial, Latin fluctuates between different settings because it occupies an intermediate position in the gradual shift from head-finality to head-initiality. This difference in the head parameter is responsible for the observed variation in edge-fronting, since its setting determines the application of antilocality in constraining movement. Concretely, if head-finality is the output of a roll-up operation raising the complement to the specifier to the left of its head, this indicates that suspension of antilocality must be allowed in head-final languages like Latin. In head-initial Romance languages, by contrast, antilocal movement never arises. This investigation thus derives from the different settings of the head parameter a concomitant parametrization in the role of antilocality.

1.4 Closing up

This collective volume provides through in-depth language-internal or comparative studies new perspectives on the relation between word order change and *syntactic movement* (the theoretical concept that ties the book’s different parts together). Each chapter in the book raises a number of stirring questions and issues that go well beyond those chosen as illustration in this introduction and should feed further research in the fascinating topic of word order variation and change. We hope this book will demonstrate that the generative theory of grammar is particularly well equipped to deal

with the specific questions that a diachronic inquiry in this domain needs to address. The matters of ‘directionality of change’ and ‘triggers’ present themselves as salient topics for further investigation.

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