Second Position Effects in the Syntax of Germanic and Slavic Languages

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Contents

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Abbreviations

ACC	accusative
ACT	active
AOR	aorist
AUX	auxiliary
Bg	Bulgarian
ch.	chapter
CL	clitic
COND	conditional
CONJ	conjunction
Cz	Czech
DIM	diminutive
fn	footnote
FOC	focus particle
FUT	future auxiliary
GEN	genitive
IMP	imperfect tense
IMPRF	imperfective aspect
IMPV	imperative
INF	infinitive
INST	instrumental
Mac	Macedonian
NOM	nominative
OCS	Old Church Slavonic
OHG	Old High German
OP	Old Polish
OR	Old Russian
OS	Old Serbian
PART	*l*-participle
PASS	present passive participle
PAST	past tense
PERF	perfective aspect
PIE	Proto-Indo-European
PL	plural
Pl	Polish
POSS	possessive
PRES	present tense

PRF	perfective (aspect)
PRON	pronoun
PR.PART	present participle
PRT	particle
PTP	past participle
Q	the question/focus particle *li*
REFL	reflexive
Rus	Russian
S-C	Serbo-Croatian
Slo	Slovenian
SUBJ	subjunctive
VOC	vocative

Introduction

0.1. The empirical domain and research questions

This work investigates second position phenomena in the syntax of Germanic and Slavic languages. Within Germanic, it addresses the so-called Verb Second (V2) order, which involves placement of a finite verb after the clause-initial constituent, as illustrated in (1) for Dutch.

(1) a. Ik *heb* een huis met een tuintje gehuurd
I have a house with a garden$_{DIM}$ rented
"I rented a house with a little garden"
b. Gisteren *heb* ik een huis met een tuintje gehuurd
yesterday have I a house with a garden$_{DIM}$ rented
"Yesterday I rented a house with a little garden" (Dutch, Zwart 1993b: 297)

The sentence in (1a) exemplifies a complex tense structure, with the finite verb *heb* occurring after the clause-initial subject and the past participle *gehuurd* located at the end of the clause, whereas (1b) is a slightly modified version of (1a), with the finite verb preceded by the adverb *gisteren*, rather than the subject. The crucial requirement of V2-clauses is that the tensed verb appears as the second element in the clause, with few restrictions on the category of the initial constituent.

The V2 order is obligatory in main clauses in all Germanic languages with a notable exception of English. Otherwise, V2-clauses are not very common cross-linguistically. Outside Germanic, they are also found in Breton, Karitiana, a Tupi language spoken in Brazil, and Kashmiri, an Indo-Aryan language. Diachronically, they were attested in most Medieval Romance languages, including Old French (see Roberts 1993) and Old Spanish (see Fontana 1993).

Within Slavic, this book investigates the phenomenon of second position cliticization. Correspondingly to the V2 order, it consists in the obligatory placement of clitics after the clause-initial element virtually irrespective of its category. The workings of second position cliticization are illustrated in (2) for a sequence of auxiliary and pronominal clitics in Serbo-Croatian. Thus, the clitics can be

preceded by a number of different categories: the subject (see 2a), a *wh*-element (see 2b), a participle (see 2c), an adverb (see 2d), and they also occur in second position in embedded clauses, following the complementizer (see 2e). Placement of the clitics after more than one constituent results in ungrammaticality, as shown in (2f).

(2) a. Mi *smo* *mu* *je* predstavili juče
we are$_{AUX}$ him$_{DAT}$ her$_{ACC}$ introduce$_{PART.M.PL}$ yesterday
"We introduced her to him yesterday"
b. Zašto *smo* *mu* *je* predstavili juče?
why are$_{AUX}$ him$_{DAT}$ her$_{ACC}$ introduce$_{PART.M.PL}$ yesterday
"Why did we introduce her to him yesterday?"
c. Predstavili *smo* *mu* *je* juče
introduce$_{PART.M.PL}$ are$_{AUX}$ him$_{DAT}$ her$_{ACC}$ yesterday
"We introduced her to him yesterday"
d. Juče *smo* *mu* *je* predstavili
yesterday are$_{AUX}$ him$_{DAT}$ her$_{ACC}$ introduce$_{PART.M.PL}$
"Yesterday we introduced her to him"
e. Ona tvrdi da *smo* *mu* *je* mi predstavili juče
she claims that are$_{AUX}$ him$_{DAT}$ her$_{ACC}$ we introduce$_{PART.M.PL}$ yesterday
"She claims that we introduced her to him yesterday"
f. *Mi juče *smo* *mu* *je* predstavili
we yesterday are$_{AUX}$ him$_{DAT}$ her$_{ACC}$ introduce$_{PART.M.PL}$

(S-C, Bošković 2001: 8–9)

Second position clitics are prosodically deficient elements that require a host to their left. They do not form a natural class in morphosyntactic terms, as they include pronouns, auxiliary verbs, modal verbs, and sentential particles. The property that unifies them is their prosodic deficiency and dependency. Slavic languages are quite unique in exhibiting second position clitic placement among other European languages, as this pattern is not readily observed in contemporary Germanic or Romance languages. These languages have verb-adjacent clitics, which within Slavic are found only in Bulgarian and Macedonian, as illustrated in (3). Example (3a) shows that such clitics may not be separated from the verb by any intervening material, such as the adverb *včera*. Example (3b) indicates that verb-adjacent clitics in Bulgarian require prosodic support to their left, on a par with second position clitics in Serbo-Croatian. Yet, in contrast with second position clitics they can be located lower in the structure than after the initial constituent (see 3c).

(3) a. Vera *mi* *go* (*včera) dade
Vera me$_{DAT}$ it$_{ACC}$ yesterday gave
"Vera gave it to me yesterday"
b. **Mi go* dade Vera
c. Včera Vera *mi go* dade

(Bg, Franks 2010)

Verb Second and second position cliticization are among the first syntactic mechanisms to be discussed in the linguistic literature. The first detailed study of second position elements dates back to Wackernagel's (1892) investigation of word order in early Indo-European languages. Wackernagel observed that these languages displayed rather free word order, but a number of elements of unrelated categories, including auxiliaries, adverbs, discourse particles, and pronouns always appeared after the first word in the sentence. These elements were clitics; they were unaccented and occurred adjacent to each other forming clusters. Wackernagel postulated that this was the basic word order rule in early Indo-European languages, and that the clitics appeared after the first element because they needed prosodic support to their left.

Wackernagel also studied the distribution of the verb and noted that early Indo-European languages displayed an asymmetry with respect to verb placement that resembles the pattern found in contemporary continental Germanic languages. Namely, in matrix clauses the finite verb was unstressed and located after the clause-initial element providing this initial element was not longer than two syllables. By contrast, in subordinate clauses the verb was stressed and occupied the sentence-final position. On the basis of this observation, Wackernagel put forward a tentative hypothesis that second position cliticization in early Indo-European languages may have been the source of the V2 order in contemporary Germanic languages, and that the two phenomena may represent the same syntactic mechanism in different guises.

The potential link between V2 and second position cliticization has been recognized in some studies, including Anderson (1993), Franks (2000), and Bošković (2001). For instance, in his analysis of second position cliticization in Slavic, Franks (2000: 17–21) makes a conjecture that at some level of representation (such as LF) all languages display the V2 order, so any account of V2 should also be valid for second position clitic placement. Still, the two processes show important differences: unlike second position cliticization, the V2 order is not restricted by any prosodic requirements and holds only for finite verbs. Irrespective of these differences, Franks posits that the actual crosslinguistic variation is related to the position in which the clitics or the finite verb are spelled out. Yet, an important question that arises is what factor or parametric choice decides about overt V2 or second position clitic placement as well as why these phenomena happen to be rather uncommon crosslinguistically, in particular on Franks's assumption that the verb universally raises to second position at LF.

Both V2 and second position cliticization are unique syntactic mechanisms, as they exhibit properties that are not readily found in other syntactic operations. By and large, movement in syntax normally takes place in order to establish a relation with a specific category; the moved element lands in a designated structural position, and the process results in feature checking. For instance, *wh*-movement involves raising of a *wh*-element to Spec, CP, which results in checking the [+wh] fea-

ture on C^0. Movement of the finite verb to second position in Germanic and second position cliticization do not seem to necessarily adopt this procedure. Placement of these elements appears to be constrained only by the requirement that they are located after the clause-initial constituent, with seemingly few restrictions as to what this constituent might be. Thus, there may be no uniform, designated structural position targeted by the verb or the clitics. Correspondingly, it is not immediately clear what features could be checked by the clitics as a result of their movement to second position. Clitics include verbal, pronominal, and sentential categories, so they do not form a natural morphosyntactic class and do not share morphosyntactic features. What unifies them is prosodic deficiency.

The special properties of the V2 order and second position cliticization have given rise to considerable debate in linguistics over the last thirty years. Some of the issues that this debate has been concerned with are addressed in the subsequent chapters of this volume. For instance, an important issue in the study of second position cliticization has been related to the question of whether clitic placement is derived exclusively in syntax or perhaps, in view of the prosodic requirements displayed by clitics, takes place in the phonological grammar component. Although in general verb placement in V2 clauses in the Germanic languages seems to be independent of phonology, in Northern Norwegian dialects the position of the finite verb may give the impression of being PF-conditioned as well: in *wh*-questions the finite verb must be preceded by at least one foot (that is, two syllables) to occur in second position; otherwise, if the clause-initial element is shorter, the verb may occur in third position (Rice and Svenonius 1998; see Chapter 1, section 1.3.1, for a discussion). Given that diachronically the elements (including verbs) located in second position in main clauses in early Indo-European languages were unstressed and that the V2 requirement in Germanic is potentially a reflection of this original, prosody-conditioned pattern, it might be the case that V2 is a PF-related phenomenon, on a par with cliticization. On the other hand, it has also been observed that the clause-initial elements preceding the verb and the clitics must be mobile syntactic constituents. For instance, Progovac (1996) shows that clitics may only follow the first word in a clause if this word is a constituent that may undergo syntactic movement. This means that there may be words that cannot support clitics even though they are stressed and prosodically independent. For example, since prepositions can never be moved without their NP complements in Serbo-Croatian, they are not suitable clitic hosts (see 4b), even if these prepositions are prosodically independent and can be contrastively stressed, such as *prema* 'toward' (see 4a).

(4) a. Prema Miodragu *ga* *je* Marija bacila, a ne od njega
toward Miodrag$_{DAT}$ it$_{ACC}$ is$_{AUX}$ Marija throw$_{PART.F.SG}$ and not from he$_{GEN}$
"Marija threw it toward Miodrag, and not away from him"
b. *Prema *ga je* Miodragu Marija bacila, a ne od njega (S-C, Progovac 2005: 137)

The impossibility of clitic placement after the clause-initial element in (4) follows from an independent syntactic principle, possibly related to case assignment, which takes place under adjacency and as a result precludes presence of any overt material between the preposition and its NP complement (see Progovac 2005: 138–139). In view of the syntactic restriction exemplified in (4), the idea that second position cliticization or verb placement may be motivated solely by prosodic requirements is problematic, as PF-related phenomena are not expected to be influenced by syntactic constraints.

An issue that has received considerable attention in the study of the V2 order is the trigger of the operation. Movement of the verb to second position has been attributed to both syntactic and semantic requirements. For instance, an early assumption due to Den Besten (1977/1983) that I consider important for the ideas developed in this work is that V2 is contingent on tense specification. Namely, Den Besten proposed that in Germanic tense may be expressed on the finite verb or on the complementizer. In consequence, a tensed verb may raise to C^0, the complementizer position, and replace the complementizer via a structure-preserving substitution. This proposal also captures the unavailability of the V2 order in subordinate clauses introduced by an overt complementizer in most Germanic languages. On the semantic side, it has been suggested that V2 is an overt way of marking the illocutionary force of a clause (see, for example, Wechsler 1991; Brandner 2004; Truckenbrodt 2006) or, in other words, specifying its clause type: declarative, interrogative, negated, or some other type. Many of the proposals that postulate a link between V2 and clause typing have been motivated by the observations concerning the availability of V2 orders in subordinate clauses in the Scandinavian languages, which have been argued to be dependent on the degree of assertion expressed by the matrix verb selecting such subordinate clauses.

Furthermore, considerable research has been devoted to determining a parameter that decides about the presence or absence of the V2 order crosslinguistically. For instance, Koopman (1984) proposed that the availability of V2 is related to the way nominative case is assigned to the subject in a language. Thus, although by default nominative case is assigned in the spec-head configuration (at least in the 1980/90s terms), in V2 languages nominative case is assigned under government from C^0. Koopman postulated that in order to be able to assign case, C^0 must be lexicalized. This may happen in two ways: either by the base generation of a complementizer in subordinate clauses or by movement of the verb to C^0 in matrix clauses, which in turn enables the verb to govern the subject.

In spite of the multitude of proposals, the motivation for the V2 requirement is still a matter of debate. The issue is further complicated due to considerable internal variation with respect to the V2 effect across Germanic. Thus, as has been mentioned above, the V2 rule is obligatory in all Germanic languages except English, where it is observed only in operator contexts, such as *wh*-movement and negated focused structures of the type *Never before have I been so happy*. In continental Ger-

manic languages, where V2 is required in all matrix contexts, there are many cases of micro-variation, in particular with respect to the availability of V2 in embedded clauses. Thus, V2 is possible in subordinate clauses in Yiddish, Faroese, and Icelandic. Afrikaans and German allow embedded V2 when the complementizer is dropped, an option which is conspicuously not available in Dutch. As was mentioned above, Scandinavian languages permit optional V2 placement in subordinate clauses that are selected by verbs that express strong assertion, such as *say*, *claim*, and *report*. Interestingly, diachronically the V2 order was obligatory in all old Scandinavian languages, but this rule was lost in all of them except for Faroese and Icelandic. Conversely, Afrikaans allows V2 in subordinate clauses in increasingly more contexts, thus it seems to be developing in the opposite direction than the Scandinavian languages.

In view of the internal diversity with respect to the V2 pattern in Germanic, an immediate question that may arise concerns the source of the observed micro-variation. Another issue that requires an explanation is whether V2 is a uniform phenomenon or whether it potentially encompasses a number of different operations that result in the same linear position of the verb in the clause. For instance, the rather limited instances of the V2 order in English are often referred to as "residual V2," following Rizzi (1990b, 1996). Still, it is debatable whether these cases involve the same syntactic derivation as non-operator V2 clauses in continental Germanic languages, with elements such as the subject located in the position in front of the finite verb.

Given the observed variation and the many different proposals addressing the V2 effect in Germanic, it may be instructive to investigate properties of second position cliticization in Slavic. On the assumption that Wackernagel's original hypothesis about the common source of the two second position effects is correct, it might be useful to examine these two mechanisms in a parallel fashion in order to verify the hypotheses that have been put forward to account for second position placement of verbs and clitics. Although both orders represent one of the earliest syntactic patterns described in linguistics and exhibit similar syntactic properties, they have so far been investigated separately, especially in diachronic studies. Thus, the general aim of this volume is to study both types of second position effects and the main research questions related to this study are whether second position effects are syntactically uniform phenomena as well as whether there is a unique grammatical property that decides about the absence or presence of a respective second position effect in a language.

0.2. Theoretical assumptions concerning language change and variation and research methodology

Although Wackernagel's hypothesis is a generalization concerning word order, the study of which belongs to the domain of syntax, Wackernagel gave a pros-

odic explanation for the observed syntactic pattern, claiming that clitics in early Indo-European languages were located after the clause-initial element because they needed prosodic support to their left. This type of explanation seems typical of the approach to the study of language carried out by neogrammarians in the 19th century, which will be briefly overviewed in the current section. Given that many of the hypotheses developed in this work are motivated by diachronic observations concerning changes in verb and clitic placement in the Germanic and Slavic languages, this overview will also serve as a background for the presentation of the methodology and theoretical assumptions that are followed in diachronic studies in the contemporary generative framework, which in turn will be contrasted with the views on the nature of language and language change adopted in the 19th century. The historical outline presented below is largely based on Lightfoot (1999, ch.2) and Anderson and Lightfoot (2002, ch.8); a more detailed treatment of the 19th-century approach to the study of language is to be found in Morpurgo Davies (1998), whereas a thorough overview of current assumptions about diachronic syntax research is offered by Roberts (2007).

Wackernagel's reliance on a prosodic explanation for the observed syntactic distribution of second position elements reflects the 19th-century assumption about phonetics as the most observable property of language and hence the most important aspect of language study. Still, this assumption does not imply that prosodic requirements may directly interact with word order, as neogrammarians presumed the sound level to be completely autonomous from syntax and semantics. This is also a standard view that is upheld in the generative framework: phonology and syntax form separate modules of grammar, which operate independently. This hypothesis is based on the observation of the conspicuous absence of syntactic processes that could be shown to be contingent on the phonological make-up of the elements that take part in these processes. For instance, it is quite clear that there are no languages in which a syntactic operation such as scrambling applies only to a phonologically-determined class of constituents (for instance, words that end with an open syllable). In general, syntactic operations seem to be immune to the workings of phonology. See also Scheer (2011) for an in-depth discussion of modularity in phonology and syntax.

Many other assumptions, both about the nature of language and the reason for language change, are no longer maintained in contemporary linguistics. In the 19th century the study of language was heavily influenced by new philosophical trends and major discoveries in the field of physics and biology, such as Darwin's theory of evolution and Linné's botanical classification of species and genera. Linné's discovery led linguists such as August Schleicher to view languages as natural organisms and to postulate family relationships between different language groups (for instance, Germano-Slavic, which was further subdivided into Balto-Slavic and Germanic), which were expressed through genealogical tree models. Languages, on a par with species, were assumed to struggle for surviv-

al and compete with each other. In biology, the struggle for survival is reflected through mutations which yield organisms that are better prepared for continued existence in a given environment. In languages, this process was assumed to be reflected through changes that followed a fixed developmental direction. Thus, languages were argued to, for instance, progress from isolating to agglutinating and then to inflectional types (Schleicher 1848), which reflected a path from primitive simplicity, via a period of growth, to a period of decay; or conversely, languages were postulated to gradually become simpler (Rask 1818), although, as Lightfoot (1999: 37) points out, the notion of language simplicity was never defined in the 19th century in independent terms and is in fact circular. What is important is that all types of language change were taken to be directional, proceeding in a certain predestined order, and no reversal of the change was supposed to be possible. This way of thinking can still be observed in some contemporary hypotheses concerning language change outside the generative framework. For instance, as is discussed in more detail below and in Chapter 4, section 4.6.1, some linguists still postulate that grammaticalization, which involves the reanalysis of a lexical element into a functional one, is a unidirectional process and a change in the opposite direction is impossible, in spite of empirical facts arguing against this hypothesis, such as the reanalysis of clitics into weak pronouns in Old Polish, Old Russian, Macedonian, and Slovenian, which are discussed in Chapter 4, section 4.6.

Furthermore, the 19th century was a period of an increased interest in history, which was fueled by the ideas of Romanticism, and which also resulted in research on cultural and ethnic origins of different processes. In correspondence, linguistics in the 19th century was a historical science, which focused on the study of similarities between cognate words. These similarities were assumed to be a result of the same historical origin, and they were used to determine historical relations between languages as well as to establish diachronic sound changes. For instance, the fact that the words for "father" are similar in languages such as French (*père*), Spanish (*padre*), Italian (*padre*), Sardinian (*patre*), and Portuguese (*pai*) were taken to indicate that these languages are historically related and belong to the same "language families," whereas the phonetic differences between them were supposed to reveal general, potentially universal sound changes that occur in language history. The observed diachronic changes were described in terms of language laws. The term "language law" is actually a misnomer because these were rather generalizations about different instances of language change, such as Grimm's Law, which described a shift in the consonant system in Germanic. Crucially, these laws were assumed to apply crosslinguistically, though different languages could exhibit different stages of the application of a law. It was hoped that by observing historical modifications, it would be possible to achieve a Newtonian-style analysis of language, which would have the power to predict language change. Therefore, these laws were supposed to be deterministic, on a par with

the physical laws of force and motion, which predict all future states in a linear fashion and were declared to be exceptionless and regular.

In the spirit of the era, some linguists explained observed diachronic changes by appealing to the laws of physics. For instance, in 1824 Bopp introduced the term *Lautgesetz* 'sound law' (see Lightfoot 2006: 30) and postulated a mechanical law to explain ablaut alternations, such as *take–took* and *foot–feet* in English. This sound law referred to the law of gravity and implied that syllables may have different weight, which in turn leads to the ablaut change. Other linguists put forward "psychological" accounts of the observed changes, at times appealing to alleged national characteristics of the speakers of the languages affected by the respective diachronic changes. Thus, Grimm (1848: 417–437, quoted in Lightfoot 1999: 38) attributed the application of his law of consonant shift to "the German's mighty progress and struggle for freedom … the invincible German race was becoming ever more vividly aware of the unstoppability of its advance into all parts of Europe … How could such a forceful mobilization of the race have failed to stir up its language at the same time, jolting it out of its traditional rut and exalting it? Does there not lie a certain courage and pride in the strengthening of voiced stop into voiceless stop and voiceless stop into fricative?"

The idea that languages are historically related was a novelty in the 19th century and through their observations the linguists of that time made valuable and influential contributions that have had an impact on much subsequent work in language studies. However, Lightfoot (1999: 22–23, 26–27) points out a number of limitations of the 19th-century approach. First, the exclusive reliance on cognate words produced rather limited generalizations about the nature of language. Furthermore, some of the generalizations were highly speculative because neighboring languages may influence each other even if they are not related historically. Such an influence may give rise to innovations in vocabulary or grammar that have nothing to do with the common history of these languages. This is what happens in sprachbund situations, such as the Balkan sprachbund, whose languages share many areal features in syntax, vocabulary, and phonology even though they are genetically not related. Moreover, even in the case of languages that belong to the same family there is a possibility that these languages do not share a common ancestor. For instance, French and Italian both belong to the family of Romance languages, but they derive from different variants of Latin.

Second, a major problem of the 19th-century approach to language study was its limited scope of research. It focused on the study of cognate words and their potential pronunciations and meanings, but offered no syntax or acquisition research. According to Lightfoot (1999: 37), this limitation is due to the fact that the neogrammarians dealt only with the products of language and did not investigate underlying abstract processes and systems. Language was perceived as a collection of words governed by universal laws and variable habits. As a result, it was not possible to carry out research on syntax, as syntax cannot be studied by investi-

gating sets of sentences that are transmitted from one generation to another, on a par with cognate words. Correspondingly, since language acquisition does not consist in learning words or sets of sentences, the 19th-century linguists did not have much to offer and explain this process.

Some of the assumptions that were made in the 19th century persisted in contemporary approaches to linguistic research. One of them is the idea of language "drift" (the term originally due to Sapir 1921, ch.7), which is the assumption that languages develop in a certain predestined direction and that reversals of this process are impossible. Anderson and Lightfoot (2002: 158–159) give Greenberg's (1963) typological division between "transitional" and "pure" language types with respect to word order as an example of such an approach. Pure language types are those in which head directionality is maintained in all phrases. Thus, a pure SVO language also exhibits Aux-V, noun-adjective, and preposition-NP orders, while a pure SOV language displays a mirror image of these orders, all ranked in a certain hierarchy. If a language changes from one pure type to another, the change is stipulated to occur in a strict hierarchy: first affecting the verb-object order, followed by the auxiliary-verb order, and so on. Anderson and Lightfoot (2002: 159) point out a conceptual problem with this idea for language acquisition. Suppose a child were to acquire a language that is exactly in the middle of a change between the SVO and SOV types. It is not immediately clear how the child is to determine whether this is an SVO language changing into SOV or in the opposite direction unless the child is equipped with a memory of past generations.

Furthermore, there is considerable empirical evidence suggesting that languages do not change in a uniform direction. Above I referred to grammaticalization, which involves the reinterpretation of a lexical item as a grammatical one and can be exemplified by the reanalysis of the noun *pas* 'step' as a negation marker in French. Grammaticalization is often assumed to be unidirectional, though a considerable number of cases of the opposite change, referred to as degrammaticalization, have been reported in the literature (see Chapter 4, section 4.6.1), such as the development of Saxon genitive in English. Namely, in Old English genitive case was marked with the inflectional suffix *-es*, yet in Middle English, the suffix underwent temporary degrammaticalization into the possessive pronoun *his*, which was found in structures such as *Christ his sake*. Later on the possessive form was weakened into the current clitic form *-'s*. Correspondingly, many diachronic studies describe processes of language change that were not completed and became reverted. For instance, Breitbarth (2005) observes a curious case of the ellipsis of finite auxiliaries in Early Modern German, which spread rapidly after its emergence around 1450, but disappeared in older Modern German, after 1700. Likewise, Pancheva (2005) notes that in Old Bulgarian verb-adjacent clitics temporarily switched into second position clitics, only to become verb-adjacent again in subsequent stages of history (see Chapter 4, section 4.5.3 for details).

Within the generative framework, in the theory of Principles and Parameters, which is adopted in this work, it is assumed that the reasons for language change are very local and unrelated to alleged principles of history or natural sciences. The main object of study is the grammar of the native speaker, whereas the key theoretical question is how grammar is attained during the process of language acquisition. A major observation that influences the way research is carried out in this framework is the so-called "logical problem of language acquisition": language learners are able to develop a complete grammar of their native language to the utmost level of perfection on the basis of relatively little evidence and in a very short period of time in spite of the fact that it involves a highly complex cognitive system, more complex than other systems that are learned later, such as for example arithmetic counting. This paradox is explained through the assumption of the innate human language capacity referred to as Universal Grammar or Language Acquisition Device. Universal Grammar is hypothesized to be part of the genetic endowment of human species and is postulated to consist of a structured system of abstract principles and parameters that condition the way sentences are constructed in a given language. The principles are assumed to be crosslinguistically invariant, whereas the parameters have binary values, such as [± null subject] or [±article]. The values of the parameters may be different in each language; they are set by the language learner in the process of language acquisition on the basis of the exposure to linguistic data. The hypothesis of the existence of a pre-wired language system with set principles and variable parameters is assumed to explain the speed and easiness of language acquisition as well as language variation.

The theoretical underpinnings of the theory of Principles and Parameters have repercussions for the assumptions that are made about the process of language change in this framework. Namely, as observed by Lightfoot (1979) in his seminal work *Principles of Diachronic Syntax*, it is hypothesized that Universal Grammar allows each speaker to construct their own grammar anew in the process of language acquisition solely on the basis of the input coming from their environment. Speakers are entirely oblivious of the history of the language they are exposed to, so they cannot possibly be aware of any potential predestined paths of language change, such as a drift toward simplicity. Moreover, they are in principle unaware of the grammars of their parents or other speakers because they do not have access to them, irrespective of whether the other speakers belong to the same or different generations. This means that they do not recognize any changes that are in progress, covering many generations of speakers. Still, a question that arises is how language change occurs in a scenario in which language users only have access to the synchronic stage of their grammars.

Lightfoot (1979, 1991) posits that language change is essentially synchronic and that it occurs when language learners construct their own individual grammar on the basis of the data they are exposed to. Thus, changes in the grammar are linked to the process of language acquisition. As a result of independent morphologic-

al or phonological developments, a structure or a category may become opaque, and in consequence ambiguous to the language learner. Such a situation may give rise to an instance of language change, which occurs when a learner interprets a linguistic phenomenon in a different way than other speakers during language acquisition and as a result sets a parameter differently than other language users.

An example of ambiguous language input in Old Slavic that is argued to have triggered language change is discussed in Chapter 4, section 4.6.2.3. It involves structures with prepositions that are complemented by clitics. In contemporary Slavic languages only strong pronouns may act as complements of prepositions. However, in Old Polish texts we find data featuring clitic PP complements, as illustrated in (5).

(5) Sam, prawi, *przez* *mię* przysiągł jeśm
he say$_{AOR.3SG}$ without me swear$_{PART.M.SG}$ am
"He said that he has sworn without me…"
(Old Polish, Sermon III, *On St. Michael's Day*)

Moreover, Jung and Migdalski (2015) provide a similar example from Old Russian (see 6), in which the accusative clitic *tę* is the complement for the preposition *za*.

(6) za *tę* golovy svoi sъkladyvaèmь
for you$_{ACC.SG}$ head$_{ACC.PL}$ own$_{ACC.PL}$ lay down$_{1PL}$
"We bow down to you" (Old Russian, *Hypatian Chronicle* 1177; Zaliznjak 2008: 36)

Examples of this type can be interpreted by the language learner in two ways. On the one hand, prepositions in Old Slavic could be proclitics and as such act as hosts for pronominal enclitics, producing a prosodically independent unit of a preposition and an enclitic. On the other hand, since prepositions cannot be followed by clitics, the pronominal complement of the preposition could be analyzed as a tonic pronoun even though it has the morphological form of a clitic. Jung and Migdalski (2015) argue (see also Chapter 4, section 4.6.2.3) that this ambiguity led to the reanalysis of pronominal clitics as weak pronouns in Old Russian and Old Polish.

Within Germanic, a well-known study that attributes language change to data ambiguity concerns the grammaticalization of modal verbs in English due to Lightfoot (1979). In Modern English, modal verbs have a different syntactic distribution than lexical verbs such as *understand*, as illustrated in (7) on the basis of examples from Anderson and Lightfoot (2002: 163).

(7) a_1. Can he understand chapter 4?
a_2. *Understands he chapter 4?
b_1. He cannot understand chapter 4
b_2. *He understands not chapter 4
c_1. *He has could understand chapter 4
c_2. He has understood chapter 4
d_1. *Canning understand chapter 4…
d_2. Understanding chapter 4…

e_1. *He wanted to can understand
e_2. He wanted to try to understand
f_1.*He will can understand
f_2. He will try to understand
g_1. *He can music
g_2. He understands music

Thus, unlike lexical verbs, modal verbs raise to C^0 in questions (see $7a_1$) and may appear to the left of negation (see $7b_1$). Furthermore, in contrast to lexical verbs, modal verbs do not occur in the present perfect (see $7c_1$) or the present participle form (see $7d_1$). Finally, modal verbs cannot be infinitival complements to other verbs (see $7e_1$), including other modal verbs (see $7f_1$), and they also cannot take nominal complements (see $7g_1$).

Importantly, modal verbs were indistinct from lexical verbs in Old English, so the starred examples in (7) were all well-formed then. Moreover, Anderson and Lightfoot (2002: 164) point out that in French the two classes of verbs still behave alike and show the same distribution, which suggests that the change that occurred in English was not "predestined," was not subject to a universal language law and did not have to take place. Strikingly, all the forms involving modal verbs in (7) were lost at the same time, and in fact it is possible to determine the date of their decline, as the last author who used them was Sir Thomas More in the early 16th century. The fact that the change was so uniform indicates, according to Anderson and Lightfoot, that it consisted in a modification of the abstract system of language and was not related to social changes, influence of other speakers, or fashion.

Above I mentioned that language change may occur due to ambiguity or opacity of primary linguistic data available to the language learner. In his original analysis of the process, Lightfoot (1979) (see also Anderson and Lightfoot 2002: 166) points to two potential sources of ambiguity that in his view led to the differentiation of modal verbs as a separate class in English.

First, the modal verbs belonged to the preterite-present class of verbs, which also included verbs such as *unnan* 'grant' and *witan* 'know,' which were later lost or switched to another class of verbs, leaving modal verbs as the only members of this class. A characteristic morphological property of the verbs belonging to this class was that they were not inflected for the third person singular, though the other forms carried person/number morphology. With the impoverishment of verbal morphology in English, the only inflectional morpheme left was the *-s* ending in the third person singular. Since the preterite-present verbs never carried any third person singular inflection, they started to stand out as a special, morphologically isolated class of verbs.

The second special property of the preterite-present class of verbs was that in many cases their past and subjunctive variants were phonetically identical. When the subjunctive was lost, the past tense variants could in some cases express both past time and subjunctive meanings. This type of ambiguity is in fact preserved in modal verbs in Modern English. For instance, the verbs *can* and *could* may some-

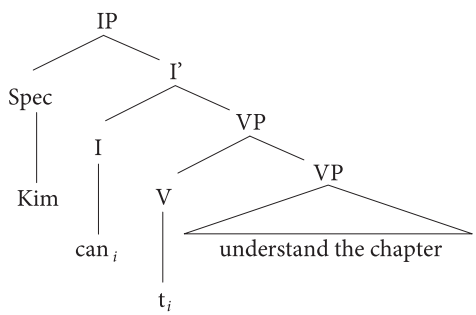
times express a temporal present-versus-past contrast (see 8a), but this contrast is not always available, as shown in (8b). Correspondingly, even though *might* was interpreted as the past form of *may* in earlier stages of English (see 9c), this distinction became opaque and is no longer preserved in Modern English, and the two forms differ in the amount of certainty about an action or a state they express, as shown in (9a–b), from Anderson and Lightfoot (2002: 167).

(8) a. Kim could understand the book until she reached page 56
b. Kim could be here tomorrow

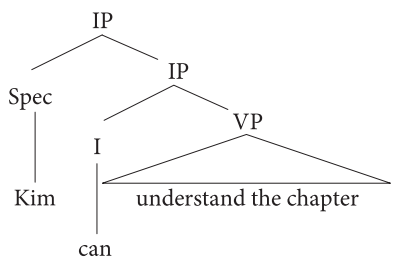
(9) a *Kim might read the book yesterday
b. Kim may/might read the book tomorrow
c. These two respectable writers might not intend the mischief they were doing
(1762 Bp Richard Hurd, *Letters on Chivalry and Romance*, 85)

As a result of these ambiguities, modal verbs were interpreted as representatives of a distinct, special class of verbs. Importantly, the fact that all the examples involving modal verbs in (7) became ungrammatical at the same time indicates that the change was due to a switch in a single property and a result of a categorial innovation. Anderson and Lightfoot (2002: 164) suggest (following Lightfoot's earlier analyses) that in syntactic terms the change consisted in the reinterpretation of the modal verbs as exclusively tensed verbs merged in I^0 (or T^0), with predictable consequences for the syntactic environments in which these verbs could subsequently occur. The phrase structures illustrating the change are given in (10) and (11).

(10) Middle English



(11) Present-day English



Since modal verbs in present-day English are I^0 elements, located above negation (NegP) (see 7b), they are predicted not to be able to precede a perfective or present participle (generated in Spec, VP), as in (7c) and (7d). Moreover, they are expected to be in complementary distribution with the infinitival marker *to*, which is also located in I^0 (see 7e); there may be no more than one modal verb in a clause (see 7f), and they may not be complemented by NPs (see 7g). All these restrictions found in Modern English are accounted for by the postulate of a single syntactic change. This postulate also explains why these modifications all happened at the same time, exemplifying a so-called catastrophic change, with many phenomena being affected simultaneously. A related case of catastrophic change is discussed in Chapter 4 of this work, in which it is argued that the switch from verb-adjacent to second position cliticization in the Slavic languages gave rise to other syntactic changes that do not seem immediately related to the position occupied by the clitics, such as the applicability of the Person Case Constraint, the possibility of clitic climbing and clitic splits, and their attraction by negation.

The grammaticalization of modal verbs described above was abrupt and discontinuous. Yet, some cases of language change appear to be gradual. As an example of such a change, Fischer, van Kemenade, Koopman, and van der Wurff (2004: 17) examine inherent case marking by adjectives in Old English. In Old English adjectives could assign inherent case (dative or genitive) to their complements, but this option was lost in Middle English. Fischer et al. (2004: 17) note that a potential way of analyzing this change might be to assume that the availability of inherent case assignment is a parameter and that the value of this parameter was reset in English in the second half of the 13th century. Surprisingly though, instances of adjectives followed by a case-marked nominal object are still found in the later period, together with the adjective-PP orders, which represent the innovated pattern after the parameter resetting, as shown in (12).

(12) a. and tok hemt out that were him lieve
and took them out that were him_{DAT} dear
"and took out those that were dear to him" (Gower *Confessio Amantis* 2.3395)

b. This man to folkes alle was so leef
this man to people alle was so dear
"This man was so dear to all people" (Hoccleve *Jonathas* 170, Fischer et al. 2004: 17)

On the assumption that language change is abrupt, the variation exemplified in (12) is unexpected and in fact seems to pose a problem for the theory of parameters, which assumes that once a parameter is set by the learner during the process of language acquisition, it remains the same and cannot be reset.

Likewise, in Slavic a similar case of variation between newer and older structures is exemplified by auxiliary clitics in Polish, which are being reanalyzed as affixes (see Mikoś and Moravcsik 1986; Borsley and Rivero 1994; Franks and Bański 1999; Witkoś 1998; Migdalski 2006, ch.5). The reanalysis has been completed in the singular forms, but in the plural paradigm there is still variation. This is indi-

cated by prosodic tests related to stress assignment, which is very regular in Polish and falls on the penultimate syllable. As shown in the paradigm of the *l*-participle *czytał* 'read' in (13), the rule of penultimate stress assignment is observed only in the singular variants (the stressed syllable is capitalized and the auxiliaries are given in *italics*). In the plural paradigm, the part+aux sequences are stressed on the antepenultimate syllable, which indicates that the plural forms of the auxiliaries are still analyzed as clitics.

(13) Stress assignment in the paradigm of the *l*-participle *czytał* 'read' in Polish

	SG	PL
1	czyTAŁ-*em*	czyTAli-*śmy*
2	czyTAŁ-*eś*	czyTAli-*ście*
3	CZYtał$_{M}$	czyTAli$_{VIR}$
	czyTAła$_{F}$	czyTAły$_{NON\text{-}VIR}$
	czyTAło$_{N}$	

However, an increasing number of speakers place stress on the penultimate syllable of the 1st and 2nd person plural forms. This is an innovation that does not seem to be accepted by all prescriptive linguists.

(14) Stress assignment in the paradigm of the *l*-participle *czytał* 'read' — the innovated pattern

	SG	PL
1	czyTAŁ-*em*	czytaLI-*śmy*
2	czyTAŁ-*eś*	czytaLI-*ście*
3	CZYtał$_{M}$	czyTAli$_{VIR}$
	czyTAła$_{F}$	czyTAły$_{NON\text{-}VIR}$
	czyTAło$_{N}$	

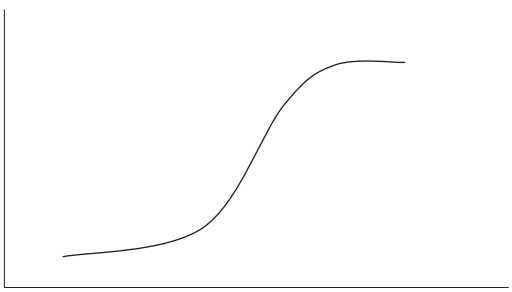
The reinterpretation of the auxiliary clitics as affixes has been taking place for many centuries (see Rittel 1975 and Kowalska 1976: 63 for a detailed corpus analysis) and has not been yet completed. The two interpretations of the auxiliary forms still exist in the grammar.

A potential way of analyzing cases of synchronic variation between older and newer forms in a language is to assume the hypothesis of grammar competition, postulated by Kroch (1989) and Pintzuk (1991). According to this hypothesis, speakers may acquire more than one grammar of their native language. One grammar represents the older interpretation of a particular language phenomenon, while the other grammar features the innovated analysis. For example, the older grammar may contain structures with inherent case assignment in Middle English

and the clitic forms of the auxiliaries in Polish, whereas the new grammar may feature adjective-PP orders in Middle English and plural forms of auxiliary affixes in Polish. These two grammars are assumed to be in competition. There may be a period of variation between these grammars, though eventually one of them will prevail: by default it will be the newer grammar, though it is equally possible that the old grammar will be retained if the process of language change is reversed.

The period of variation between two grammars may give the impression that language change is not abrupt. In fact, it has been observed in the literature (see Osgood and Sebeok 1954: 155; Kroch 1989: 203) that processes of language change normally follow an S-shaped curve, in which the frequency of occurrence of a new structure versus an old one is plotted on the y-axis against the course of time on the x-axis, as shown in the diagram in (15).

(15)



The process begins slowly, then gathers momentum with a period of significant rise, and then it slows down again when the change is soon to be completed. Kroch (1989) models S-curved grammar changes with a logistic function and concludes that language change takes place at the same speed in all linguistic contexts in which it is observed. This observation is referred to as the Constant Rate Hypothesis. It states that "when one grammatical option replaces another with which it is in competition across a set of linguistic contexts, the rate of replacement, properly measured, is the same in all of them" (Kroch 1989: 200). This is because language change applies at the abstract level of grammatical parameters; hence it spreads in all linguistic contexts at the same rate.

As was pointed out above in the discussion of the grammaticalization of modal verbs in English, language change often affects a cluster of different phenomena. An advantage of Kroch's hypothesis is that it permits tracking clusters of such changes on the assumption that all changes within such a cluster will proceed at the same rate. Thus, if a series of grammar changes proceeds according to the same quantitative curve, it can be hypothesized that these changes are interrelated, as was first shown by Kroch (1989) for the spread of *do*-support in English.

0.3. Organization of the book

This work investigates two linguistic phenomena in two different language groups in synchronic and diachronic perspectives. The organization of this book reflects this dual division.

Chapter 1 provides an account of V2 placement in contemporary Germanic languages. It overviews different analyses of V2 clauses that have been postulated over the last few decades and examines main research questions posed in these studies. Specifically, it investigates the issue of whether the V2 order is an operation that belongs to narrow syntax or whether it is a prosody-driven process, as was originally assumed by Wackernagel (1892) and as has also been argued for Northern Norwegian and German by Boeckx (1998), Rice and Svenonius (1998), and Bošković (2001). Furthermore, it looks into two important theoretical challenges in the studies on V2 syntax, related to the trigger of the operation and the syntactic position occupied by the verb. Concerning the first issue, it examines the possibility of V2 clauses being an overt way of encoding the illocutionary force of a clause, as has been argued for on the basis of the availability of embedded V2 in semantically-defined contexts in the Scandinavian languages. Regarding the second issue, it refers to the debate between Den Besten (1977/1983), Travis (1984), Zwart (1993a, 1997), and Postma (2013), which is concerned with the question of whether the verb in V2 structures uniformly targets the head of CP or whether it may also occupy a lower position in some constructions and in some languages. This debate is set against a more general theoretical question, which is whether V2 clauses represent a uniform syntactic operation or whether V2 is an umbrella term that is used to describe different syntactic mechanisms that lead to verb placement in second position.

Chapter 2 examines the diachronic development of V2 structures in Old Germanic languages, including Gothic, Old English, Old High German, and Old Norse. These languages represent different directions in the diachronic change: whereas the ratio of V2 clauses is considerably lower in contemporary English than in Old English, all the other languages that emerged from Old Germanic developed uniform V2 grammars, albeit at different stages in their history. The investigation of this variation within the single language group may help to determine the trigger for the emergence or the demise of a V2 system. Moreover, it provides a comparative background for the investigation of the emergence of second position cliticization, which occurred in some Slavic languages and is examined in Chapter 4.

Chapter 3 investigates second position cliticization in Slavic. It overviews prosodic and syntactic analyses of the process and points out problems with some of the previous accounts, including the scattered deletion approach, developed in Franks (1998, 2010, 2011). Moreover, it introduces a new division of second pos-

ition clitics into generalized and operator cliticization, which corresponds to the distinction of V2 patterns in Germanic. Whereas generalized cliticization is observed only in a subset of the Slavic languages and includes auxiliary and pronominal clitics, operator cliticization is attested across Slavic languages irrespective of whether they have other second position clitics or not; it comprises a semantically-defined subclass of clitics that encode illocutionary force, which may display special restrictions related to the categorial and syntactic status of their hosts.

Chapter 4 develops an analysis whose aim is to determine a parametric factor that determines the availability of second position cliticization in a language. On the basis of synchronic data from Slavic it shows that the two types of cliticization patterns, second position and verb-adjacent cliticization not only differ with respect to the position occupied by the clitics, but crucially they exhibit different syntactic processes: whereas second position clitics do not target a uniform head projection but rather each of them raises to a separate specifier in the functional projections above VP (see Stjepanović 1998, 1999), verb-adjacent clitics form clusters and all adjoin to a designated head such as T^0. A major part of the analysis developed in Chapter 4 is based on the study of diachronic changes in the cliticization patterns in Slavic, which uses corpora of old Slavic languages, including the ones complied by Pancheva, Łazorczyk, Krivokapić, and Minkova (2007a), Pancheva, Kagle, and Łazorczyk (2007b), and Radanović-Kocić (1988). The principal observation is that while in Old Church Slavonic pronominal clitic were verb-adjacent, they shifted to second position in some of the languages that subsequently evolved, yet the shift was contingent on and contemporaneous with the loss of tense morphology. This loss is interpreted in syntactic terms as the loss of the TP layer, as a result of which pronominal clitics could not adjoin to a suitable head projection and ended up targeting second position in the clause. Furthermore, this chapter also shows that in some languages (such as Old Polish, Old Russian, and in some contexts also contemporary Czech, Macedonian, and Slovenian) the loss of tense morphology could also lead to the reinterpretation of pronominal clitics as weak pronouns, which is analyzed as an instance of degrammaticalization. Thus, on the basis of a detailed diachronic study of tense systems and cliticization patterns, Chapter 4 presents a principled account of the variation in the distribution of the clitics in Slavic and relates it to the availability of tense morphology in a language. In this way it also provides an additional link between second position cliticization in Slavic and the V2 order in Germanic, showing that both phenomena display and can be defined in terms of tense dependency.

Chapter 1

Properties of the V2 order

1.1. Introduction

This chapter addresses verb-second (V2) structures in the Germanic languages. As has been mentioned in the Introduction, on a par with second position cliticization, the V2 order is a syntactic curiosity: it requires placement of an element belonging to a certain natural class (in this case, a finite verb) after the clause-initial constituent, with few restrictions as to the category of this constituent. The V2 order is required in all main clauses; it does not seem to be contingent on any special morphology on the verb or on the element preceding the verb, and it does not always trigger obvious semantic effects. As a result of these properties, V2 structures have provoked a number of theoretical questions related to the exact syntactic mechanism and the underlying motivation for this operation. These questions are addressed in this chapter, and the potential answers that have been reached will be of use for the investigation of another second position phenomenon, second position cliticization, in Chapters 3 and 4.

This chapter has the following organization. Section 1.2 provides theoretical background concerning the distribution of V2 clauses across Germanic and outlines general approaches to the V2 syntax. Section 1.3 considers the possibility of V2 being a prosody-driven process and discusses language data that have been provided in support of this claim, which mainly comes from Northern Norwegian dialects. Section 1.4 scrutinizes the syntactic analyses of V2 that have been put forward in the literature, in particular in relation to establishing the trigger for this movement operation. On the basis of empirical findings coming from the Scandinavian languages, especially those concerned with the availability of V2 structures in some semantically defined types of subordinate clauses, section 1.4.2 looks into the possibility of V2 being a syntactic way of encoding the illocutionary force of a clause. Moreover, this section examines another syntactic property of V2, which is Tense dependency. This dependency is important in view of

the postulates put forward about the availability of second position cliticization in Chapter 4. Finally, sections 1.4.3 and 1.4.4 respectively examine the syntactic position of the verb and the elements preceding the verb in V2 clauses. The main research question addressed in these sections is whether V2 is a uniform syntactic phenomenon, with the finite verb and the elements in front of it targeting designated syntactic positions or whether (as argued for in Migdalski 2010 and 2012 on the basis of V2 and second position cliticization data) it is an umbrella term that is used to refer to a number of different instances of syntactic movement or base-generation, whose common property is the fact that the verb occurs after the first constituent in the clause.

1.2. General properties of V2 orders

The Verb Second (V2) order refers to a structure that involves obligatory placement of the finite verb in second position, following the clause-initial syntactic constituent, with seemingly few restrictions as to what this initial constituent might be. The construction is found in continental Germanic (thus, in all the Germanic languages except for English) and is exemplified in (1) for Dutch.

(1) Gisteren las ik dit boek
yesterday read I this book
"Yesterday I read this book" (Dutch)

On a descriptive level, the clause-initial element that precedes the finite verb in main clauses in Germanic is called "prefield." In structural terms, the prefield constituent is hosted by the specifier of the head occupied by the finite verb (thus, depending on an analysis and a particular structure, Spec, TP; Spec, CP, or the specifier of some other projection in the left periphery of the clause; see below for details). If there are more verbs in a clause (for instance, in a compound tense structure that contains an auxiliary verb), only the finite verb is located in second position, while all other verbal forms occupy the end of a clause, making up the verbal complex. The part of a sentence between the finite verb (or a complementizer in a subordinate clause) and the verbal forms at the end of a sentence is termed the "middle field." The descriptive division of a clause in continental Germanic is sketched in (2), with (2a) illustrating a main clause and (2b) a subordinate clause introduced by a complementizer.

(2) a. den Hans wird Maria morgen treffen
the Hans$_{ACC}$ will Mary tomorrow meet
prefield **Vfin** **middle field** **verbal complex**
"Tomorrow Mary will meet Hans"

b. dass Maria morgen den Hans treffen wird
C middle field verbal complex
"that tomorrow Mary will meet Hans" (German, Frey 2004: 208)

The prefield can be filled by a remarkably wide range of syntactic constituents. Most often it is filled by the subject; this is an option that gives rise to the unmarked reading of a sentence (that is, the interpretation with "wide" or sentence focus) that forms the most natural answer to the question "What happened" (Holmberg 2015: 347). It is illustrated for Dutch in (3). See section 1.4.4 for a detailed discussion of potential interpretations of the prefield material.

(3) Ik heb een huis met een tuintje gehuurd
I have a house with a garden$_{DIM}$ rented
"I rented a house with a little garden" (Dutch, Zwart 1993b: 297)

However, a number of other elements may also precede the finite verb in main clauses, as exemplified for Dutch and Afrikaans below. Exact types of these elements are subject to crosslinguistic restrictions, but they include objects and adverbs (see 4), which are often interpreted as topics in this position, as well as *wh*-questions (see 5).

(4) a. [Een huis met een tuintje] *heb* ik gehuurd
a house with a garden$_{DIM}$ have I rented
"A house with a small garden, I have rented it"
b. Gisteren *heb* ik een huis met een tuintje gehuurd
yesterday have I a house with a garden$_{DIM}$ rented
"Yesterday I rented a house with a little garden"

(5) Waarom *heb* ik een huis met een tuintje gehuurd?
why have I a house with a garden$_{DIM}$ rented
"Why have I rented a house with a little garden?" (Dutch, Zwart 1993b: 297)

Correspondingly, the Afrikaans data in (6) show that the prefield may be occupied by the subject (which as in Dutch is the default, neutral option; see 6a), a topicalized adverbial of time (see 6b) or place (see 6c), or a topicalized VP (see 6d).

(6) a. Ons *het* Sondag deur die stad gehardloop
us have Sunday through the city run
"We ran through the city on Sunday"
b. Sondag *het* ons deur die stad gehardloop
c. Deur die stad *het* ons Sondag gehardloop
d. Deur die stad gehardloop *het* ons (Afrikaans, Biberauer 2015)

Other elements that may be found in the prefield include predicative nouns and adjectives as well as non-finite verbal heads in Breton, Icelandic, and Yiddish.

Interestingly, this position can also be filled by some types of particles, though not all of them are eligible. Holmberg (2015: 350) states that particles that express polarity or modality, such as *doch*, *eben*, *ja*, *schon* in German may occur as prefield elements in V2 structures. Likewise, particles that combine the function of conjunctions and discourse linkers that typically occur clause-initially, such as *emellertid* 'however,' 'even so' in Swedish and *trotzdem* 'yet' in German, may also count as the first constituent in V2 clauses.

(7) a. Emellertid kan du inte använda en DVD-RAM skiva som startskiva
however can you not use a DVD-RAM disc as start-up disc
"However, you cannot use a DVD-RAM disc as start-up disc" (Swedish)
b. Es war kein optimales Spiel, trotzdem haben wir gewonnen
it was no optimal game yet have we won
"It wasn't an optimal game, yet we won" (German, Holmberg 2015: 351)

Conversely, "genuine" conjunctions that in continental Germanic are equivalents of *and*, *but* and *or*, such as *und* 'and' and *aber* 'but' in German, cannot in general be used as prefield elements. The distribution of particles in V2 structures is somewhat complicated, but strikingly, conjunctions in Serbo-Croatian exhibit a very similar pattern with respect to second position when compared to the related conjunctions in German (see Ćavar and Wilder 1999). The issue is touched upon in Chapter 3, section 3.5.2.4.

Notwithstanding the crosslinguistic variation, Holmberg (2015: 347, 2016) proposes a generalization that says that it is only those categories that have been moved to the left periphery and are located in the C-domain which are eligible as prefield constituents. By contrast, categories that are base-generated (externally merged) in the left periphery, such as question particles and "genuine" conjunctions, do not count as prefield elements and do not count for V2. In Holmberg's (2016) view, this generalization follows from the assumption that V2 in Germanic is a constraint on movement, rather than on linear order or structure, and it involves both attraction of the finite verb to C^0 and movement of one constituent across C^0 to Spec, CP. This issue is discussed in more detail in section 1.4.4.1, where I show, following Frey (2006), that some constituents that are base-generated do occur in the prefield.

A notable property of the V2 pattern is the fact that in most Germanic languages in which the V2 rule applies, this operation is a main clause phenomenon. Thus, as shown in (8) for Dutch, the verb normally may not raise to second position in embedded clauses that are introduced by a complementizer. In such contexts, all the verbal elements must appear at the end of a clause.

(8) a. Ik geloof [$_{CP}$ dat [$_{TP}$ Jan de waarheid spreekt]]
I believe that Jan the truth speaks
"I believe that Jan is telling the truth"
b. *Ik geloof dat spreekt$_i$ Jan de waarheid t$_i$ (Dutch)

This restriction does not hold in Faroese, Icelandic (see 9), and Yiddish (see 10), in which V2 placement is obligatory in most types of both matrix and subordinate clauses.[1]

(9) a. Jón hefur líklega keypt bókina
Jón has probably bought book
"Jón has probably bought the book"
b. að Jon hefur líklega keypt bokina
that Jón has probably bought book
"that Jón has probably bought the book" (Icelandic, Eythórsson 1995: 197)

(10) a. Ikh shik avek dos bukh
I send away the book
"I am sending the book away"
b. Avrom gloybt az Max shikt avek dos bukh
Avrom believes that Max sends away the book
"Avrom believes that Max is sending the book away" (Yiddish, Diesing 1990a: 42)

A property that has attracted a considerable amount of research and which will be discussed in more detail in section 1.4.2 is the fact that even outside Faroese, Icelandic, and Yiddish V2 is not strictly a main clause phenomenon, and it is permitted in some embedded contexts. By and large, it has been observed that the V2 rule may apply in subordinate clauses depending on the degree of assertion expressed by the verb in the main clause. Hooper and Thompson (1973) distinguish five verb classes (see 11) that differ with respect to the strength of assertion that they encode; see also Biberauer (2015, 2016) and section 1.4.2.1 for further discussion.

(11) The Hooper & Thompson (1973) verb classes
i. CLASS A — strongly assertive (*say, claim, assert, report, vow*)
ii. CLASS B — weakly assertive (*think, believe, suppose, guess, imagine*)
iii. CLASS C — non-assertive (*doubt, deny, be possible*)
iv. CLASS D — factive (*regret, resent, be surprised*)
v. CLASS E — semi-factive (*know, discover, find out, forget*)

A number of Germanic languages (in particular, some Scandinavian dialects) allow V2 structures in embedded clauses that are introduced by verbs from class A, B, and E. In general, with the exception of Faroese, Icelandic, and Yiddish, V2 (and other main clause phenomena) is not possible in embedded clauses that are introduced by verbs from class C and D (see also Vikner 1995).[2] The observation of the relationship between the strength of assertion of the main verb and the avail-

[1] Interestingly, diachronically V2 was obligatory in subordinate clauses also in Classical Old Icelandic and all the other old Scandinavian languages but this rule has been preserved only in Faroese and Icelandic (see Eythórsson 1995).

[2] Biberauer (2015) points out that some verbs in Afrikaans that belong to classes C and D also allow embedded V2.

ability of V2 structures has given rise to a series of accounts linking the possibility of V2 to the type of Illocutionary Force expressed by the verb in the matrix clause. These accounts are scrutinized in section 1.4.2.

The V2 rule is obligatory in matrix clauses across Germanic with the notable exception of English. In English, the finite verb must occur in second position only in limited contexts: in *wh*-questions and in some cases involving special Force-marking, such as negative inversion.

(12) a. What has Marlon said?
b. Never before have I been so happy

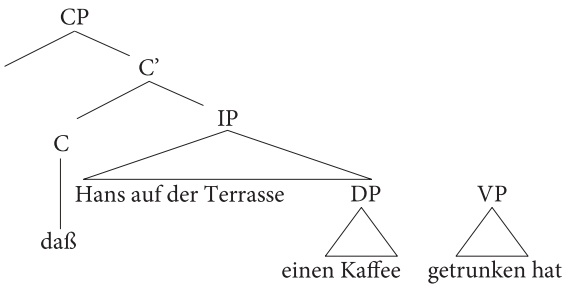
Rizzi (1990b, 1996) states that the subject-verb inversion in English (as well as the counterpart of this operation that is attested in all modern Romance languages except for Raetho-Romansch) exemplifies "residual V2," a special subcase of Verb Second that is not generalized to declarative clauses, but it is restricted to operator contexts. It seems to me that the term "residual" is somewhat misleading given that, as will be demonstrated in this chapter, generalized V2 has different syntactic and semantic properties than operator-related V2 movement. Moreover, Chapter 2 shows that Rizzi's term is problematic when the diachrony of V2 structures is taken into account, as it implies that the V2 manifestations in English are a residue of the V2 patterns found in the earlier stages of the Germanic languages, whereas in actuality the opposite holds.

Irrespective of the dependency between the availability of V2 and the verb classes listed in (11), a striking property of V2 that has influenced initial research on V2 in generative linguistics is the complementary distribution between the complementizer and the fronted verb, exemplified in (8) earlier in this section. On the basis of this property, Den Besten (1977/1983) postulated that in V2 languages the finite verb raises from its base position in V^0 and moves to C^0, replacing the complementizer.[3] Den Besten's analysis is exemplified in (13) for the German data provided by Hallman (2000), with (13a) representing the structure with an overt complementizer and with (13b–c) illustrating the derivation of V2, with the finite verb *hat* 'has' moving to the empty C^0.

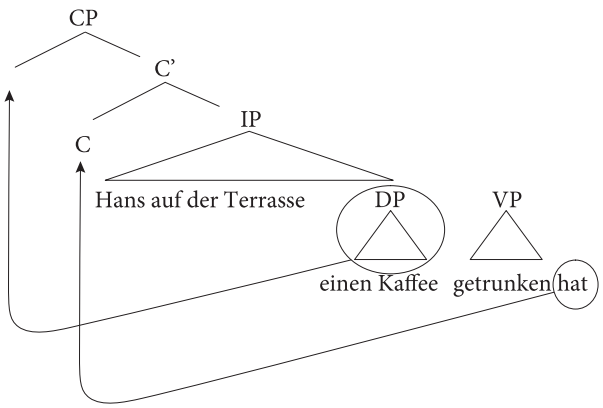
[3] The operation had been addressed in the generative literature also before Den Besten's analysis. For example, Bach (1962) posits that German is an SOV language and derives V2 orders by postulating a Verb Second transformation, which obligatorily moves finite verbs to second position to the right of the sentence boundary. Correspondingly, Koster (1975) argues that in Dutch the operation proceeds via the Verb Placement transformation, which moves finite verbs to COMP, located to the right of the clause-initial position and to the left of the subject. See also Thiersch (1978) for an early discussion of V2 in German and Zwart (1997) for a historical overview. As far as Den Besten's (1977/1983) proposal is concerned, it has been significant for both empirical and theoretical reasons, as it was the first case of head movement discussed in generative literature and also the first study in which the functional category COMP (C^0) was interpreted as a head in the X-bar framework (see Holmberg 2015: 343).

(13)

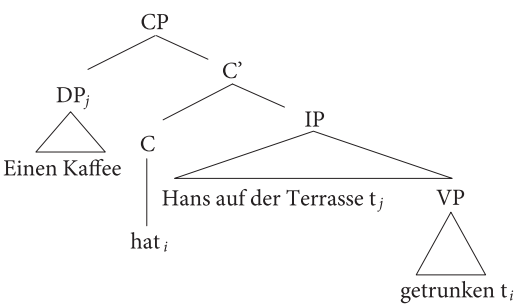
a. daß Hans auf der Terrasse einen Kaffee getrunken hat
that Hans on the terrace a coffee drunk has
"that Hans drank a coffee on the terrace"



b. einen Kaffee hat Hans auf der Terrasse getrunken
a coffee has Hans on the terrace drunk
"Hans drank a coffee on the terrace"



c.



German provides additional support for Den Besten's analysis; namely, it permits the complementizer to be dropped, which in turn enables the V2 order in the em-

bedded clause, as illustrated in (14b). The omission of the complementizer is also possible in Afrikaans, but not in Dutch (see Biberauer 2015).

(14) a. Peter behauptet, daß Johann Maria küsse
Peter claims that John Mary kisses
"Peter claims that John kisses Mary"
b. Peter behauptet Johann küsse Maria (German, Zwart 1993a: 197)

A question that may arise with respect to Den Besten's analysis concerns the derivation of V2 orders in languages such as Faroese and Icelandic, in which V2 structures are possible in subordinate contexts and which do not show complementary distribution between the overt complementizer and the verb. A general assumption that is made in the literature about such languages (see, for instance, Holmberg and Platzack 1995) is that the verb raises to C^0 in main clauses but in subordinate contexts it reaches a functional head between C^0 and VP, such as T^0. Indirectly, this assumption implies that there is no uniform syntactic position for the verb in V2 contexts. This issue is addressed in section 1.4.3.1. Alternatively, it has also been suggested that such languages exhibit CP-recursion (see de Haan and Weerman 1986; Iatridou and Kroch 1992) or that the verb and the complementizer target different projections within a split CP (see Wiklund et al. 2007).

In recent Minimalist terms, in which movement in syntax is assumed to be motivated by feature checking, Den Besten's theoretical account of V2 could be recast as an interaction of two features: an EPP feature on C^0 that attracts exactly one XP to its specifier and a [*u*V] feature on C^0 that attracts the finite verb (see, for example, Chomsky 2000; Roberts 2004; and Holmberg 2015).[4]

Still, as has been mentioned in the Introduction, irrespective of a theoretical account that is assumed to capture the derivation of V2, this operation is a syntactic curiosity and V2 structures (as well as other second position phenomena, such as Wackernagel cliticization examined in Chapters 3 and 4) pose a theoretical dilemma related to the trigger and the applicability of syntactic operations. Namely, all types of displacement in syntax normally take place in order to establish a relation with a particular category. For instance, the subject NP lands in Spec, TP and establishes a syntactic relation with T^0. A moved element targets a designated structural position, and the operation results in feature checking. Movement of the verb to second position in Germanic does not seem to follow this standard procedure: verb placement is constrained virtually only by the requirement that it follows the clause-initial constituent, with few restrictions as to what this constituent can be. Furthermore, Anderson (2000: 325; see also Holmberg 2015: 367) points out two other special properties of V2 movement: first, since it applies in all types of clauses, it is not associated with any particular morphology on the verb;

[4] The way the idea is recast in a more recent framework has no influence on the ideas developed in this chapter.

second, it does not seem to produce any detectable semantic effects.[5] In Anderson's view, these two properties indicate that V2 is a principle of sentence linearization, which Anderson proposes to capture through an OT ranking of different constraints. It seems to me though that the explanation of V2 as a case of sentence linearization does not help to establish a correspondence between the presence (or absence) of second position effects and some other properties of grammar. In this way it is not explanatory, as it does not state why this principle is at work in some languages but not in others.

1.3. Non-syntactic analyses of the V2 order

As has been pointed out in the preceding section, the only condition that seems relevant in V2 contexts is that the finite verb occurs after the clause-initial constituent, and there are rather few restrictions as to what this constituent might be. In consequence, this property may give an impression that V2 placement is not a result of a syntactic operation. As has been mentioned in the Introduction, V2 has been hypothesized to have its origin in a prosodic requirement. Namely, Wackernagel's (1892) original insight was that the elements located in second position in main clauses in early Indo-European languages were unstressed and that the V2 requirement in Germanic is a reflection of the original prosodic pattern. The assumption that V2 is a PF-related phenomenon implies that there might be instances in which the position of the verb in main clauses is influenced either by the prosodic make-up of the material located in the prefield or by the prosodic status of the verb itself. This section investigates cases of V2 placement which have been argued in the literature to be influenced by PF restrictions, focusing on the Northern Norwegian dialect spoken in Tromsø and the surrounding areas.

1.3.1. "Prosodic" V2 in Northern Norwegian

Like other continental Germanic languages, Norwegian exhibits the V2 pattern: the finite verb occurs after the clause-initial element. This element can be unstressed and "light," as in (15a), where the initial element is the subject that can be pronounced as a reduced vowel, or a long adverbial that consists of several prosodic phrases, as in (15b).

[5] These observations will be challenged in section 1.4.1, in which I show that V2 is possible only in tensed contexts. Furthermore, note that the semantics of (some) V2 structures is often associated with illocutionary force marking; see section 1.4.2.

(15) a. Jeg *vet* ikke
I know not
"I don't know"
b. På sørspissen av øya, nede ved bukta *kjøpte* han et hus
on the-south-point of the-island down by the-bay bought he a house
"On the southern spit of the island, down by the bay, he bought a house"
(Standard Norwegian, Rice and Svenonius 1998)

In Standard Norwegian, the same pattern holds for *wh*-questions: the finite verb occurs after the first *wh*-constituent, no matter whether it is light or not, as indicated in (16).

(16) a. Hva *sa* du?
what said you
"What did you say?"
b. I hvilket av de gamle husene som du kjøpte *finnes* det spøkelser?
in which of the old houses as you bought is-found it ghosts
"In which of the old houses that you bought are there ghosts?"
(Standard Norwegian, Rice and Svenonius 1998)

The Tromsø dialect of Northern Norwegian has the same distribution of V2 in declarative clauses as Standard Norwegian, with the finite verb appearing after the initial constituent irrespective of whether it is prosodically deficient or not, as shown in (17).

(17) a. Det *vet* æ ikkje
that know I not
"I don't know that"
b. *Det æ *vet* ikkje
that I know not
(Tromsø Norwegian, Rice and Svenonius 1998)

However, in the context of *wh*-questions, V2 placement in the Tromsø dialect seems to be subject to prosodic restrictions with respect to the "weight" of the *wh*-element preceding the finite verb, as has been observed on a descriptive level first by Falk and Torp (1900: 289) and Iversen (1918) (see Westergaard 2005 for an overview), and more recently in various syntactic and prosodic analyses by Åfarli (1985, 1986), Taraldsen (1986), Rice and Svenonius (1998), Westergaard and Vangsnes (2005), Westergaard (2005), and others. Namely, in *wh*-questions the finite verb occurs in second position if it is preceded by at least one foot (that is, a two-syllable *wh*-word); otherwise, it may occur in third position. Thus, the *wh*-words *korfor*, *korsen*, and *katti* ('why,' 'how,' and 'when') always require V2 (see 18). By contrast, the finite verb is not required to appear in second position after the monosyllabic question words *ka*, *kem*, and *kor* ('what,' 'who,' and 'where'), as illustrated in (19).[6]

[6] These examples indicate that the Tromsø dialect has "anti-residual V2." As has been mentioned earlier in this chapter, English has only "residual V2," which is obligatory in questions (and

(18) a. Korfor *gikk* ho?/*Korfor ho *gikk*?
why went she why she went
"Why did she go?"
b. Korsen *har* dem det?/* Korsen dem *har* det?
how have they it/ how they have it
"How are they doing?" (Tromsø Norwegian, Westergaard and Vangsnes 2005: 122)

(19) a. Ka ho *sa*?
what she said
"What did she say?"
b. Kem det *er*?
who it is
"Who is it?" (Tromsø Norwegian, Westergaard and Vangsnes 2005: 122–123)

Furthermore, according to Rice and Svenonius (1998), the examples in (20) below show that what matters for the verb placement is the length of the *wh*-word and that the presence of other elements, which do not form a constituent with the *wh*-word, such as the subject located next to it, is irrelevant. Thus, the monosyllabic *wh*-word in (20a) is immediately followed by the subject, and the V2 rule is violated. By contrast, when the *wh*-word pied-pipes the locative particle *hen* as in (20b), the verb is in second position. Likewise, the V2 order is observed in (20c), with a complex *wh*-constituent. The interaction between the subject and the verb in *wh*-questions is somewhat more intricate though, as will be shown below.

(20) a. Kor han Espen *for* hen?
where he Espen went LOC
"Where did Espen go?"
b. Kor hen *for* han Espen?
where LOC went he Espen
"Where did Espen go?"
c. Ka de dær guttan du snakka med i går *sa*?
what those boys you spoke with yesterday said
"What did those boys you talked to yesterday say?"
(Tromsø Norwegian, Rice and Svenonius 1998)

Furthermore, in Rice and Svenonius's view, the position of adverbial elements, such as *ikkje* 'not' in (21a–b), indicates that the verb remains in its base position when the V2 rule does not apply. When the verb is in second position, as in (21c), *ikkje* is postverbal, located toward the end of the clause.[7]

some other structures), but not in declarative clauses. Rice and Svenonius (1998) point out that the Tromsø dialect represents the opposite case: V2 is obligatory in declarative clauses, but it is not required in some *wh*-questions.

[7] Rice and Svenonius's (1998) analysis, from which some of the examples included in this section have been taken, captures the interaction between the type of *wh*-word and the position of the verb by assuming the OT framework. It heavily relies on the constraint ProsV2, which requires that "[t]he left edge of the verb coincides with the right edge of the first prosodic phrase of the utterance." A problem with this idea is that it makes use of a phonological constraint that

(21) a. Kem *du* ikkje ringte til?
who you not phoned to?
"Who didn't you call?"
b. Ka det egentlig *har* å si?
what it actually has to say
"What does it actually matter?"
c. Koffor *skrev* han ikkje?
why wrote he not
"Why didn't he write?" (Tromsø Norwegian, Rice and Svenonius 1998)

Whether V2 in the Tromsø dialect is indeed phonologically conditioned is a matter of debate. It seems to me that the data in (20) indicate that a specific prosodic make-up of a *wh*-word is not a sufficient property to condition the application of the V2 rule, as the position of the verb depends on the subject/non-subject distinction of the material adjacent to the *wh*-word. Moreover, example (17) above shows that the "weight" of prefield elements influences the verb placement only in the case of *wh*-words and that with other prefield material the verb always targets second position. Since the PF component of grammar is not expected to be able to distinguish between grammatical categories, such a distinction is unexpected if the position of the verb is indeed motivated by prosody.[8]

Furthermore, there has been some disagreement about the data illustrating the alleged relation between the prosodic form of a *wh*-word and verb placement. As indicated in example (19) above, the finite verb may optionally occur in third position after the monosyllabic *wh*-words *ka*, *kem*, and *kor* ('what,' 'who,' and 'where') in Tromsø Norwegian. Rice and Svenonius (1998) point out though that V3 orders are in fact attested in many other Northern and Western Norwegian dialects. Some of these dialects permit V2 and V3 orders with both monosyllabic and multisyllabic *wh*-expressions, as shown in (22) and (23) for the Møre dialect following Nordgård (1985: 116). Rice and Svenonius (1998) report that whereas the V2 order is preferred after complex *wh*-expressions and dispreferred after short *wh*-words in the Møre dialect, it seems optional in both contexts and both orders produce the same meanings.

(22) a. Hva *vil* du drikke til peppersteiken?
what will you drink to pepper-steak-the
"What would you like to drink with the pepper steak?"

has a strong construction-specific flavor. A standard assumption in the OT framework is that all constraints are universal; they are just low ranked in those languages in which they do not seem to be operative. This implies that ProsV2 is a universal constraint, found also in the languages that show no relationship between the form of a *wh*-word and the availability of verb movement to second position, which is an unwelcome result.

[8] There is further variation with respect to the position of the verb in *wh*-questions in other Norwegian dialects, which in my view shows that the V2 placement is not PF-conditioned. Namely, the Nordmøre dialect does not require the verb to appear in second position in any type of *wh*-questions. The verb may occur in third position both with monosyllabic and longer *wh*-words. See Åfarli (1986) and Westergaard (2005, ch.2, section 3.2) for details.

b. %Hva du *vil* drikke til peppersteiken?
what you will drink to pepper-steak-the
(Norwegian dialects, Rice and Svenonius 1998)

(23) a. Hvilken fisk *har* du kjøpt til selskapet i kveld
which fish have you bought to the-party in evening
"What kind of fish have you bought for the party tonight?"
b. %Hvilken fisk du *har* kjøpt til selskapet i kveld
which fish you have bought to the-party in evening
(Norwegian dialects, Rice and Svenonius 1998)

Conversely, Nordgård (1985) and Taraldsen (1986) propose that although both V2 and V3 orders are attested with monosyllabic *wh*-words, the V2 order is ungrammatical in Northern Norwegian, and the reason why some speakers of this dialect accept it is because they are bilingual and influenced by the rules of Standard Norwegian, which they all use for writing.

Westergaard (2005) questions this suggestion and points out that it has implications for the nature of first language acquisition in Northern Norwegian dialects. Namely, it predicts that the child raised in these areas is primarily exposed to V3 *wh*-questions, initially acquiring the word patterns of the dialects and is influenced by the standard language only at a later stage. Furthermore, this assumption implies that the position of the verb in *wh*-questions produced by adult speakers of these dialects is not governed by syntactic or pragmatic restrictions but is rather a result of random choices. These implications are not confirmed by the acquisition corpus compiled by Westergaard (2005). She observes that although both the V2 and the V3 orders seem grammatical in all cases with monosyllabic *wh*-words, the variation is not entirely optional in the adult grammar. There are clear preferences for specific types of subjects and verbs, which are statistically significant and in general seem to be related to information structure.

Westergaard's (2005) and Westergaard and Vangsnes's (2005) studies show that the V3 pattern is preferred when the subject is definite or understood as familiar from the previous context, as well as when it is a pronoun or an expletive. There seems to be a definiteness restriction on the pre-verbal position in V3 environments, which is not observed in V2 contexts.

(24) *?Kor en blå brikke *er*?/ Kor *er* en blå brikke?
where a blue piece is? where is a blue piece
"Where is a blue piece?"
(25) Kor *er* det en blå brikke?/ Kor det *er* en blå brikke?
where is it a blue piece/ where it is a blue piece
"Where is there a blue piece?"
(Tromsø Norwegian, Westergaard and Vangsnes 2005: 127)

As far as the relation between a type of verb and the V2/V3 orders is concerned, Westergaard (2005) points out that the V2 pattern is most common with a semantically light verb, which in virtually all cases is instantiated by

være 'be,' as exemplified in (26). Other verbs are typically in third position, as illustrated in (27).

(26) Kor *er* pingvinen henne?
where is penguin-the LOC
"Where is the penguin?" (Tromsø Norwegian, Westergaard 2005: 21)

(27) Kor du *har* fått det henne?
where you have got that LOC
"Where did you get that?" (Tromsø Norwegian, Westergaard 2005: 22)

Westergaard and Vangsnes (2005) account for the variation in the position of the verb in *wh*-questions by assuming Rizzi's (1997) split CP for Norwegian. (Westergaard 2005 develops a slightly modified version of the analysis to the one that is presented in Westergaard and Vangsnes 2005; here I focus on the latter account). In their view, the presence of the V2 or the V3 pattern is contingent on the application of phrasal or head movement of a *wh*-word to a functional projection within the complex CP.[9]

(28) Int(erogative) > Topic > Focus > Fin(itness) [$_{IP}$ …]

Westergaard and Vangsnes suggest that V2 in declarative main clauses in all Norwegian dialects (which all invariantly display the V2 pattern in such clauses) is triggered by the Topic feature endowed with the EPP property. This feature triggers the movement of the subject or a topicalized element (such as *Island* in 29) to Spec, TopP. However, Westergaard and Vangsnes explicitly make a non-standard assumption about the nature of feature checking: it is not sufficient to merge an XP-element in the Specifier of a head involved in the movement operation. A [+EPP] *head* feature also requires additional checking by an X^0 element. In the case at hand, this requirement is satisfied by the movement of the finite verb *liker* to the Topic head, as indicated in the derivation in (29).

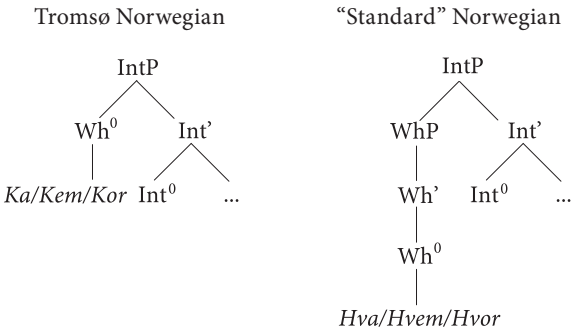
(29) [$_{TopP}$ Island$_i$ [$_{Top}$ liker$_j$ … [$_{IP}$ jeg faktisk t$_j$ t$_i$]]]
Iceland like I actually
"I like Iceland, actually"
(declarative clauses, both Norwegian dialects, Westergaard and Vangsnes 2005: 131)

In *wh*-questions, the derivation proceeds differently depending on the dialect variant. In standard Norwegian, V2 is a result of verb movement to Int^0, while the *wh*-word moves to Spec, IntP. In Tromsø Norwegian, the longer *wh*-words also land in Spec, IntP and the verb moves to Int^0. As far as the short *wh*-words are concerned, Westergaard and Vangsnes suggest, following Taraldsen's (1986) proposal, that they are head-like elements in Tromsø Norwegian, so they do not

[9] The structure proposed in Westergaard (2005) is more complex, as in addition it contains Pol(arity)P(hrase), which Westergaard assumes to be involved in *yes-no* questions.

project. When they land in Spec, IntP, they c-command Int^0, and in consequence the verb does not need to target this projection, as shown in (30).

(30)



Westergaard and Vangsnes do not provide a complete derivation for *wh*-movement in Tromsø Norwegian; however, in Migdalski (2010) I observe that their proposal is problematic because it violates the Minimal Link Condition. Namely, I point out that at the initial stage of the derivation the element that is closer to Int^0 is the verb, rather than the *wh*-word. Therefore, if both the finite verb and the *wh*-word are able to check the same feature, the *wh*-word should never be able to move across the finite verb, even on the assumption that the *wh*-word has clitic-like properties that allow it to raise via XP-movement but land in a head position. In principle, this problem may be circumvented by Westergaard and Vangsnes's suggestion that a morphosyntactic feature must be checked by *both* head movement of a verb to a functional head hosting the relevant feature *and* XP-movement of prefield material to the Specifier of this head to check off the same feature, but such an approach is at odds with syntactic economy principles and in fact goes against standard assumptions made in the literature on movement (for example, the Doubly-Filled Comp Filter, first formulated by Chomsky and Lasnik 1977, which applies to the COMP/CP layer, or Koopman and Szabolcsi's 2000 extension of this filter to all projections).

In order to account for the relation between the V2 patterns in *wh*-questions and the indefiniteness of the subject, Westergaard and Vangsnes propose that new information subjects represent a type of Focus and that they target Spec, AgrsP, which is located higher than Spec, TP. Without providing much justification, they claim that the finite verb must move to the Focus head (Foc^0) to license the Focus feature. If given subjects are present, there is no trigger for V–to–Foc movement and the verb remains in third position.

Importantly, Westergaard and Vangsnes's analysis shows that V2 is not a uniform phenomenon and that the verb may target different positions in the structure, while its movement may have various triggers. This is a stance that is also taken in this chapter. It will be demonstrated in section 1.4.4 that V2 structures

across Germanic have different interpretations and exhibit syntactic restrictions depending on the position of the verb and the type of lexical material located in the prefield. What is somewhat less advantageous about Westergaard and Vangsnes's account is that the structure they propose to explain the observed word order variation is rather complex. They assume that the heads in the split-CP domain are selected from a universal set of possible functional categories made available by Universal Grammar. This means that there is variation with respect to the types and number of functional elements in the CP, but this variation is limited by UG constraints. However, as I point out in Migdalski (2010), with a CP layer that is so rich, it is difficult to test or falsify their claims, as well as to restrict or exclude the derivations that are not attested in Norwegian, but which might be permitted by the proposed structure. For instance, if the CP layer in Norwegian is so elaborate, a question that may arise is why Norwegian disallows multiple *wh*-fronting. Another problem with this proposal is the possibility of overgenerating structures that are not attested. One of the merits of Den Besten's (1977/1983) account of V2 in continental Germanic is that by positing that both the finite verb and the complementizer target the same C-head in the non-split CP projection, he readily captures the complementary distribution between the verb and the complementizer in subordinate clauses. Although Westergaard (2005: 42) does propose that Norwegian speakers never produce structures that contain more than one of the following three C-heads: Int^0, Pol^0 or Top^0, once a split-CP analysis is assumed, it is more difficult to account for the fact that the complementizer and the verb are mutually exclusive (see also Mohr 2005 for another example of a split-CP analysis of V2 in German that faces the same issue).

Moreover, I observe in Migdalski (2010) that it is somewhat problematic to link the preference for the V3 order with pronouns, expletives, and definite subjects to the absence of V–to–Foc movement. The most basic distinction in the V2/V3 pattern is related to the phonological make-up of the *wh*-element. Without taking recourse to building up a highly elaborate CP structure, the most intuitive explanation might be to assume that the short *wh*-words cliticize onto short subjects, pronouns, and expletives, which are also clitic-like elements. Clitics always represent old information and refer to definite objects. In this way, the definiteness effect in the V3 context can be captured straightforwardly. Still, irrespective of the details of a syntactic proposal that is assumed, the data presented in this section indicate that relating V2/V3 orders in Northern Norwegian to prosody is unjustified, as the position of the verb is sensitive to information structure requirements.

1.3.2. Non-syntactic analyses of V2 in other Germanic languages

Although other Germanic languages do not seem to display the (alleged) dependency between the availability of V2 structures and the prosodic make-up of prefield constituents observed in Northern Norwegian, it has been suggested in the

literature that the V2 requirement might be prosodically motivated also in some of these other languages. For instance, Boeckx (1998) attributes the V2 order to the workings of a PF parameter that forces the finite verb to appear in second position of its intonation phrase. The examples given in (31) present the mechanism of this PF parameter. The sentence in (31b) features a regular occurrence of the finite verb *heirate* in second position. In sentence (31a) the verb *heirate* is the third syntactic constituent, yet the structure is acceptable because the verb is the second prosodic word following a pause. In Boeckx's (1998) view, these examples indicate that the V2 rule is determined by prosodic constraints.

(31) a. Wie reich sie auch sei, # ich heirate sie nicht
however rich she too may-be I would-marry her not
"I would not marry her, rich as she might be"
b. Wie reich sie auch sei, heirate ich sie nicht (German, Boeckx 1998: 276)

Bošković (2001: 173) adopts Boeckx's idea and proposes to extend it to all V2 structures in Germanic. He suggests that they are subject to the following set of PF requirements:

(32) a. Suffix
b. #_

(32a) states that there must be a phonologically overt element preceding the verb; (32b) indicates that the verb must be right-adjacent to an intonation boundary.

It seems to me that there is a problem with Bošković's proposal, as it is not entirely clear how a PF requirement might possibly distinguish between categories and apply exclusively to verbs. On his own part Bošković admits that these PF constraints are too general. For instance, V1 constructions in German, such as *yes-no* questions, are incorrectly excluded by (32). He acknowledges that in order for these requirements to work, it is necessary to stipulate that they are "somehow suppressed" in the syntactic environments requiring V1. This idea is obviously problematic because it suggests that phonological rules are able to detect a syntactic context. Moreover, in relation to the Northern Norwegian data discussed above, these requirements clearly do not capture the fact that the verb may occur either in second or third position after a monosyllabic *wh*-word, nor does it relate the position of the verb to the information status of other elements, such as the subject (an empirical fact that, in all fairness, was observed only after Bošković's 2001 proposal).

Furthermore, it has been reported in the literature that there are some instances in German in which the finite verb occurs as the third constituent, both syntactically and prosodically, yet its unusual placement is not caused by phonological constraints as in (31), but due to requirements related to parsing and sentence interpretation. For example, Meinunger (2006: 149–150), who refers to the data in (33) originally provided by Pittner (2003), observes that V3 is possible in free relatives if there is a case conflict between a pronoun and a *wh*-word.

(33) a. Wer so laut singen kann, (der) muss in Wagneropern auftreten
who so loud sing can the$_{NOM}$ must in Wagner operas appear
"Whoever may sing this loudly should perform in Wagner operas"
b. Wer so laut singen kann, */??(den) sollte man für Wagneropern engagieren
who so loud sing can the$_{ACC}$ should one for Wagner operas hire
"People who can sing this loudly should be hired for Wagner operas"
(German, Meinunger 2006: 149)

The sentences in (33) present the "matching effect" concerned with case identity: a verb must appear there in third position (and the d-pronoun cannot be dropped) in case the d-pronoun and the *wh*-constituent in the free relative are marked for different morphological cases. Meinunger argues that in this case V3 does not constitute a purely morphosyntactic operation. Rather, the V2/V3 orders have a pragmatic motivation in this context, as the placement of the verb is determined by the need to facilitate interpretation and disambiguate readings.

To summarize, this section has shown that V2 is different from other syntactic operations as it does not seem to be motivated by a uniform morphosyntactic trigger. A potential way of capturing the special status of V2 placement might be to assume that the movement is a PF-phenomenon, influenced by prosodic considerations. With this possibility in mind, I have addressed cases of *wh*-movement in the Tromsø dialect of Northern Norwegian, in which the application of the V2 rule has been argued in some analyses to be contingent on the prosodic make-up of the prefield element. However, a more detailed examination of the Tromsø Norwegian data in the literature has shown that the position of the verb is more likely to be influenced by information structure considerations and that the prosodic structure of the prefield *wh*-element does not play a significant role in the verb movement. Furthermore, this section has briefly examined instances in which V2 is determined by pragmatic requirements related to reference disambiguation. The unavailability of V2 in such clauses can be entirely attributed to sentence parsing considerations. Thus, it seems evident that, although exceptional, V2 clearly is a phenomenon that belongs in narrow syntax and it would be inappropriate to create a general PF- or pragmatics-dependent rule to account for V2 placement.

1.4. Syntactic analyses of V2

1.4.1. General syntactic properties of the V2 order

This section addresses purely syntactic analyses of V2, which do not assume that the operation is related to or dependent on prosody. As has been mentioned in section 1.2, the earliest accounts, such as Den Besten's (1977/1983) analysis of Dutch and Thiersch's (1978) analysis of German, postulate that in V2 languages

the finite verb targets C^0 in matrix clauses. In this way these accounts capture the complementary distribution between V2 and an overt complementizer observed in most Germanic languages, illustrated in (34) for Dutch.

(34) a. Ik geloof [$_{CP}$ dat [$_{IP}$ Jan de waarheid spreekt]]
I believe that Jan the truth speaks
"I believe that Jan is telling the truth"
b. *Ik geloof dat spreekt$_i$ Jan de waarheid t$_i$ (Dutch)

Den Besten's hypothesis sparked a range of proposals not only related to the explanation of the V2 effect, but also aiming to determine a parametric contrast between V2 and non-V2 languages. For example, in an early analysis Koopman (1984) argued that in V2 languages nominative case is assigned under government from C^0, rather than in a spec-head configuration. To be able to assign case, C^0 must be lexicalized, for example by a complementizer in subordinate clauses. Since there is no complementizer in matrix clauses, the verb must move to C^0 to govern the subject. On the other hand, Platzack (1986) postulated that finiteness is located higher than in I^0 in V2 languages, so they require verb movement to C^0 rather than to I^0.

A number of other accounts put forward in the 1980s implied that V2 is a way of acquiring a certain feature required by C^0. For example, Holmberg (1986) and Taraldsen (1986) suggested that V2 is a way of ensuring that main clause CPs are predicates. Inspired by Kayne's (1982) proposal, Holmberg suggested that arguments must have the [–V] feature specification, while predicates must be [+V]. In the context of V2, head movement of the verb to C^0 is a way of acquiring the [+V] feature. Since embedded clauses are assumed to be arguments, thus with nominal [–V] features, they do not require the verb movement. With the advent of the Minimalist Program in the 1990s, the focus of attention shifted towards finding morphosyntactic features that trigger syntactic operations. In the case of V2, the feature identified as the trigger of V2 has been, for instance, a finiteness operator termed [+F] in Holmberg and Platzack (1990), tense and agreement on C^0 (Tomaselli 1990) or the feature [+I] in Rizzi (1990b). An overview of different approaches to V2 assumed until the mid-1990s can be found in Vikner (1995), who on his own part unabashedly concludes that it is *some* feature on C^0 (for example, agreement, [+I], or [+F]) that forces C^0 to be filled by some lexical material.

With the relegation of head movement to the PF component in the early 2000s, Nilsen (2003) and Müller (2004) rejected the traditional head raising analysis of V2 and argued for movement of remnant vP to Spec, CP. Although Müller's (2004) account seemed to work for German, it did not appear to be appropriate for other Germanic languages. As of the mid-2010s, a head movement analysis proves to be the default syntactic analysis of V2 again (see, for instance, the papers presented at the *Rethinking Verb Second* workshop at the University of Cambridge in March, 2016).

For the purpose of the analysis of second position phenomena carried out in this work, three syntactic properties of V2 are important. First, it seems that verb movement to second position is contingent on tense marking, rather than on rich inflection, the way V–to–T movement is (see Pollock 1989; Schifano 2015; Koenaman and Zeijlstra 2014). Thus, within Germanic V2 may affect verbs with poor or no agreement marking as long as they are tensed. For instance, verbs in the Mainland Scandinavian languages show little inflection, and as Biberauer (2015, 2016) observes, they are also extremely deflected in Afrikaans, in which the only verbs to distinguish finite versus non-finite forms are "be" and possessive "have" (that is, *is* versus *wees* and *het* versus *hê*). Outside Germanic, strong empirical evidence for the tense dependency of V2 structures is provided by Karitiana, which is a Tupian language spoken in the state of Rondônia in Brazil. Karitiana is a regular V2 language, but it allows V2 orders only with tense-marked verbs. In subordinate clauses verbs are clause-final, on a par with continental Germanic, and these clauses either contain no tense markers or they have an unmarked verbal suffix indicating present or past tense (Storto 1993: 143, 2003). Storto (1999) accounts for the V2/Tense dependency in Karitiana by arguing that its subordinate clauses are truncated variants of matrix clauses: while matrix clauses project functional heads such as Aspect, Tense, Mood, and Agreement, the only functional head that is available in subordinate clauses is Aspect. Given these crosslinguistic observations, Jouitteau (2010) proposes a generalization saying that second position phenomena (not just V2) may only occur in tensed domains. In Chapter 4 I show that the availability of second position cliticization in Slavic is also related to the presence of overt tense morphology.

Notably, the relationship between tense marking and the availability of V2 was already observed in the first theoretical accounts of V2. Namely, Den Besten (1977/1983) assumed that both C^0 and the finite verb express Tense in Germanic, therefore the verb may target (and replace) the complementizer position in these languages via a structure-preserving substitution. Den Besten's insight has resurfaced in many subsequent analyses, for instance in Roberts and Roussou's (2002) reduction of EPP and V2 to a T-dependency. Roberts and Roussou propose that the subject is realized when T is spelled out in TP, while the V2 requirement arises when T is in the CP domain. Correspondingly, Koster (2003) points out that since in languages such as Dutch or German complementizers are in complementary distribution with finite verbs, complementizers must also code Tense. Since complementizers specify a specific clause type (understood as a specific type of illocutionary force in the sense of Cheng 1997, see section 1.4.2 for details), Koster postulates that complementizers are combined Type/Tense markers, which mark both the clause type of a sentence and the scope of its Tense operator. Thus, due to the close relationship between complementizers and Tense, tensed verbs also type clauses in V2 languages.[10]

[10] One of the motivations for Koster's assumption that the constraint holds universally is the distribution of second position clitics in Slavic, which include the finite (tensed) auxiliary verb "to

The two other syntactic properties of V2 that are relevant for the assumptions about second position phenomena made in this work are discussed in the subsequent sections. Section 1.4.2 addresses a common suggestion made in the literature (for instance, in Koster 2003 referred to above) that views V2 structures as a way of encoding the illocutionary force of a clause. Section 1.4.3 investigates hypotheses that are concerned with determining the position of the verb in different V2 structures; namely, whether the verb always targets C^0 in V2 clauses, as was originally suggested by Den Besten (1977/1983) or whether it may raise to different projections as long as it occurs in second position.

1.4.2. V2 as illocutionary force-marking

A common idea that has been pursued in the V2 literature during the last few decades is that Verb Second is a way of formally encoding the illocutionary force of a clause (see, for example, Hooper and Thompson 1973; Wechsler 1991; Holmberg and Platzack 1995; Gärtner 2001; Meinunger 2004, 2007; Brandner 2004, Julien 2015; Lohnstein 2016, see also a debate in *Theoretical Linguistics* 32–33 from 2006). This section addresses this idea in some detail. This issue is important in the studies on V2 because if this assumption is correct, Force may be perceived as a uniform trigger for the operation. Furthermore, a discussion of this issue is crucial for the diachronic analysis of second position phenomena carried out in this work. As will be shown in Chapter 2 for Verb Second and in Chapter 4, section 3.4.1 for second position cliticization, both processes were historically restricted to clauses that expressed some kind of marked illocution and were extended to other contexts only at later stages. This fact may be used in support for Wackernagel's hypothesis about a common source of both second position effects, which was outlined in the Introduction.

1.4.2.1. Force and V2 syntax

At first sight the link between V2 and Force marking seems well-motivated and there are a number of strong reasons to adopt it. First, the fronted verb is in complementary distribution with the complementizer in most Germanic languages, whereas complementizers directly encode the Force value of a subordinate clause. Hence, it seems logical to postulate that either the complementizer is located in or the verb raises to a syntactic position in which a Force feature is checked.

Second, as will be shown in the present section, in many Scandinavian dialects the availability of V2 orders in embedded clauses depends on the strength

be" (see Chapter 3). While the constraint seems to be correct in spirit, there is substantial empirical evidence suggesting that second position clitics in Slavic do not target C^0; in fact they do not seem to target a uniform syntactic position. See Chapter 3, section 3.5.2.2.

of assertion expressed by the verb in the matrix clause (see also section 1.2 earlier in this chapter). Assertion is generally understood as a type of illocutionary force that causes the interlocutor to acknowledge the meaning of an utterance as the "common ground" (see Wiklund et al. 2009: 1915 for a discussion). A common way to classify assertions is to appeal to Hooper and Thompson's (1973) distinction of five complement-taking predicates given in (35).

(35) The Hooper & Thompson verb classes
   i. CLASS A predicates introduce strong assertions and include verbs of saying, such as *say, claim, exclaim, assert, report, vow, be obvious, be certain,* and *be true*
   ii. CLASS B predicates are weakly assertive and include verbs that denote mental processes (*think, believe, suppose, guess, imagine, expect, it seems, it happens*)
   iii. CLASS C predicates are non-assertive (*doubt, deny, be (im)possible, be (un)likely, be (im)probable*)
   iv. CLASS D predicates are factive; they normally express attitude or emotion and select presupposed complements (*regret, resent, bother, be sorry, be strange, be surprised*)
   v. CLASS E predicates are semi-factive; they include verbs that denote perception or acquisition of knowledge and, like Class D predicates, they select presupposed complements (*know, realize, learn, recognize, discover, find out, forget, see*)

A number of Scandinavian dialects permit V2 orders (as well as some other root phenomena) in embedded clauses that are introduced by verbs from class A, B, and E. A broad generalization that has been made on the basis of this observation is that the less presupposed (more asserted) the complement of a matrix verb is, the more likely it is to allow V2 (see Wiklund et al. 2009: 1915 and the references cited therein).

For instance, the verb *say* (class A) expresses strong assertion. Such verbs are uttered with an intention to make the hearer accept the content of an utterance and assume it to be part of the common ground (Wiklund 2010). On a par with other verbs that encode strong assertion, *say* permits the V2 order in its complement clause, as illustrated for Norwegian in (36a). Correspondingly, V2 orders are possible in subordinate "indirect assertions," that is in clauses in which the speaker is not the assertor, but rather the person who conveys somebody else's assertions. These clauses are introduced by verbs that belong to class B, such as *påstod* 'claimed,' *gissade* 'guessed,' and *trodde* 'believed' in Swedish, as illustrated in (36b).

(36) a. Han sa at han *kunne* ikke synge i bryllupet
He said that he could not sing in wedding-the
"He said that he could not sing at the wedding"
(Norwegian, Wiklund et al. 2009: 1918)

b. Hugo påstod att du *kommer* aldrig att läsa den här boken
Hugo claimed that you will never read this book
"Hugo claimed that you would never read this book" (Swedish, Wechsler 1991: 182)

By contrast, the factive verb *regret*, which belongs to class D, involves weak assertion, as it expresses a subjective attitude towards an event whose existence is pre-

supposed (thus, it is already part of the common ground), but it is not asserted. As shown in (37a) for Norwegian and in (37b) for Swedish, it does not allow the V2 order in its complement clause.

(37) a. Han angret på at han ikke *hadde* sunget
he regretted on that he not had sung
"He regretted that he hadn't sung"
a'. *Han angret på at han *hadde* ikke sunget (Norwegian, Wiklund et al. 2009: 1920)
b. Han ångrar att han inte *har* last lapska
he regrets that he not has studied Lapp
"He regrets that he has not studied Lapp"
b'. *Han ångrar att han *har* inte… (Swedish, Wechsler 1991: 182)

Furthermore, Wechsler (1991) observes that the availability of V2 in subordinate clauses in the Scandinavian languages may also depend on the semantics expressed by the complementizer. For example, in Swedish clauses that are introduced by the complementizers *fast*(*än*) 'although,' *eftersom* 'since,' *medan* 'while,' which are termed by Wechsler "assertion-type" complementizers as they indicate that the propositional content of the clause is asserted by the speaker, allow optional V2 patterns.

(38) a. Hugo studerar lingvistik fastän han *har* aldrig varit intresserad av språk
Hugo studies linguistics although he has never been interested in language
"Hugo studies linguistics, although he has never been interested in language"
b. Hugo studerar lingvistik fastän han aldrig *har*… (Swedish, Wechsler 1991: 181)

Conversely, V2 orders are not possible if the clausal complements are selected by the conditional-type complementizers, such as *om* 'if' and *ifall* 'in case.'

(39) Jag blir ledsen om [du inte *kommer*]/*[du *kommer* inte]
I (will) get sad if you not come you come not
"I will be sad if you do not come" (Swedish, Wechsler 1991: 181)

The conclusion that can be drawn from the Norwegian and Swedish data is that the V2 order is available in subordinate clauses if they are direct assertions. In his original proposal, Wechsler (1991) captures this relation by appealing to Searle's (1969: 30) Illocutionary Force Indicator, which is a term that is used to refer to different mechanisms, such as word order, stress, the mood of the verb, which specify a particular illocutionary act that is performed by the speaker during the utterance of a sentence. Wechsler proposes that the Indicator is encoded by two syntactic features FIN and C and that it may have different "illocutionary potentials," including a polarity question, conditional, or an (in)direct assertion. These potentials are assigned by the Illocutionary Rule, which applies across the Germanic languages with minor parametric differences.

More recent approaches to embedded V2 structures (see, for example, Wiklund et al. 2009) dispense with construction specific rules of the type proposed by

Wechsler and suggest that the strength of assertion can be reflected through the richness of functional projections in the structure of the embedded clause selected by the verb. For instance, in her recent work on embedded V2 in Afrikaans, Biberauer (2015, 2016) appeals to the "Kayne–Rizzi–Roberts (KRR) Effect," which states that T–to–C fronting (thus, movement parallel to V2) is possible if the target C-position is not lexically selected. The KRR is a term coined by McCloskey (2006) to refer to earlier observations made by Rizzi and Roberts (1989), who in turn develop Kayne's (1982, 1983) and Den Besten's (1977/1983) ideas. McCloskey (2006) makes use of the KRR effect to account for the distribution of embedded *wh*-V2 in some dialects of English, such as Hiberno-English (see also Henry 1995 and Woods 2016). Namely, as shown in (40), *wh*-movement is possible in Hiberno-English in subordinate clauses that are complements of so-called *wonder*-predicates but not with so-called *discover*-predicates (see 41).

(40) a. I asked him [from what source *could* the reprisals come] (*Irish Times*, April 24th, 2001)
b. The baritone was asked [what *did* he think of Mrs Kearney's conduct]
(James Joyce: *Dubliners,* McCloskey 2006, quoted in Biberauer 2016)

(41) a. *I found out [how *did* they get into the building]
b. *The police discovered [who *had* they beaten up] (Biberauer 2016)

McCloskey (2006) postulates that *wonder*-predicates c-select larger complements than *discover*-predicates and allow CP-recursion, which in turn makes V2 orders in *wonder*-predicates possible. Biberauer (2016) points out that McCloskey's (2006) proposal could be captured in Rizzian terms (Rizzi 1997) by assuming that *wonder*-predicates select ForceP, whereas *discover*-predicates are complemented by FinP. As a result, T–to–Fin movement is possible in the case of *wonder*-predicates because it does not violate the KRR. The workings of the mechanism are illustrated in (42).

(42) a. *[$_{\text{CPmatrix}}$ …… discover [$_{\text{FinP}}$ what *should*-Fin [$_{\text{TP}}$ we ~~should~~ [$_{\text{VP}}$ do ~~what~~]]]]
(lexically selected FinP contains moved verb)
b. [$_{\text{CPmatrix}}$ …… wonder [**$_{\text{ForceP}}$** … what [$_{\text{FinP}}$ *should*-Fin [$_{\text{TP}}$ we ~~should~~ [$_{\text{VP}}$ do ~~what~~]]]]]
(lexically selected ForceP does not contain moved verb; this verb is in the lower Fin-head)
(Biberauer 2016)

Thus, the generalization that can be made about the syntactic structure of embedded V2 on the basis of Biberauer's (2016) proposal and the related earlier work on this topic is that the clauses that render strong assertion project a more robust functional field, which includes the Force head that is targeted by V2 in the embedded clause.

The idea that subordinate clauses that allow V2 orders contain more functional projections than the ones in which the V2 pattern is not possible correlates with a number of distinct syntactic properties of such clauses. In general, these properties indicate that subordinate V2 clauses are semantically and syntactically

dependent on the matrix predicate to a lesser degree than subordinate non-V2 clauses. In fact, Freitag and Scherf (2016) argue that in Germanic embedded V2 clauses do not show true subordination, though actual subordinate clauses do exist in Kashmiri, a non-Germanic V2 language. Holmberg (2015: 360) puts forward a hypothesis that subordinate V2 clauses may potentially express their own illocutionary force. On the syntactic side, one of the properties suggesting that embedded V2 clauses are more independent than non-V2 clauses is related to extraction, which is considerably less restricted out of non-embedded V2 than out of embedded V2 (Holmberg 1986: 109ff.; Vikner 1995: 108ff.), as shown in (43) for Swedish.

(43) Vilken festi sa hon [att vi (*behöver) inte (behöver) köpa roliga hattar till ti]?
which party said she that we (need) not (need) buy funny hats for
"Which party did she say that we don't need to buy funny hats for?"
(Swedish, Holmberg 1986: 111)

Correspondingly, it has been observed that embedded V2 clauses cannot be topicalized (see Reis 1997; Heycock 2005), as shown in (44).

(44) a. Dass eri unheimlich beliebt sei, möchte jederi gern glauben]
that he extremely popular is would everyone gladly believe
"Everyone would gladly believe that he is popular" (German)
b. *Er sei unheimlich beliebt, möchte jederi gern glauben
c. [Att fett (*är) inte (är) bra för hjärtat] vet jag
that fat (is) not (is) good for the-heart know I
"I know that fat is not good for the heart" (Swedish, Holmberg 2015: 361)

Furthermore, embedded V2 clauses exhibit special effects related to the interpretation of negation. As illustrated in (45), negation in the matrix clause cannot scope over the clause with the V2 pattern (see Heycock 2005 and Holmberg 2015). Thus, whereas the structure with the verb placed in the final position is ambiguous, the construction with the verb in second position does not have the interpretation under which the reason why he is coming is not that he is lazy.

(45) Er kommt nicht, weil er (ist) faul (ist)
he comes not because he (is) lazy (is)
"He doesn't come because he is lazy" (German, Holmberg 2015: 361)

De Haan (2001) and Reis (1997) (quoted in Holmberg 2015: 361) account for the restrictions exemplified in (44) and (45) by stating that subordinated clauses with the V2 order are rather unintegrated with the matrix predicate, and the relationship between the matrix and embedded clauses is that of a coordination rather than subordination.

To summarize, the present section has shown that subordinate V2 and non-V2 clauses display different syntactic behaviour, which can be captured by postulating a richer functional field for the subordinate V2 clauses. The subsequent section

will demonstrate that the contrast between them extends to semantics, as V2 and non-V2 subordinate clauses may have different semantic properties.

1.4.2.2. Force-related semantics in V2 structures

Following Wechsler's (1991) initial observation about the correspondence between embedded V2 clauses in Swedish and assertion specification, Truckenbrodt (2006) presents an investigation of semantic effects related to the presence and absence of the V2 pattern in main and embedded clauses in German. The central idea of his account is that V–to–C movement has an effect on the illocutionary force of a clause. In a sense, Truckenbrodt extends Wechsler's analysis, as he also examines matrix clauses that lack the V2 order. He observes that the main characteristic of such clauses is that unlike matrix V2 clauses, they cannot be used as assertions. Thus, the distinct property of matrix V2 clauses (in which, in Truckenbrodt's view, the finite verb is in C^0; see section 1.4.3.1 for a discussion of the controversy surrounding this issue), such as *It is raining*, is that they commit the speaker to the truth of a proposition or they urge the addressee to accept that truth (Truckenbrodt 2006: 259).

By contrast, non-V2 main clauses can be interpreted deontically and render speech acts such as orders, requests, wishes and invitations, which are "volitional on the part of the speaker." Thus, the speaker may wish for something or may want to encourage the addressee to perform something (Truckenbrodt 2006: 264). For instance, by using the imperative form *Have eaten at 12.30!*, the speaker cannot convey to the addressee that s/he has finished eating at 12.30, rather than at 12.45, as the Addressee may mistakenly believe (Truckenbrodt 2006: 264). Truckenbrodt paraphrases this deontic meaning as "Speaker wants (from Addressee)…," as exemplified in (46) for an imperative.

(46) Imperative (Imperative morphology in C^0)
Öffne das Fenster! "Open the window!"
"S wants from A that A open the window" (Truckenbrodt 2006: 264)

Furthermore, Truckenbrodt makes use of the notion of common ground, which is the common knowledge shared by the speaker and the addressee in an utterance. In his view, common ground is an inherent part of the interpretation of declaratives and imperatives, as illustrated in (47) and (48).

(47) Declarative ([–WH] and indicative/Konjunktiv II morphology in C^0)
Der Peter hat das gemacht. "Peter has done this."
"S wants from A that it is common ground that Peter has done this"
(48) Interrogative ([+WH] and indicative/Konjunktiv II morphology in C^0)
Hat der Peter das gemacht? "Has Peter done this?"
"S wants from A that it is common ground whether Peter has done this"
(Truckenbrodt 2006: 264–265)

Truckenbrodt's major claim is that the grammatical elements located in C^0 (such as the features of the finite verb and the [+wh] feature) interact with the interpretation "S wants from A that it is common ground that…" He presents this interaction in formal terms as a set of features termed a "context index," given in (49). The context index triggers V–to–C movement and assigns illocutionary force to different types of sentences, as indicated in (50).

(49) Context indices on C in unembedded use have the form $<Deont_S\ (,x)_1\ (,<Epist>)_2>$.
A paraphrase is 'S wants (from x)$_1$ (that it is common ground)$_2$ that/whether . . .'

(50) In a context index $<Deont_S\ (,x)(,<Epist>)>$ in C^0
a. **Epist** is present iff (i) C^0 contains a finite verb with indicative or Konjunktiv II or (ii) C^0/CP is marked [+WH].
b. x=**A**(ddressee) iff C^0 contains a finite verb with person inflection.

(Truckenbrodt 2006: 265)

Thus, the feature $Deont_S$ in the context indices in (50) triggers the meaning 'S wants…' (so $Deont_S$ renders 'S wants from A that…'), whereas the feature Epist yields the meaning "it is common ground that/whether… ."

On the assumption that the required indicative/subjunctive and person features are supplied by the movement operation from V^0 to C^0, the feature values A and Epist arise due to V–to–C movement. Consequently, x and Epist in the context index of C^0 can be viewed as unvalued features that trigger V–to–C (Truckenbrodt 2006: 262; see also Holmberg 2015 for a discussion).

As an example, the context indices in (51) are applied to the sentences involving the verb in C^0 for the sentences in (46) through (48).

(51) Imperative: $<Deont_S, A>$ "S wants from A …"
Declarative: $<Deont_S, A, <Epist>>$ "S wants from A that it is common ground …"
Interrogative: $<Deont_S, A, <Epist>>$ "S wants from A that it is common ground …"

The examples in (52) are non-V2 main clauses. They all lack V–to–C movement, have a deontic interpretation, and are used as directives or desideratives.

(52) a. [–WH], no verbal mood in C^0
(i) Dass du (ja) das Fenster öffnest!
that you (PRT) the window open
"(Don't forget to) open the window!" (directive)
$<Deont_S, (X)>$ "S wants (from X(≈ you)) that you open the window."
(ii) Dass ich noch einmal Venedig sehen könnte!
that I still once Venice see could
"I would like to see Venice once more." (desiderative)
$<Deont_S>$ "S wants to see Venice once more."
b. [–WH], no verbal mood in C^0
(i) Das Fenster öffnen!
the window $open_{INF}$
"Open the window!" (directive)
$<Deont_S>$ "S wants from X ((≈ you) that you open the window."

(ii) Noch einmal Venedig sehen!
still once Venice see_{INF}
"I would like to see Venice once more." (desiderative)
<$Deont_S$> "S wants to see Venice once again." (German, Truckenbrodt 2006: 269)

The workings of Truckenbrodt's (2006) proposal can be also demonstrated for other Germanic languages, for example for the two Swedish sentences in (53) taken from Holmberg (2015: 370). As has been pointed out earlier in this chapter, embedded V2 clauses express a high degree of assertion. According to Holmberg, the sentences in (53) illustrate this property: whereas (53a) only reports what Eva says, (53b) also asserts it, though unlike in main V2-clauses, the assertion is not expressed on the part of the speaker.

(53) a. Eva säger [att hon aldrig ser på TV]
Eva says that she never watches at TV
b. Eva säger [att hon ser aldrig på TV]
Eva says that she watches never at TV
"Eva says that she never watches TV" (Swedish, Holmberg 2015: 370)

Under Truckenbrodt's analysis, C^0 in subordinate clauses do not display <$Deont_S$, A>, but if a predicate expresses a high degree of assertion, they may have <Epist>, which will trigger movement from V^0 to C^0.[11]

1.4.2.3. Problems with V2 as a Force marking licensor

This section shows that in spite of a strong correlation between the availability of V2 orders and the strength of assertion, the idea that the V2 pattern is directly related to Force marking faces a number of challenges. These challenges follow from both syntactic and semantic properties of V2.

On the syntactic side, the observation of the link between the availability of subordinate V2 clauses and the strength of assertion has given rise to an extension of the idea of V2 being a source of Force marking also in matrix clauses. For instance, in her interesting analysis Brandner (2004) posits, following Cheng's (1997) *Clausal Typing Hypothesis*, that all clauses must be typed, which means that they must be explicitly specified as declarative, interrogative, or of some other type. Clause typing occurs via two types of formal devices: either morphologically, through insertion of a lexical item, such as a Force-encoding particle in languages like Korean or Persian, or by employing a syntactic configuration that renders an explicit Force value through movement, such as V2 or *wh*-movement.

[11] On the syntactic side, Biberauer (2016) points out that Truckenbrodt's (2006) work may indicate that the KRR (see section 1.4.2.1 above) follows from semantic considerations, which in turn provides a challenge for Chomsky's early 2000s ideas suggesting that head movement has no semantic effects and consequently should be relegated to the PF component.

Brandner postulates that the following two structural requirements must be met for Force marking to be encoded. First, since Force may only operate on already formed propositions, it must be able to scope over a complete clause as its complement. Second, to be able to act as a proposition, an event must have a Tense value. Thus, both Tense and Force values must have scope over all verbal projections and be part of the main projection line. Brandner (2004: 109) captures these two requirements by postulating the conditions given in (54), where feature f stands for a Force feature.

(54) A feature f has scope over all verbal projections if:
a. f has a unique lexical realization on a head and m-commands all verbal projections, or
b. f has a lexical realization on a head of a non-VP and is in a spec-head agreement with a head m-commanding all verbal projections.

Condition (54a) states that the Force value can be interpreted from an inserted particle (as in Korean or Persian) or alternatively, as stated in condition (54b), it can be read off via V2 movement, in which the verb leaves VP and receives its Force-value from an XP located in its specifier that bears this feature lexically (for instance, a *wh*-phrase).

On the assumption that all clauses must be typed crosslinguistically, a question that may be asked is how Force can be specified in the languages that have neither Force-related particles nor V2 movement. Brandner suggests that such languages only mark the deviation from declarative. In the case of V2 languages, though, Force is explicitly licensed in all clauses, including declarative clauses. This means that V2 is always motivated by Force, but a particular Force value is specified only in the second step of the V2 derivation, by the prefield constituent that moves to the Specifier above the verb.[12]

Although interesting in spirit, Brandner's assumption that V2 is always motivated by Force-related considerations proves problematic when it is extended to other second phenomena, such as second position cliticization. Namely, as will be shown in section 3.4, Chapter 3, Force-related second position cliticization is distinct from general second position cliticization; moreover, Force-related clitics display rather different syntactic and distributional properties in comparison to the other clitics.

Furthermore, Brandner's proposal is also problematic when applied to the Scandinavian languages, which have been argued to show a Force-related V2 dependency. Namely, it has been observed in the literature that some clauses in these languages clearly have a non-declarative Force value, yet they do not require the

[12] Recall from section 1.4.1 that a similar idea is put forward by Koster (2003), who makes a link between clause type and Tense. He proposes the Tense Second Constraint, which he assumes holds crosslinguistically.

(i) Tense Second Constraint: All languages mark Tense/Type in the "second" position (C^0) of the main clause.

V2 order. For instance, Wiklund (2010) provides examples from Swedish which contain elements that evidently mark some Force value, including speech act adverbials, assertive particles, and swear words, such as *ju* and *nämligen/minsann* in (55). She notes that although these elements overtly encode Force features, the V2 order is not obligatory.

(55) a. Hon upptäckte att han *ju* inte hade rest
she discovered that he you-know not had go
"She discovered that he didn't have to go"
b. Vi upptäckte att de *nämligen/minsann* inte hade kommit
we discovered that you see/indeed not had come
"We discovered that you hadn't come" (Swedish, Wiklund 2010: 33)

In all fairness, the lack of V2 in (55) does not necessarily invalidate Brandner's (2004) postulate of the obligatory clause typing, as it can be assumed that the assertive particles and swear words in (55) function in a similar way as Force-encoding particles in Korean, thus satisfying Brandner's condition mentioned in (54a). See also Julien (2009) for an alternative interpretation of these data.

However, Wiklund (2010) points out another problem for the assumption of a direct link between Force and V2. She shows that even though the V2 pattern is obligatory by default in main clauses in Swedish, there exist matrix clause structures in which V2 is impossible. These structures include exclamatives, which undoubtedly express a specific type of Force-related meaning. In such clauses, the verb cannot occur in second position (see 56) but must remain in situ, which is unexpected if V2 uniformly encodes Force.

(56) a. Att han inte var där!
That he not was here
b. *Att han var inte där! (Swedish, Wiklund 2010: 35)

Furthermore, Wiklund observes that there are also cases of the opposite situation, which are instantiated by V2 orders without any illocutionary force, attested in Icelandic for non-assertive and factive predicates by Jónsson (1996).

Finally, Wiklund (2010) points out a problem with the postulate of a uniform dependency between the strength of assertion and the possibility of the V2 pattern in subordinate clauses. As was stated in section 1.4.2.1, a generalization that has been made in the literature is that in the Scandinavian languages V2 orders are more likely to occur in complement clauses that express a high degree of assertion. Wiklund points out that regardless of the validity of this generalization, the non-V2 order is the default one in subordinate clauses in Swedish, and the highly-asserted subordinate clauses display the V2 order only optionally. Consequently, even though the subordinate clauses in (57) are both selected by a highly assertive verb *say* (class A in Hooper and Thompson's 1973 classification), the V2 order in (57b) is only optional and the non-V2 pattern in (57a) does not indicate

that the subordinate clause is less assertive. The fact that both orders are possible means that the illocutionary force expressed in the subordinate clause is the same whether the verb remains in situ or raises to second position.

(57) a. Olle sa att han inte *hade* läst boken
Olle said that he not had read book-the
b. Olle sa att han *hade* inte läst boken
Olle said that he had not read book-the
"Olle said that he had not read the book" (Swedish, Wiklund 2010: 27)

These facts indicate that the relationship between high assertion (and Force marking in general) and V2 is not uniform. Clauses that express high assertion are not necessarily required to follow the V2 order. Likewise, there exist V2 matrix clauses in Icelandic that do not encode any illocutionary force. Finally, the V2 order in matrix clauses may in fact be precluded when some specific type of Force is expressed, for instance in imperative structures.

On the semantic side, although impressive in its formalism, Truckenbrodt's (2006) analysis of the effects of V2 discussed in section 1.4.2.2 is not without problems either. Holmberg (2015) points out that on the assumption that the semantic features related to assertion are universally located in C^0, a question that arises is why not all languages exhibit the V–to–C verb movement of the German type in the contexts described by Truckenbrodt. A potential answer to this question might be a hypothesis that such semantic features are expressed by a particle located in C^0 in languages without V–to–C verb movement, as in Brandner (2004). Still, Truckenbrodt's theory cannot be then applied to languages such as Breton, in which verb fronting is required in all finite clauses. In this type of languages verb fronting does not have the special semantic function observed in Germanic. Consequently, the sentence types investigated by Truckenbrodt cannot be cross-linguistically determined on the basis of his diagnostics related to the presence or absence of verb movement to C^0.

Summarizing, this section has examined a number of approaches that treat V2 as a way of encoding the illocutionary force of a clause. It has been shown that there is a clear relation between the possibility of the embedded V2 and a Force value related to the strength of assertion in certain Scandinavian languages. Still, even though some syntactic operations that result in the V2 order do express Force, V2 does not seem to be a sufficient or a necessary condition to mark Force. Outside Scandinavian, V2 encodes Force in the case of operations such as *wh*-movement, but it is a matter of debate whether V2 is a means of licensing Force in all declarative clauses. This issue will be touched upon again in Chapter 2 in relation to the diachrony of V2 structures and in Chapter 3, section 3.4, in the context of second position cliticization in Slavic. It will be demonstrated that Force-related verb movement to second position predates general V2 structures observed in contemporary continental Germanic, whereas Force-determined second position

clitic placement involves a special syntactic mechanism that is unrelated to general second position cliticization.

1.4.3. The position of the verb and prefield elements in V2 structures

As has been pointed out earlier, a striking property of V2 orders is that they involve placement of a finite verb after the clause-initial constituent, with few restrictions as to the category of this initial element. In spite of the categorial variation among the prefield constituents, the early analyses of V2 (such as Den Besten 1977/1983) assumed that the verb targets the same syntactic position, C^0. Likewise, the accounts of V2 that have been presented in this chapter so far motivate the operation in a largely uniform way, arguing that it is related to Tense dependency or Force marking.

However, it was observed already in the early 1980s that V2 clauses may have special semantic or pragmatic interpretations depending on the types of elements located in the prefield. For instance, Travis (1984) notes that whereas subjects marked for nominative case have a neutral reading when they occur in the prefield, objects located in front of the verb necessarily have a marked interpretation. For instance, objects located in the prefield in German are interpreted as foci or topics. Thus, the sentence in (58), with the accusative-marked DP in the prefield, could not be used as an answer to the question "what has happened?" but only as an answer to "who has Peter invited?" or "who has invited Hans?"

(58) Den Hans hat der Peter eingeladen
the$_{ACC}$ Hans has the$_{NOM}$ Peter invited
"…that Hans has invited Peter" (German, Fanselow 2002: 230)

The exact reading of the non-subject elements in the prefield is subject to cross-linguistic variation. For example, in Swedish the object moved to the prefield position may not be interpreted as focused but only as (contrastively) topicalized (see Holmberg 2015: 348).

(59) Tidningar läser barnen inte
newspapers read the-children not
"Newspapers, the children don't read" (Swedish, Holmberg 2015: 348)

The observed variation concerning the interpretation of different prefield elements led Travis (1984) to postulate that the finite verb is not always in C^0 in V2 structures in German. When the verb is preceded by the subject, it targets a lower head position, whereas the subject is located in Spec, TP.

Subsequent research on this topic has shown that the interpretational differences between the potential prefield elements are more fine-grained and cannot be

reduced to the subject versus non-subject distinction. For instance, Lenerz (1977) (see also Fanselow 2002) notes that there are a number of structures in German (for instance, psychological and unaccusative predicates and structures with passivized ditransitive verbs) which have the neutral interpretation when the oblique argument (usually marked for dative case), rather than the subject, is located in the prefield. This fact indicates that in clauses such as the ones in (60) the indirect object does not move to Spec, CP, which is an operator position, as it does not receive a topicalized or focused interpretation.[13]

(60) a. Einem Kind wurde das Fahrrad gestohlen
a$_{DAT}$ child was the$_{NOM}$ bike stolen
"The bike was stolen from a child"
b. Einem Schauspieler ist der Text entfallen
a$_{DAT}$ actor is the$_{NOM}$ text forgotten
"An actor has forgotten the text" (German, Fanselow 2002: 231)

Correspondingly, Fanselow (2003: 30) (see also Haider 1993 and Mohr 2005) points out that clauses may also have a pragmatically neutral interpretation in German when the prefield is filled by sentential or temporal adverbs.

(61) Was ist geschehen? What happened?
a. Wahrscheinlich ist ein Zug entgleist
probably is a train derailed
b. Heute morgen ist ein Zug entgleist
Today morning is a train derailed
"(Probably), a train was derailed (this morning)" (German, Fanselow 2003: 30)

The empirical findings reported in this section have given rise to much discussion in the literature concerning the syntactic position of the finite verb in V2 clauses as well as to potential interpretations of the prefield elements. This discussion will be examined in the next subsections, which have the following organization. Section 1.4.3.1 provides arguments for non-uniform verb placement in V2 structures coming from Dutch and German. The main postulate is that at least in some structures the verb targets a lower position, such as T^0. Section 1.4.3.2 addresses recent dialectal and diachronic observations due to Postma (2013), who suggests that the variation with respect to verb placement not only holds for different syntactic operations, but is also observed with respect to different dialects. Finally, section 1.4.3.3 discusses the availability of the V2 order in embedded clauses across Germanic.

[13] On Fanselow's (2002) analysis, the oblique arguments in (60) are fronted to Spec, CP, and the operation is reminiscent of Stylistic Fronting in Icelandic.

1.4.3.1. Syntactic position of the verb in V2 clauses

As has been mentioned in section 1.2, the early analyses of V2 orders in Germanic, such as Den Besten (1977/1983), presume that the verb targets C^0 in matrix clauses, whereas all the elements located in the prefield, such as the subject in (62a) or the adverb *gestern* interpreted as a topic in (62b), are uniformly located in Spec, CP.

(62) a. Hans kam gestern
Hans came yesterday
"Hans came yesterday"
b. Gestern kam Hans
yesterday came Hans
"Yesterday Hans came" (German)

There are a number of theoretical issues that arise if Den Besten's (1977/1983) analysis is adopted. First, this analysis implies that the position preceding the finite verb in Germanic can be both an A-position (when it is occupied by subjects) and an A'-position (when it is filled by operators and topics). This inconsistency can be solved in various ways. For instance, on Rizzi's account (1991), the exact type of syntactic position is determined by agreement. Spec, CP is an A'-position when the verb in C^0 does not agree with the element located in its Specifier (that is, with a topic or an operator). When Spec, CP is occupied by the subject, the subject enters the spec-head agreement relation with the verb, which turns Spec, CP into an A-position.

Another theoretical problem with Den Besten's (1977/1983) analysis has been noted by Zwart (1993a, b), who observes that if the Minimalist assumption saying that every displacement is triggered by a morphosyntactic feature is taken into account, Den Besten's analysis is problematic, as it provides the same analysis for different operations triggered by different features. Namely, it is standardly assumed following Rizzi (1991, 1996) that in *wh*-questions the verb moves to second position in Germanic in order to check the [+wh] feature of C^0, whereas the element located in Spec, CP (a *wh*-element or a topicalized phrase) checks the [+wh] or the [+operator] feature of C^0 in the spec-head configuration. However, Zwart observes that it is problematic to assume that movement of the finite verb in affirmative clauses is triggered by a [+wh] feature or that the movement of the subject is due to a [+ operator] feature on C^0. If anything, such operations might be motivated by subject-verb agreement or Case. See Zwart (1993a: 90) for more discussion. In all fairness, Den Besten developed his analysis in the 1970s, during the time when movement in syntax was optional and it did not have to be motivated by a trigger, the way it is in Minimalism. Therefore, it might be not fair to argue against his account on purely theoretical grounds.

However, Zwart also points out a number of empirical issues with the assumption that the verb uniformly targets C^0. Some of them were mentioned in the introduction to this section: as has been observed by Travis (1984), the semantic import

of the prefield is different depending on whether it is filled in by the subject or by some other elements. On his own part, Zwart (1993b) refers to data involving pronominal clitics in Dutch, first examined by Koster (1978) and Travis (1984), which indicate that subjects and topics are located in different positions. Thus, the examples in (63) and (64) present an asymmetry between subject and object clitics in Dutch. In subject-initial main clauses subjects may be reduced into clitics in first position (see 63b), but clause-initial objects in topicalizations may not (see 64b).

(63) a. Ik zie hem
I see him
"I see him"
b. 'k zie hem
I_{CL} see him

(64) a. Hem zie ik
him see I
"Him, I see"
b. *'m zie ik
him_{CL} see I (Dutch, Zwart 1993b: 301)

According to Zwart, the contrast between (63) and (64) may suggest that either the topic occupies a different position than the subject or that they are located in the same position, but this position is of a different type depending on whether the initial element enters a spec-head agreement relationship with the verb or not (recall Rizzi's 1991 idea alluded to earlier in this section).

Another contrast is related to the position of the clitics with respect to the complementizer. Namely, whereas subject clitics obligatorily occur after the complementizer in subordinate clauses, as in (65a), they must occur after the verb in non-subject-initial main clauses, as in (66b–c) and (67b–c).

(65) a. dat 'k vandaag appels eet
that I_{CL} today apples eat
"that I eat apples today"
b. *dat vandaag 'k appels eet
c. dat vandaag iedereen appels eet
that today everybody apples eat
"that today everybody eats apples" (Dutch, Zwart 1993b: 305)

(66) a. Natuurlijk eet 'k vandaag appels
of course eat I_{CL} today apples
"Of course I eat apples today"
b. *Natuurlijk eet vandaag 'k appels
c. Natuurlijk eet vandaag iedereen appels
of course eat today everybody apples (Dutch, Zwart 1993b: 305)

(67) a. Waarom eet 'k vandaag appels?
why eat I_{CL} today apples

b. *Waarom eet vandaag 'k appels?
c. Waarom eet vandaag iedereen appels?
why eat today everybody apples (Dutch, Zwart 1993b: 305)

Zwart argues that the contrast indicates that the verb occupies different positions in the structure depending on whether it is the subject or some other element that is clause-initial.

Another contrast is related to the distribution of clitic versus non-clitic subjects. The data in (65c), (66c), and (67c) show that non-clitic (full DP) subjects may be separated from the verb or the complementizer with an adverb, but subject clitics may not and they have to remain right-adjacent to the verb or the complementizer. According to Zwart, these facts demonstrate that the verb is in C^0 in topicalizations and *wh*-questions in Dutch.

The final contrast concerns the position of the subject clitic with respect to the verb. As shown in (68), the clitic precedes the verb in subject initial main clauses. However, the clitic may not precede the verb or the complementizer in embedded clauses, topicalizations, and *wh*-questions (see 69). Zwart argues that if the position of the clitic in (66a) and (67a) is taken to show that the verb is in C^0 in these examples, it also indicates that the verb in (68a) is not in C^0 but rather in a lower functional head.

(68) a. 'k Eet vandaag appels
I_{CL}eat today apples
"I eat apples today"
b. *Eet 'k vandaag appels (Dutch, Zwart 1993b: 305)

(69) a. *'k dat eet vandaag appels
I_{CL}that eat today apples
b. *Natuurlijk 'k eet vandaag appels
of course I_{CL} eat today apples
c. *Waarom 'k eet vandaag appels?
why I_{CL} eat today apples (Dutch, Zwart 1993b: 306)

Eythórsson (1995: 207ff.) revisits Zwart's analysis of Dutch V2 data and points out that German shows a similar distribution of pronominal clitics (see also Thiersch 1978 for an early detailed description of the properties of clitics in German), which indicates that the finite verb in German may also target either C^0 or a lower position in the structure. Thus, Eythórsson (1995: 208) shows that subject pronominal clitics adjoin to the complementizer position in subordinate clauses, as in (70a), as well as in non-subject-initial main clauses, as in (70b) and (70c).

(70) a. daß er ihm gestern ein Buch geschenkt hat
that he_{CL} him yesterday a book sent has
"that he sent him a book yesterday"

b. Freilich hat er ihm gestern ein Buch geschenkt
of course has he$_{CL}$ him yesterday a book sent
"Of course he sent him a book yesterday"
c. Warum hat er ihm gestern ein Buch geschenkt?
why has he$_{CL}$ him yesterday a book sent
"Why did he send him a book yesterday?" (German, Eythórsson 1995: 208)

Moreover, Eythórsson demonstrates that the subject may have a different distribution depending on its clitic/non-clitic status: subject pronominal clitics may not occur to the right of the object, as shown in (71), whereas full DP subjects, such as *Johann* in (72) are allowed in this position.

(71) a. *daß ihm er gestern ein Buch geschenkt hat
that him he$_{CL}$ yesterday a book sent has
b. *Freilich hat ihm er gestern ein Buch geschenkt
of course has him he$_{CL}$ yesterday a book sent
c. *Warum hat ihm er gestern ein Buch geschenkt?
why has him he$_{CL}$ yesterday a book sent (German, Eythórsson 1995: 208)

(72) a. daß ihm Johann gestern ein Buch geschenkt hat
that him Johann yesterday a book given has
"that John gave him a book yesterday"
b. Freilich hat ihm Johann gestern ein Buch geschenkt
of course has him Johann yesterday a book given
"Of course John gave him a book yesterday"
c. Warum hat ihm Johann gestern ein Buch geschenkt?
why has him Johann yesterday a book given
"Why did Johann give him a book yesterday?" (German, Eythórsson 1995: 208–209)

Importantly, since by and large clitics are not phonologically distinct from full forms in German, it can be assumed that the pronominal subject in the clause-initial position in (73) is a clitic.

(73) Er hat ihm gestern ein Buch geschenkt
he has him yesterday a book sent
"He gave him a book yesterday" (German, Eythórsson 1995: 209)

Eythórsson argues that if the subject pronoun in (73) is taken to be a clitic, the grammaticality of this example is unexpected on the assumption that the verb targets C^0 in all main clauses. If this were the case, the clitic would be picked up by the verb on the way to C^0. Moreover, the clitic would be expected to follow the verb, the way it does in the operations that unambiguously involve verb raising to C^0, such as topicalizations and *wh*-questions (see 74a–b), rather than precede it. As shown in (74a), in such structures the subject cannot precede the complementizer either.

(74) a. *Freilich er hat ihm gestern ein Buch geschenkt
of course he has him yesterday a book sent
b. *Warum er hat ihm gestern ein Buch geschenkt?
why he has him yesterday a book sent
c. *er daß ihm gestern ein Buch geschenkt hat
he that him yesterday a book sent has
(German, Eythórsson 1995: 209–210)

Eythórsson points out that in order to maintain the standard account that stipulates universal verb movement to C^0 in main clauses in German, one might try to account for the grammaticality of (73) by positing that initial pronouns in main clauses are never clitics. However, such a claim would not be on the right track. Eythórsson states that it is more likely that these pronominal forms can be clitics or full forms depending on the context. In (73), the subject is a clitic on a flat intonation reading; if it is stressed, it may be a strong pronoun. Correspondingly, Eythórsson implies that the finite verb in (73) does not land in C^0 on the flat intonation reading of the subject.

Eythórsson finds additional support for his idea that clause-initial pronominal forms can be clitics in the data from some South German dialects (Montafonerisch/Hochalemannisch, see Abraham and Wiegel 1993), in which pronouns may occur clause-initially in their phonologically reduced forms. Eythórsson (1995) takes their reduced phonological make-up to indicate that they are clitics.

(75) a. -s regnt (= es regnet)
it rains
"It is raining"
b. -r hot- am ötschas ge: (= er hat-ihm etwas gegeben)
he has him something given
"He has given him something" (South German dialects, Eythórsson 1995: 211)

Eythórsson takes all these facts to mean that Zwart's analysis of the non-uniform position of the verb in V2 contexts is also borne out by the German data. In other words, he assumes that also in German the finite verb in V2 structures may land either in C^0 or in a lower head position.

1.4.3.2. Verb agreement marking in Dutch and West Germanic dialects

This subsection investigates agreement marking on the verb and the complementizer in Standard Dutch as well as some Dutch, Frisian, and Limburgian dialects. The agreement properties provide more evidence for the idea that the verb in V2 clauses does not target a uniform syntactic position. Some of these agreement facts are discussed in more detail in this subsection, as they have inspired an important proposal due to Postma (2013), who suggests that the variation concerning the position of the verb holds not only across different syntactic structures but also across different dialects within Germanic. In his view, whereas in some dia-

lects the verb in V2 clauses lands in C^0, in some other dialects it may be located in a lower head position.

Thus, apart from the variation in the position of subject clitics and full pronouns in Dutch that was discussed in the previous section, another syntactic property suggesting that the verb targets different positions in the structure in various V2 constructions that has provoked considerable discussion in the literature is subject-verb agreement in so-called inversion paradigms. Verbs in Dutch assume a different morphological make-up depending on whether subject-verb inversion has taken place. As shown in (76)–(78), the verb ends in *-t* in subject-initial main clauses and in embedded clauses. By contrast, the verb takes the form of a bare stem in non-subject initial main clauses.

(76) a. dat jij naar huis gaat/*ga
that you to house go
"that you are going home"
b. Jij gaat/*ga naar huis (Dutch, Zwart 1993b: 309)

(77) a. Vandaag ga/*gaat jij naar huis
today go you to house
"Today you go to your house"
b. Wanneer ga/*gaat jij naar huis?
when go you to house
"When are you going to your house?" (Dutch, Zwart 1993b: 309)

(78) a. Jij loopt
you walk
"You walk"
b. dan loop je
then walk you
"Then you walk" (Dutch, Postma 2013: 221)

The process is more robust in some Dutch dialects than in Standard Dutch (see Goeman 1999 and Postma 2013), but it also regularly shows up in the 2nd person singular forms of the verb. It is sometimes assumed that the process has a phonological motivation, but as observed by Postma (2013), a purely phonological explanation is not sufficient, as it does not account for all cases of the *t*-drop. For instance, it occurs in the non-verbal cases such as *puist–puisje/*puistje* 'pimple/small pimple,' but it fails to show up in *plaat–plaatje* 'plate/little plate.'

Zwart (1993a) takes the morphological contrast to be significant and argues that it means that the verb targets a different syntactic position in the respective structures. He argues that the forms with the *t*-ending in (76a)–(78a) represent the T-inflection, whereas the forms without the *t*-ending in (76b)–(78b) represent the C-inflection, as illustrated in (79).

(79) a. [$_{TP}$ wi speult op straat t] (V2 in TP)
we play on street

b. [$_{CP}$ - speul-e [$_{TP}$ wi t op straat t]] (V2 in CP) (Postma 2013: 230)
play we on street

Moreover, inflection may be also spelled out on the complementizer through complementizer agreement. In a nutshell (see Zwart 1993b for a detailed description of the facts and an analysis), in some dialects of Dutch and German, the complementizer shows person and/or number agreement with the subject.

(80) a. of-s toe kom-s
whether$_{2SG}$ you come$_{2SG}$
b. of ik kom
whether I come$_{1SG}$ (Groningen dialect, Van Ginneken 1939)

A rough generalization is that if a dialect has both complementizer inflection and two systems of inflection (with the inverted and non-inverted verb), then the inflection on the complementizer is the same as the inflection of the inverted form of the verb. For instance, in (81) the complementizer *datte* and the verb *speule* are both C-forms with *e*-inflection.

(81) a. [$_{TP}$ wi speult op straat t] (V2 in TP)
b. [$_{CP}$ - speul-e [$_{TP}$ wi t op straat t]] (V2 in CP)
c. datt-e [$_{TP}$ wi speul-t op straat t] (Postma 2013: 230)

Zwart (1993a: 208–209) tacitly proposes that a similar assumption can be made about dialects of Dutch and other Germanic languages without overt agreement contrasts. That is, he suggests that although these other languages lack overt agreement morphology, agreement is represented also in these languages as "an abstract syntactic relation," on a par with Case in English, a language without overt morphological case on non-pronominal NPs.

In a recent paper, Postma (2013) points out that Zwart's hypothesis of a general morphological agreement that holds irrespective of its morphological realization across Germanic leads to an overgeneralization. Postma observes that there is a clear systematic dichotomy between the Germanic dialects that display overt agreement in the inversion paradigms and those that do not. He links the agreement facts to the loss of the second person pronoun *du* 'thou' in the respective dialects of Dutch. In these dialects, *du* has been replaced by the new pronouns *gij/jij/jii* 'you.' The change is sometimes attributed to sociolinguistic developments, such as the usage of the honorific plural pronouns such as *gij* 'you' with a singular reference (see Aalberse 2009 for an overview), yet Postma points out that such accounts do not predict in which dialects this change occurs nor do they explain why *du* disappears completely, instead of being only (gradually) removed to some limited contexts.

As a starting point, Postma (2013) takes Aalberse's (2009) observation that *du* falls out of use together with the decline in the verbal inflection to be significant. However, a detailed study of Dutch dialects allows him to find a more in-depth

correlation: *du* disappears in those dialects that also show inversion paradigms; in other words, double paradigms and the preservation of *du* anti-correlate. Moreover, Postma notices an internal limit within the double paradigms: they are only found in 2nd person, singular or plural, and in the 1st person plural, but never with the 3rd person singular or plural or the 1st person singular. Postma accounts for this distribution by following Postal's (1969) idea that plurality is expressed only in 3rd person forms, whereas the traditional 1st and 2nd person "plural" variants are just combinations of different person features. If Postal's feature representations are taken into account, it seems that double paradigms are associated with [2]-feature. The distribution of the double paradigms and the way they are associated with Postal's features is presented in chart (82).

(82) Person dependencies of double paradigms in Dutch dialects (Postma 2013: 226)

Person	Double paradigm	Example	Postal features	Allowed readings
1sg	no		1	[1]
2sg	yes	je leeft/leef je	2	[2]
3sg	no		3	[3]
1pl	yes	wi leeft/leve wi	1+2 or 1+3	[1] [2] [3]
2pl	yes	ge leeft/leefde ge jullie leeft/leven jullie	2+3	[2] [3]
3pl	no		3	[3]

Postma presents the following syntactic account of the dependency between the disappearance of *du* and the availability of inverse verbal paradigm. He proposes to analyze pronoun *du* as a position-dependent spellout of the 2nd person pronoun, while the two paradigms of the verb are analyzed as a position-dependent spell-out of the verb. The dialects without *du* have a different verbal template in syntax, as manifested by the raise of the inverse paradigm.

Along with Zwart (1993a), Postma assumes that the inverse paradigm represents two positions in the structure: the elements with the *t*-ending (for instance *je leeft* in 82) belong to T-inflection, while the bare forms (for instance *leef je* in 82) belong to the C-inflection. Unlike Zwart though, who assumes that all V2 dialects in Germanic may place the verb either in T^0 or C^0 irrespective of the availability of the overt morphological realization of the agreement patterns on the verb, Postma suggests that the finite verb in the dialects without the double paradigm may only target C^0, and it is only the dialects with the two paradigm options that may locate the finite verb both in T^0 and C^0.

Moreover, Postma shows that his proposal has repercussions for the assumptions about the position occupied by the subject. Recall that under Den Besten's (1977/1983) analysis, the subject is in Spec, CP in direct contexts (that is when the subject occupies the prefield) and in Spec, TP in inversion contexts. Under Zwart's

analysis, the subject is always in Spec, TP. Postma proposes that if a particular syntactic position of the verb gives rise to different spell-outs of *phi*-features, the difference could also be reflected in the feature spell-out of the subject pronouns. This is indeed the case in Frisian, which does not have a double paradigm of verbs, but it has a double spell-out of pronouns. As shown in (83), Frisian has *dou* in direct (Spec, CP) contexts and *-e-*, *-ou* or a null form in inversion (Spec, TP) contexts.

(83) a. {dou/*ou/*ø} giest der hinne
you go$_{2SG}$ there to
b. dan giest {ø/-ou} der hinne
then go$_{2SG}$ you there to (Frisian, Postma 2013: 231)

To summarize, Postma's proposal implies that West Germanic dialects without the inversion paradigm always locate the verb in C^0, and the subject can occupy two positions (Spec, TP and Spec, CP), as illustrated in (84a). Conversely, West Germanic dialects with the inversion paradigm locate the finite verb either in C^0 or in T^0, but the subject is always hosted in Spec, TP, as indicated in (84b).

(84) a. [$_{CP}$dou rinst –
you walk
[$_{CP}$ dan rinst [$_{TP}$ -ou …]]
then walk you
b. [$_{TP}$ jij loopt] –
you walk
[$_{CP}$ dan loop [$_{TP}$ jij …]
then walk you (Postma 2013: 232)

On a more general level, Postma (2013) suggests that the two analyses of V2 by Den Besten (1977/1983) and Zwart (1993a, b) are not really competing accounts, but rather, they describe two types of constructions found in Germanic. The Dutch dialects that were affected by the loss of *du* switched from Den Besten's structures (with double subject pronoun spell-out but without double verbal spell-out) into Zwart's structures, with the double spellout of the verb in C^0 and T^0).

Postma's proposal is in line with a general idea developed in this chapter, which is the assumption that the concept of V2 is an umbrella term for a number of different structures that may have various triggers and syntactic properties. Their only commonality is that they lead to the placement of the finite verb immediately after the clause-initial constituent.

1.4.3.3. The distribution of the complementizer and the verb in subordinate clauses

This section discusses another property of V2 patterns that supports the idea of a non-uniform position of the finite verb in V2 contexts across languages. It is concerned with the availability of the V2 order in embedded clauses.

Recall from section 1.2 that in Dutch and most other Germanic languages the V2 order is impossible in embedded clauses (see 85–87). This property lends support to Den Besten's (1977/1983) proposal, which states that the verb always targets C^0 in main clauses. In subordinate clauses, C^0 is occupied by the complementizer, so the finite verb must remain in situ, adjacent to the past participle, as shown in (88–90) for Dutch. Furthermore, the ungrammaticality of (89a) shows that embedded topicalization of arguments is normally not acceptable in Dutch, though this fact is not relevant for the current discussion. All the Dutch examples come from Zwart (1993b: 297).

(85) *dat ik heb een huis met een tuintje$_{DIM}$ gehuurd
that I have a house with a garden rented (Dutch, Zwart 1993b: 297)

(86) a. *dat [een huis met een tuintje] heb ik gehuurd
that a house with a garden$_{DIM}$ have I rented
b. *dat gisteren heb ik een huis met een tuintje gehuurd
that yesterday have I a house with a garden$_{DIM}$ rented
(Dutch, Zwart 1993b: 297)

(87) *waarom heb ik gisteren een huis met een tuintje gehuurd
why have I yesterday a house with a garden$_{DIM}$ rented
(Dutch, Zwart 1993b: 297)

(88) dat ik een huis met een tuintje gehuurd heb
that I a house with a garden$_{DIM}$ rented have
"that I have rented a house with a small garden" (Dutch, Zwart 1993b: 297)

(89) a. *dat [een huis met een tuintje] ik gehuurd heb
that a house with a garden$_{DIM}$ I rented have
b. dat gisteren ik een huis met een tuintje gehuurd heb
that yesterday I a house with a garden$_{DIM}$ rented have
"that I rented a house with a small garden yesterday" (Dutch, Zwart 1993b: 297)

(90) waarom ik een huis met een tuintje gehuurd heb
why I a house with a garden$_{DIM}$ rented have
"why I have rented a house with a small garden" (Dutch, Zwart 1993b: 297)

In addition, although V2 is disallowed in embedded clauses in German as well, the verb raises to second position in subordinate clauses if the complementizer is not present, which further supports the idea that the finite verb and the complementizer compete for the same position.

(91) a. Johann glaubt dass er Maria immer noch liebt
John thinks that he Mary still loves
b. *Johann glaubt dass er liebt Maria immer noch
John thinks that he loves Mary still (German, Zwart 1993b: 298)

(92) a. *Johann glaubt er Maria liebt immer noch
John thinks he Mary loves still
b. Johann glaubt er liebt Maria immer noch
John thinks he loves Mary still (German, Zwart 1993b: 298)

(93) a. *Johann glaubt immer noch er Maria liebt
John thinks still he Mary loves
b. Johann glaubt immer noch liebt er Maria
John thinks still loves he Mary
"John thinks he still loves Mary" (German, Zwart 1993b: 298)

However, the complementary distribution between the finite verb and the complementizer is by no means universal across Germanic. For instance, recall from section 1.2 that Yiddish allows V2 structures in embedded clauses introduced by a complementizer, as illustrated in (94a). The position of the verb in the Yiddish example is contrasted with the corresponding German clause in (94b).

(94) a. Avrom gloybt az Max *shikt* avek dos bukh
Avrom believes that Max sends away the book
"Avrom believes that Max sends away the book" (Yiddish)
b. Sigrid glaubt dass Waltraud wahrscheinlich das Buch gekauft *hat*
Sigrid thinks that Waltraud probably the book bought has
"Sigrid thinks that Waltraud probably has bought the book"
(German, Holmberg 2015: 356)

Likewise, in Icelandic and some dialects of Faroese the verb also obligatorily occurs in second position in both main and subordinate clauses, as shown for Icelandic in (95).

(95) a. Jón hefur líklega keypt bókina
John has probably bought book-the
"John has probably bought the book"
b. að Jon hefur líklega keypt bokina
that John has probably bought book-the
"that John has probably bought the book" (Icelandic, Eythórsson 1995: 197)

Eythórsson (1995) points out that the V2 order was permitted in subordinate clauses in all old Scandinavian languages, so the restriction against V2 in such contexts in contemporary Scandinavian is an innovation. Conversely, Biberauer (2015, 2016) observes that modern spoken Afrikaans seems to be developing in the opposite direction than Scandinavian, as it increasingly admits V2 in subordinate clauses.

The data presented in this subsection are important for two reasons. First, at first sight they are problematic for Travis's (1984) and Zwart's (1993a) accounts of V2, as these analyses cannot capture the complementarity between the complementizer and the finite verb in a straightforward way. Second, they provide support for the idea pursued in this chapter of a non-uniform verb placement in V2 structures.

Concerning the first issue, Zwart (1993a: 8) argues that it is possible to account for the complementarity on the assumption that the complementizer stays in a specific relationship with the functional head below it, and due to this relationship, the verb does not need to raise to T^0/I^0 when the complementizer is present. This is what is also roughly proposed by Travis (1984), who suggests that INFL (or I^0/ T^0, using more recent terms) is located in Dutch to the left of VP and the verb moves in order to license empty heads, in line with Empty Category Principle. Given that in the case of embedded V2 the complementizer governs and thus licenses the empty INFL/I^0/T^0, the verb is not required to move.

On his own part, Zwart (1993a) proposes a solution in terms of a feature checking mechanism, in line with the early Minimalist framework. He suggests that the movement of the verb to C^0 takes place in order to check nominal [N] features of $AgrS^0$ (or I^0/T^0). In case the complementizer is located in C^0, the movement of the verb is redundant, as the N-features of $AgrS^0$ are checked off by the complementizer. In the absence of the complementizer, the verb must move in order to check the N-features of $AgrS^0$. The workings of the mechanism are sketched in a simplified form in (96) and (97).

(96) C present:

(97) C absent:

Zwart (1993a: 195)

Unlike Travis (1984), Zwart (1993a) assumes a sentence structure with a head-initial IP for all Germanic languages. Since the verb is in second position in subject-initial clauses, the implication of this proposal is that there is a functional head between VP and CP across Germanic, such as TP (or IP and AgrSP, using early Minimalist terminology).

There are also a number of other, more recent analyses explaining the complementary distribution between the complementizer and the verb in V2 structures on the assumption that the verb does not necessarily target C^0. For instance, Postma (2013), following the ideas developed by Pesetsky and Torrego (2004), proposes that the complementizer *dat* 'that' in Dutch is a joint spellout of T+C, which in consequence makes movement of the verb superfluous in the presence of the complementizer.

The exact theoretical explanation of the complementarity between the complementizer and the verb in Dutch and most other Germanic languages is not strictly relevant for the assumptions made about the nature of V2 in this chapter. What is crucial, though, is the fact that we can observe variation in the distribu-

tion of V2 in subordinate clauses in Germanic, which synchronically is possible only in Icelandic, Faroese and Yiddish. This variation has led some linguists to draw a distinction between symmetrical V2 languages (that is, the ones that permit embedded V2 orders) and asymmetrical V2 languages (that is, Dutch, German and all the other languages that disallow embedded V2), or I-V2 and C-V2 languages, respectively. However, the data concerning embedded V2 in Norwegian and Swedish presented in section 1.4.2.1 may suggest that the division between these two types of languages is less sharp and less significant than was originally assumed in the literature. For instance, Holmberg (2015: 357) points out that even though the V2 order is possible in all types of subordinate clauses in Icelandic, it is required only in complement clauses, whereas in relatives and adverbial clauses it is optional, as shown in (98); see Sigurðsson (1990) for details.

(98) fyrst einhverjir stúdentar (skiluðu) ekki (skiluðu) verkefnum
as some students (handed-in) not (handed-in) assignments
"…as some students didn't hand in assignments" (Icelandic, Wiklund et al. 2007: 225)

Karitiana, a non-Germanic V2 language, provides additional empirical evidence for the idea that the division between symmetrical and asymmetrical V2 languages is less prominent than was originally assumed. Recall from section 1.4.1 that in Karitiana the verb obligatorily moves to C^0 in main clauses, where according to Storto's (1999) analysis it checks tense and agreement features. In subordinate clauses, there is no agreement or tense morphology present, and the verb is clause-final.[14] Importantly, the lack of tense morphology is the only explicit way of marking clause subordination because there are no distinct complementizers in this language. This property indicates, in Storto's (2003) view, that the unavailability of V2 is not really the result of the presence or absence of an element in C^0. Rather, it may be related to the fact that illocutionary force is a root phenomenon, so it cannot be expressed in subordinate contexts.

1.4.4. Ways of filling the prefield — Frey's (2006) taxonomy

The previous section has examined arguments that have been put forward in favor of the hypothesis that although the verb in V2 structures occurs after the clause-initial constituent, there is no designated syntactic position that the verb targets in all structures and dialects. Suitable evidence for this hypothesis has been drawn from different semantic and syntactic effects that can be observed in V2 orders in different clausal environments across Germanic. Importantly, the main motivation for the hypothesis of a non-uniform verb placement in V2 structures initially came

[14] The status of agreement in Karitiana is subject to some controversy; what is clear though is that there is a Tense/V2 dependency and that tense marking is only available in matrix clauses, in which the verb occurs in second position. See Storto (1999, 2003) for an extensive discussion.

from the observations concerning the semantic import of the prefield material, as in Travis's (1984) study. These observations will be addressed in more detail in the present section. It will be shown that the non-uniformity of the verb placement is accompanied by variation in the syntactic mechanisms of filling the prefield.

Recall from section 1.2 that a standard assumption about V2 is that it involves two independent syntactic operations: V–to–I–to–C movement (or, as was shown in the previous section, potentially to a lower head position) and XP-movement to Spec, CP or some other specifier. This section addresses the latter operation, using the taxonomy proposed by Frey (2006) for German. Frey (2006) argues that in German the prefield position can be filled in three ways: via Base Generation, Formal Movement, and A'-movement. The distinction is based on the pragmatic effect that these operations trigger and on their contextual restrictions. Frey's proposal is based on German data; in this section I extend his taxonomy to some other Germanic languages and also show the way his proposal challenges one of the important assumptions that have been made about V2 in the literature.

1.4.4.1. Base Generation

The first strategy of filling the prefield involves "Base Generation." According to Frey (2006), this strategy applies to adverbials that are merged in Spec, CP and are licensed by C^0.

(99) a. [Am Rande bemerkt] bin ich etwas enttäuscht von dir
by the way am I somewhat disappointed by you
"By the way, I am a bit disappointed with you"
b. [Wenn seine Frau sich nicht irrt,] reist Karl nach Lund
if his wife REFL not is wrong travels Karl to Lund
"If Eva his wife is correct, Karl will travel to Lund"
c. [Kein Wunder] spricht Peter so gut Französisch
no wonder speaks Peter so well French
"No wonder Peter speaks French so well"
d. [Ein Glück] habe ich den Regenschirm dabei
a luck have I the umbrella with me
"Luckily, I had the umbrella with me" (German, Frey 2006: 243)

Frey assumes that the prefield elements in (99) are base-generated. His assumption is based on syntactic and semantic evidence. The syntactic evidence comes from his observation that, as shown in (100), these elements are unacceptable when they are located in the middle field unless they are used as intonationally marked parentheticals. For reasons of clarity, example (100b) is slightly modified with an extra binding relation.

(100) a. *Ich bin [am Rande bemerkt] etwas enttäuscht von dir
b. *weil jeder Linguist$_i$, [wenn sich seine$_i$ Frau nicht irrt], nach Lund reist
since every linguist if REFL his wife not is wrong to Lund travels

c. *Peter spricht [kein Wunder] so gut Französisch
d. *Ich habe [ein Gluck] den Regenschirm dabei (German, Frey 2006: 243)

The semantic evidence for the base generation of these constituents comes from their non-integration with the propositions rendered by these clauses. Thus, Frey observes that while the prefield elements in (99a–b) make meta-linguistic statements, the ones in (99c–d) add an emotive meaning typical of exclamatives. Since exclamatives are typically licensed by C^0, Frey argues that the same mechanism applies in the case of these prefield elements: they may only occur in Spec, CP, which suggests that they are base-generated there, entering a licensing relation with C^0.

If correct, Frey's proposal about the potential base-generation of the prefield constituent challenges a crucial assumption about the nature of V2 movement, conceived of as a combination of two movement operations: head movement of the verb to C^0 or a lower head projection and of some XP material to the specifier preceding the finite verb. Recall from section 1.2 that this assumption was used, for example, to determine which elements count as eligible prefield constituents as well as in support of the theoretical statement about V2 being a constraint on syntactic movement rather than on linear representation. If Frey's observation is confirmed by data from other Germanic languages, some of the theoretical assumptions that have been made about V2 will perhaps need to be modified.

1.4.4.2. Formal Movement

Another option of filling the prefield is the process that Frey terms "Formal Movement." It consists in preposing the highest constituent located in the middle field to the sentence-initial position preceding the verb. This operation is semantically and pragmatically vacuous because as a result of the movement the raised element does not acquire any new pragmatic or semantic import in addition to its own lexical content.

Formal movement is exemplified for the expletive *es* in the weather construction in (101a), in which according to Frey *es* raises to Spec, CP. Although this is a case of A'-movement, it is a special type of A'-operation because it does not have a semantic effect. Moreover, the fact that the expletive *es* cannot undergo long movement (see 101b) indicates that it originates as the highest element in the middle field. Expletives are semantically vacuous so they cannot be topicalized or emphasized, thus they preserve the same semantics they had in the position where they were base-generated.

(101) a. Es_i wird $t_i$bald regnen
it will soon rain
"It will rain soon"
b. *Es_i sagt Karl, dass $t_i$bald regnen wird
it says Karl that soon rain will
"Karl says that it will rain soon" (German, Frey 2006: 240)

In some cases Formal Movement may apply to elements that have been previously scrambled to the highest position in the middle field, such as the PP *mit der Axt* in (102). The scrambling of this PP has resulted in its pragramatically marked interpretation. Sill, if this element undergoes further preposing via Formal Movement, it will not acquire any new pragmatic or semantic import.

(102) a. (dass) Otto mit der Axt den Baum gefällt hat → (scrambling)
that Otto with the axe the tree cut has
"… that Otto has cut the tree with the axe"
b. (dass) [mit der Axt]$_i$ Otto t$_i$ den Baum gefällt hat → (Formal Movement)
c. [mit der Axt]$_i$ hat t'$_i$ Otto t$_i$ den Baum gefällt hat (German, Frey 2006: 241)

Instances of purely formal, semantically vacuous movement that Frey refers to as Formal Movement have been observed in V2 structures also outside German. For example, Holmberg (2015: 372–373) addresses cases of the expletive pronoun insertion in Icelandic (see 103a), which is a purely formal condition resembling the EPP requirement, which states that the subject position must be filled by an overt element. However, Holmberg (2015) shows that the expletive pronoun *það* occupies Spec, CP, rather than Spec, TP in V2 main clauses, on a par with the constituents that undergo Formal Movement in German. He draws evidence for the position of *það* from its distribution in *yes-no* questions and in clauses introduced by temporal adverbials (see 103b–c). The expletive pronoun is excluded in such contexts, which suggests that it is located in Spec, CP rather than Spec, TP.

(103) a. Það rignir
It rains
"It's raining"
b. *Rignir (*það)?
rains it
"Is it raining?"
c. Nú rignir (*það)
now rains it
"It's raining now" (Icelandic, Holmberg 2015: 372)

If correct, the Icelandic data in (103a) provide further support for Frey's postulate of Formal Movement as a case of A'-movement to Spec, CP that is not triggered by a semantically interpretable feature and does not bring any semantic or pragmatic effects.

1.4.4.3. A'-movement

The final option involves filling the prefield by elements that undergo "true" A'-movement. Such elements receive non-neutral interpretation, such as that of topics or foci, and are also pronounced with a pitch accent. This type of operation is exemplified in (104b) with the DP *Den Max*, which is interpreted as a contrastive topic.

(104) Ich erzähle dir was über Max
I tell you something about Max
"I am telling you something about Max"
a. Den Max sollte der Chief mitnehmen
the$_{ACC}$ Max should the boss take-along
"Max should take the boss along"
b. Den Max meint Eva, dass der Chief mitnehmen sollte
the$_{ACC}$ Max thinks Eva that the boss take-along should
"Max thinks that Eva should take the boss along" (German, Frey 2006: 244)

Frey observes that although *Den Max* occurs in (104a) and (104b) and in both cases it represents old information that is interpreted as a topic, the readings of these two clauses are not the same. In example (104a) *Den Max* is hosted in its local prefield and it does not have to receive a pitch accent. Conversely, in (104b) *Den Max* has undergone long movement and is pronounced with a pitch accent. These elements also have different interpretations. Namely, (104a) is a statement about *Max* without any reference to other people, whereas in (104b) *Max* is understood as discussed in relation to other people who have already been mentioned. In other words, unlike (104a), example (104b) implies a contrast and *Den Max* is interpreted as a contrastive topic. This is the only type of movement to prefield that according to Frey gives rise to interpretational differences.

Although the "true" A'-movement to prefield occurs across all V2 languages, the interpretation of the elements that undergo this movement is subject to some variation. For instance, Holmberg (2015: 371–372) provides a survey of the effects triggered by different prefield constituents in the Scandinavian languages and observes that when an object is fronted to the prefield in Swedish, it may assume the function of aboutness topic (see also Frey 2004 and Frascarelli and Hinterhölzl 2007), as indicated in (105), which according to Holmberg can be interpreted as a continuation of the utterance "Slumdog Millionaire is wonderful."

(105) Den filmen får du bara inte missa
that film must you just not miss
"You simply mustn't miss that film" (Swedish, Holmberg 2015: 371)

Moreover, on a par with German, the object can also be interpreted as contrastive topic, as shown in (106), which can be used in response to the question "Do you see a lot of film and theatre?"

(106) Film går jag mycket på, men inte teater
film go I much on, but not theatre
"I go to a lot of films, but not theatre" (Swedish, Holmberg 2015: 372)

Still, there are at least two types of interpretation that the object cannot assume when it is located in the prefield. First, it cannot be used to express contrastive focus, as in (107a); for instance as a correction of the claim "I hear you like theatre

a lot." Second, it cannot perform the role of new information focus, as shown in (107b), when used as a reply to the question "What book are you reading?"

(107) a. #Film gillar jag, inte teater
film like I not theatre
Intended reading: "It's film I like, not theatre"
b. #Harry Potter läser jag
Harry Potter read I
Intended reading: "I'm reading Harry Potter" (Swedish, Holmberg 2015: 372)

To summarize, the present section has demonstrated that although V2 orders show a uniform linear order, with a tensed verb preceded by phrasal prefield material, the prefield elements exhibit considerable variation, related to both their interpretation and the way they reach the preverbal position in syntax. Contrary to the common assumption that the prefield element is always a result of syntactic movement to Spec, CP (or some other specifier of the head occupied by the finite verb), there seem to be cases of base generation of certain adverbs that are licensed in this position by C^0. Otherwise, the prefield hosts elements that reach this position via movement. The movement can be of a purely formal type, which does not lead to a pragmatically or semantically marked interpretation of these elements and is strictly local, or it can also be exemplified by "true" long distance A'-movement that coincides with additional semantic and pragmatic import assumed by the moved elements, coupled with a pitch accent. The range of potential interpretations carried by the A'-moved elements is subject to crosslinguistic variation across Germanic.

1.5. Summary

To conclude, this chapter has overviewed the distribution and properties of V2 structures in contemporary Germanic languages. The first research question that has been addressed was whether V2 could be conceived of as a prosody-driven operation. This is the idea that was originally proposed by Wackernagel (1892) in his study of second position elements in old Indo-European languages. With this possibility in mind, I have overviewed V2 and V3 placement in *wh*-questions in Northern Norwegian, which according to some accounts may be sensitive to the prosodic make-up of the *wh*-word. However, more detailed analyses due to Westergaard (2005) and Westergaard and Vangsnes (2005) show that the position of the verb is determined by information structure requirements rather than by prosody, which suggests that the prosodic form of the *wh*-element is an epiphenomenon.

Another research question addressed in this chapter was related to the syntactic position of the verb and the prefield constituent in V2 clauses. The earliest analy-

ses of V2 structures, such as Den Besten (1977/1983), postulated that the verb targets C^0 and that the prefield element is in Spec, CP. Yet, later studies showed that prefield elements may have various semantic and pragmatic import in different structures, while the verb may exhibit divergent agreement patterns depending on the construction in which it is found. These facts have been taken to indicate that neither the verb nor the prefield constituent target a uniform designated syntactic projection. Thus, the verb does not necessarily occupy C^0, but it may also land in a lower position, depending on a particular structure or, as recently shown by Postma (2013), on a particular language or dialect: in some dialects the verb may target both T^0 and C^0, whereas in some others it is located exclusively in C^0.

The final issue that has been addressed in this chapter concerns the morphosyntactic or semantic trigger that motivates verb placement in second position. It has been commonly assumed in the literature that V2 structures may instantiate a formal way of illocutionary force marking. This assumption has been largely based on the availability of the V2 order in subordinate clauses in the Scandinavian languages, which seems to be contingent on the strength of assertion. Still, as closer inspection of the Scandinavian data indicates that while there is a clear link between V2 and Force, the need to encode Force does not appear to be a sufficient or even a necessary motivation for V2 placement. Yet, what does seem to matter for the V2 pattern is Tense-dependency, given that V2 orders are possible only in tensed domains. This generalization holds in Germanic as well as in V2-languages outside the Germanic family, such as Karitiana. It may hold for all second position phenomena crosslinguistically (see Jouitteau 2010) and as will be shown in Chapter 4, the availability of tense morphology determines the type of cliticization pattern in Slavic.

The exact trigger of verb movement to second position as well as a potential parametric condition that determines whether a given language requires V2 placement or not remain open questions. What is quite clear though is that V2 is not a uniform syntactic phenomenon and that this term is used to refer to two different syntactic mechanisms with their own characteristics: operator (Force-related) V2 and generalized V2 movement, which involve different syntactic operations although they produce the same surface order result. The subsequent chapters will provide more support for this hypothesis, coming from the diachrony of V2 orders as well as from the properties and historical development of second position cliticization in Slavic.

Chapter 2

Diachrony of the V2 order in Germanic

2.1. Introduction

The previous chapter has overviewed instances of Verb Second in contemporary Germanic languages. The main idea pursued in that chapter was that V2 placement is not a uniform syntactic phenomenon. Rather, V2 is an umbrella term and it is necessary to distinguish between two types of operations: generalized V2 and Force-related, operator V2, even though these two movements result in the same linear placement of the verb in the clause structure. Moreover, V2 may involve movement of the verb to different positions, either T^0 or C^0 or some other projections. The position occupied by the verb in V2 clauses may be either contingent on the syntactic operation that is involved or, as argued for by Postma (2013), determined by the nature of the operation in a particular language or dialect: in some V2 languages the verb may move exclusively to C^0, while in some other V2 languages both T^0 and C^0 are available as the landing sites for the verb.

This chapter provides more evidence for the hypothesis of the non-uniform character of V2 structures. The evidence comes from diachronic data from Gothic, Old English, Old High German, and Old Norse. With the exception of English (as well as Gothic, which is extinct), the languages that evolved from them all display uniform V2 grammars. Thus, the Germanic languages represent different directions of the change: whereas the ratio of V2 orders in the history of English decreased, Old High German texts show a steady raise of a uniform V2 grammar. Hence, it may be hypothesized that these languages represent different stages in the emergence and the decline of a V2 system. Indirectly, these divergent developments of the V2 patterns speak against the idea of "language drift" discussed in the Introduction.

The observed diachronic variation with respect to the degree and the directionality of the modification of the V2 systems in different Old Germanic lan-

guages provides an opportunity to determine the underlying motivation for the emergence or the decline of a V2 grammar; therefore, it can be used to establish a trigger for V2 movement in general. Furthermore, the survey of the diachrony of the V2 order in Germanic will be used as a background for the investigation of diachronic changes in the position of pronominal clitics in Slavic, as some of these languages adopted second position placement in various stages of their history; thus, they underwent a modification of their clitic system that resembles the emergence of a uniform V2 grammar in continental Germanic languages.

This chapter has the following organization. Section 2.2 provides a general description of verb placement in Old Germanic. Section 2.3 turns to Gothic, in which verb movement to second position was restricted to operator contexts. Section 2.4 examines historical changes in the V2 order in English. As has been mentioned above, V2 placement was considerably more robust in Old English than it is in Modern English. This section overviews different analyses that have been put forward in the literature to account for the decline of V2 in Middle English, pointing to the observation that the decline was related to the modification of the TP system. Section 2.5 addresses V2 placement in Old High German, which was far more regular than in Gothic or Old English, but it still showed a number of exceptions that are not observed in contemporary continental Germanic languages. In this section I also discuss two analyses of the emergence of the V2 grammar in Old High German by Axel (2007) and Fuss (2008) and show that Fuss's account is challenged by empirical facts concerning the development of the V2 order in Old Norse. Finally, I address Dewey's (2007) analysis of the development of verb placement in Old German, in which she attributes changes to the V2 pattern to prosodic modifications. I challenge her account and suggest an alternative, syntactic analysis that draws on properties of second position cliticization in Slavic.

2.2. Word order in Old Germanic — general patterns

A received wisdom stemming from the 19th century philological tradition is that Old Germanic and other ancient Indo-European languages such as Latin or Sanskrit exhibited the basic SOV (subject–object–verb) word order (see, for instance, Delbrück 1878; McKnight 1897; Lehmann 1974, and other references quoted in Axel 2007 and Eythórsson 1995: 16; see also Behaghel 1932: 11 quoted in Axel 2007 for the opposite claim that some V2 properties were present in the earliest Germanic times). As an example, typical cases of the basic OV word order (with the verb given in italics) found in both matrix and embedded clauses in Gothic are presented in (1), following the data quoted in Fuss (2008: 168).

(1) a. ik in watin izwis *dauþja*
I in water you$_{PL}$ baptize (Gothic, *Matthew* 3:11, Roberts 1996: 161)

b. þaþroh þiudangardi gudis *wailamerjada*
since-that kingdom of-God is-preached

c. jah ƕazuh in izai *nauþjada*
and everyone into it presses (Gothic, *Luke* 16:16, Ferraresi 1997: 277)

Many contemporary syntacticians (see, for example, Weerman 1989 and Kiparsky 1995) have adopted this traditional idea concerning word order and wrongly assumed that in Old Germanic the verb was always low in the clause and did not move out of VP. The V2 operation known in contemporary Germanic languages was regarded in these analyses as a language-specific innovation that emerged in a much later period. According to Eythórsson (1995) and Axel (2007: 33), this reasoning may have been motivated by two factors: insufficient investigation of Old Germanic texts (especially Gothic, which is the oldest written source of Old Germanic data available) as well as a common belief that Gothic relics (in particular, Wulfila's translation of the Bible) were word-for-word translations of New Testament Greek, and as such, unreliable sources of information about Old Germanic syntax. However, Eythórsson (1995) and some other scholars before him (see, for instance, Fourquet 1938: 234–281, quoted in Axel 2007: 29–30, 33) observed a number of systematic violations of the original Greek word order in Gothic translations, especially in Gothic OV structures, which adopted word orders contrary to the ones in the Greek vorlage. For instance, as exemplified in (2), the word pattern in Gothic systematically differs from the one found in the original Greek manuscript in the following scenario: a predicate expressed by a single (intransitive) verb in Greek is consistently rendered in Gothic through a structure in which the verb follows the complement. The preverbal complement can be a noun, an adjective, or an infinitive (see Eythórsson 1995: 20). Such examples point to the independence of the Gothic verbal syntax of the Greek vorlage.

(2) a. dwala gatawida
foolish$_{ACC.F}$ made$_{3SG}$
"made foolish" (Gothic, *1 Cor* 1:20, Eythórsson 1995: 20)

a'. emōranen (the Greek vorlage)

b. lofam slohun
palm$_{PL.DAT}$ smote$_{3PL}$

b'. errapisan (the Greek vorlage)
"(they) smote (him) with the palm of (their) hands"
(Gothic, *Matthew.* 26:67, Eythórsson 1995: 20)

Furthermore, Eythórsson (1995) notes specific contexts of verb movement in Gothic in which the usual OV pattern is violated, which clearly demonstrate that the verb could systematically leave VP. He observes that these are largely the same environments in which the verb undergoes V–to–C movement in Modern English.

Thus, the verb is fronted in *wh*-movement, commands, direct questions, subject topicalization, and with negatives.[15] This pattern is exemplified for the imperative in (3) and for *wh*-movement in (4).

(3) Wate hali hino horna
whet stone this horn
"Let the horn whet this stone!" (Gothic, *Strøm whetstone*, Axel 2007: 32)

(4) Hva skuli þata barn wairþan?
what shall that child become
"What is this child going to be?" (Gothic, *Luke* 1: 66, Eythórsson 1995: 25)

Significantly, the movement of the verb is precluded in the presence of a complementizer, the way it is also blocked in all contemporary Germanic V2 languages except for Faroese, Icelandic, and Yiddish (see Chapter 1, section 1.4.3.3). The contrast between subordinate clauses with and without a complementizer in Old High German is exemplified in (5), following Axel (2007: 6). In both of these examples, the clause-initial element is *thō* 'then, at that time, when,' which can function either as an adverb or an adverbial subordinator that introduces embedded clauses. In the former function, exemplified in (5a), the adverb is immediately followed by the verb that occurs in second position, while the object pronoun *in* and the subject NP *der heilant* appear after the verb. By contrast, in (5b) *thō* performs the function of a subordinator and the verb *quad* may not raise to second position. It occurs clause-finally, following the subject pronoun and the object.

(5) a. thō antuurtita in der heilant
then answered them the Saviour
"The Saviour answered to them then" (OHG, *Tatian* 287, 16)
b. thō her thisiu quad
when he these said
"When he had said these things" (OHG, *Tatian* 343:28, Axel 2007: 6)

The general pattern of verb movement to second position in Old Germanic presented so far suggests that in all instances it is a way of marking Force. Moreover, the movement is blocked when Force is specified by an overt morphological element in C^0, such as a complementizer. Eythórsson's (1995) observations have challenged the traditional assumptions about OV as the predominant order of the Old Germanic syntax. They are also instructive for the diachronic investigation of second position cliticization carried out in Chapter 4, which initially was also restricted to operator contexts.

[15] The verb is not fronted in the case of complement topicalization, on a par with other Germanic languages, but unlike in English.

2.3. V2 in Gothic

This section overviews verb placement in Gothic in more detail and investigates the diagnostics that have been used in the literature to determine the position of the verb in the clause structure. Moreover, it examines syntactic properties of sentential particles in Gothic. Since most of these particles are Force markers, their interaction with verb movement can be used to determine whether verb placement is indeed motivated by Force licensing, as was proposed in the previous section.

As far as diagnostics of verb movement in Gothic are concerned, Eythórsson (1995) seeks evidence for the operation by examining the position of the verb with respect to pronominal clitics and clitic sentential particles. They are addressed in the subsequent subsections.

2.3.1. The position of pronominal clitics and the verb

The position of pronominal clitics in the clause can be used as a verb movement indicator in Gothic. Eythórsson (1995: 29) shows that in most cases the clitics follow the verb (see 6), especially when the clitic is a reflexive pronoun. In this way their distribution stands in contrast with non-clitic, full NPs that adhere to the usual OV pattern in Gothic.

(6) ni kukides mis
NEG kissed me
"You did not kiss me" (Gothic, *Luke* 7:45, Eythórsson 1995: 29)

Eythórsson observes that this ordering is reminiscent of the pattern found in Modern German, where pronominal clitics are adjacent either to the complementizer, as in the embedded context in (7a) or to the verb which, if Den Besten's (1977/1983) analysis of V2 is adopted, is located in C^0 in the main clause in (7b). These facts have led Thiersch (1978) to postulate that clitics in Modern German are hosted in C^0.

(7) a. daß *ihm* der Mann ein Buch geschenkt hat
that him_{CL} the man a book given has
"that the man has given him a book"
b. Der Mann hat *ihm* ein Buch geschenkt
the man has him_{CL} a book given
"The man has given him a book" (Modern German, Eythórsson 1995: 30)

Eythórsson adopts the same reasoning for Gothic, where he assumes the verb may raise across pronominal clitics and land in C^0. He finds support for this assumption in the observation that the movement of the verb is precluded in the

presence of a complementizer. In such a case, pronominal clitics precede the verb, as shown in (8).

(8) jabai *mik* frijoþ
if me$_{ACC}$ love$_{2PL}$
"If you love me" (Gothic, *John* 14:15, Eythórsson 1995: 31)

Fuss (2003: 199, 2008) addresses similar cases of pronoun placement, focusing on the position of pronominal subject clitics with respect to the verb in *wh*-movement in Gothic and observes that the clitics may follow or precede the finite verb. Initially, in his early work Fuss (2003: 199) concludes that these patterns copied the word order of the Greek vorlage and exemplify literal word-for-word translation, as in the case of examples such as (9), in which the pronoun precedes the verb in both Greek and Gothic.

(9) a. duhe *jus* mitot ubila in hairtam izwaraim? (Gothic)
why you$_{PL}$ think evil in hearts your
b. hinati *humeis* enthumeisthe ponēra en tais kardiais humōn (Greek)
why you$_{PL}$ think evil in the heart your
"Why do you think evil in your hearts?" (*Matthew* 9:4, Ferraresi 1997: 53)

However, in his later work Fuss (2008: 171–2) points out, following Ferraresi's (1997: 58) observations, that the position of pronouns in the Gothic translations depends on the presence of the subject in the Greek vorlage. If the subject is missing in Greek, it is inserted at the beginning of a sentence in the corresponding Gothic main clause. Conversely, if the subject is missing in a *wh*-clause in Greek, it is inserted after the verb in Gothic, as illustrated in (10). Such examples also indicate that the verb in Gothic moves to second position in *wh*-contexts.

(10) a$_1$. hua tanamais taúrbum *weis* weitwode? (Gothic)
what further need we witness
b$_1$. ti eti chreian echomen marturōn (Greek)
what further need have$_{1PL}$ witness
"What do we need any further witnesses?" (*Mark* 14:63, Ferraresi 1997: 55)
a$_2$. hua nuk-kant *tu*, quino? (Gothic)
what now-know you wife
b$_2$. ti gar oidas, gunai (Greek)
what therefore know$_{2SG}$ wife
"What do you know, wife?" (*I Cor.* 7:16, Ferraresi 1997: 55)

Summarizing, the position of pronominal clitics in Gothic provides support for the postulate of verb movement in Gothic. First, the verb moves higher when it occurs with pronominal clitics than in the context of tonic nouns. Second, the fact that the verb raises across pronominal clitics in *wh*-questions suggests that the movement of the verb is related to operator/Force-marking. More evidence for this generalization is provided in the next section, which examines the syntax of sentential particles in Gothic.

2.3.2. Clitic particles in Gothic

This section discusses the interaction between verb movement and sentential particles in Gothic, with a focus on the conjunctive clitic *uh* (*h*) and the interrogative clitic *u* (*uh*). Both of them are second position clitics (as established by Wackernagel 1892: 406), which usually occur after verbs, but also after nouns, adverbs and other categories. These categories are assumed to be fronted to the left of these particles to a projection in the CP domain (see Eythórsson 1995, 1996; Ferraresi 1997; and Fuss 2008). They are much more frequent in Gothic than in its Germanic daughter languages, which retained only a small residue of them (see section 2.5.4 on Old High German; see also Axel 2007: 41). What unifies them apart from their syntactic position is the fact that they express operator properties of a sentence, such as focus, clause type, and the main/embedded distinction.[16] Moreover, their presence in *wh*-questions may lead to a violation of the V2 rule: they occur immediately after the *wh*-word and thus seem to compete with the verb for the same position, targeting the projection normally occupied by the verb. As a result, the verb occurs then below these particles. Examples illustrating this pattern are provided later in this section.[17]

2.3.2.1. The conjunctive clitic *uh* (*h*) and the interrogative clitic *u*

This section investigates syntactic properties of the conjunctive particle *uh* (*h*) and the interrogative particle *u*. According to Eythórsson (1995: 53), *uh* is only used to conjoin main clauses as a conjunction; it may not be used to conjoin non-clausal elements or subordinate clauses — for those, the non-clitic conjunction *jah* is used. It is in complementary distribution with other complementizers, and Eythórsson suggests that this indicates that *uh* is hosted in C^0 in main clauses only in the presence of a null complementizer. Otherwise, on Eythórsson's (1995: 53) analysis, it attaches to the verb to its left when this verb undergoes head movement to C^0 and when this movement is accompanied by topicalization of lexical material that lands in Spec, CP. Ferraresi (1997) and Fuss (2008) point out that Eythórsson's observations are somewhat incomplete, as *-uh* is also attested as a discourse particle used to signify anaphoric relations between clauses. Moreover, there are also cases in which *-uh* co-occurs with the conjunction *jah* (see Fuss 2008: 174). The examples in (11) illustrate *uh* placement. In (11a), *uh* follows the particle *uz*, which is part of

[16] The clause typing property of the particles is important in some analyses of their loss in the history of Germanic (see, for example, Roberts 1996 and Ferraresi 1997). These analyses postulate that when the system of the particles declined, their functions were assumed by generalized verb movement to second position. In this way these accounts make a direct link between the V2 order and clause typing (see also section 1.4.2.1 in Chapter 1). See also Axel's (2007) analysis of the V2 pattern presented in section 2.5.5.1, which makes a similar assumption.

[17] Axel (2007: 41) points out that Gothic had a number of additional particles which were phrasal elements rather than clitics. They did not trigger verb movement. These particles include the conditional particle *aiþþau* and the interrogative particle *an*.

the particle verb *uz-iddja*. In (11b) *uh* occurs after the subject pronoun *is* and the finite verb *wiss*, thus technically it is located in third position. This is the regular occurrence of *uh* when a definite subject is topicalized (see Eythórsson 1995: 55ff.).

(11) a. uz-*uh*-iddja fram attin jah atiddja in þana fairhu
forth-PRT-came from father and came into the world
"I came forth from the Father and came into the world"
(Gothic, *John* 16:28, Ferraresi 1997: 108)

b. iþ is wiss-*uh* mitonins ize jah qaþ du þamma mann…
but he knew-PRT thoughts their and said to the man
"But he knew their thoughts and said to the man…"
(Gothic, *Luke* 6:8, Ferraresi 1997: 108)

As has been noted above, apart from verbs, *uh* may also attach to other elements, such as pronouns, object DPs, adjectives, and adverbs, which are interpreted as topics. Significantly, Eythórsson observes that *uh* does not attach to subjects. In principle, definite subject DPs can be topicalized, but their topicalization requires verb movement to C^0. I take the contrast with respect to the (un)availability of verb movement in the case of subject topicalization and object topicalization to be significant. The contrast suggests to me that although *uh* is a clitic, its placement is governed by syntactic principles. If *uh* appeared in second position after the first stressed element due to PF requirements, the categorial contrast with respect to subject versus object topicalization should not be attested given that prosodic requirements are not sensitive to categorial distinctions.

On a par with the clitic *uh*, the interrogative clitic *u* attaches not only to verbs, but also to adjectives, adverbs, prepositions, and pronouns, which are then interpreted as topicalized. Correspondingly, *u* can also be used as a diagnostic of verb movement because, on a par with *uh*, it also triggers verb movement from I^0 to C^0 in Gothic. Moreover, Eythórsson (1995: 105) observes that the distribution of *u* can be used to pinpoint differences between the syntax of Greek and Gothic: in Gothic *u* triggers the movement both in direct questions (as in the Greek vorlage) and usually also in indirect questions (unlike in Greek).

2.3.2.2. Properties of the particles *uh* (*h*) and *u*

Both *uh* and *u* exhibit interesting selectional restrictions that resemble the ones observed in the distribution of Force-related, operator clitics (such as *li*) in some Slavic languages (see Chapter 3). For instance, *uh* does not attach to the rightmost constituent of a topicalized phrase, but rather to the head of it. In other words, *uh* and *u* follow the clause-initial word, such as the preposition in (12a) and the demonstrative in (12b), rather than a clause-initial XP.

(12) a. uz-*uh* þamma mela managai galiþun siponje is ibukai
from-PRT that time many went disciples his back
"from that time many of his disciples went back" (Gothic, *John* 6:66)

b. þat-*uh* samo jah þai waidedjans … idweitidedun imma
this-PRT same also the bandits insulted him
"in the same way the bandits too … insulted him"
(Gothic, *Matt* 27:44, Eythórsson 1995: 66)

Correspondingly, the interrogative clitic *u*, which marks the element that precedes it as a topic, is able to split a preposition from its complement, as shown in (12a). Although prepositions can never be split from their complements in Slavic, Eythórsson (1995: 120) remarks that *u* shows a similar distribution to the operator clitic *li* in the Slavic languages such as Russian, in which *li* attaches to the right of the initial word in direct questions. As will be shown in Chapter 3, the Slavic situation is somewhat more complex: *li* may also be interpreted as a focus marker and in some languages it may be preceded not only by heads, but by full phrases as well.

Finally, in the context of *wh*-questions, *uh* and *u* (as shown in 13), on a par with other modal or emphatic particles, such as *þan*, *nu*, and *auk* (as shown in 14; see Fuss 2008: 172), follow the *wh*-word and precede the verb, in violation of the usual V2 rule that applies in *wh*-movement.

(13) hƕan-*uh* *þan* þuk seƕum gast jah ga-laþodedum?
when-PRT PRT you we-saw stranger and PERF-we-invited
"And when did we see you as a stranger and invited you?"
(Gothic, *Matthew* 25:38, Fuss 2008: 173)

(14) a. hƕa *nu* taujai im frauja þis weinagardis?
what PRT do them owner of-the vineyard
"What then shall the owner of the vineyard do to them?" (Gothic, *Luke* 20:15)
b. hƕa *auk* boteiþ mannan, jabai gageigaiþ þana fairƕu allana
what PRT profit man if $gain_{3SG}$ the_{DEM} world whole
jah gasleiþeiþ sik saiwalai seinai
and injure REFL soul his
"For what does it profit a man, if he gains the whole world, and loses (lit. injures) his own soul?" (Gothic, *Mark* 8:36, Fuss 2008: 173)

Fuss (2008: 176) states that these are only apparent counterexamples to the uniform V2 placement in *wh*-questions in Gothic. He claims that in all such cases the position of the particles mirrors the syntax of the Greek vorlage, where they also occur in second position. I would like to offer an alternative explanation. It is normally not possible to "copy" the position of clitics across languages. They are phonologically weak elements that occupy uniform positions even in so-called "free word order" languages and any changes to their placement not only result in ungrammaticality, but make such clauses impossible to pronounce (see Chapter 4, section 4.3, for similar argumentation based on Old Church Slavonic facts). I propose (see also Migdalski 2012: 352) that the data provided by Fuss indicate that there are two ways of marking Force in Gothic: either by inserting a Force-indicating particle or by moving a verb to the position licensing Force (such as the head of ForceP in the CP domain) that is (otherwise) occupied by the particle. In this

way, Gothic displays two potential strategies of encoding Force that according to Brandner (2004) (see Chapter 1, section 1.4.2.1) are attested crosslinguistically: either by particle insertion or by verb movement to a Force-related projection.

A potential complication for this proposal is the existence of aspectual (perfectivizing) prefixes, such as *ga-*, *at-*, and *bi-* (see Eythórsson 1995: 121). They occur preverbally, but they can be separated from the verb by particles *u* and *uh* (see 15) as well as pronominal clitics. These are the only instances of the separation of the aspectual prefixes from the verb.

(15) bi-*u*-gitai galaubein ana airþai?
PRT-PRT-find faith on earth
"Shall he find faith on the earth?" (Gothic, *Luke* 18:8, Eythórsson 1995: 122)

At first the pattern in which a Force-related clitic occurs between a verb and an aspectual prefix may seem problematic for the idea that either the particle or the verb targets a Force-encoding projection, given that the particle occurs within a verb.[18] However, in spite of their placement, the aspectual prefixes do seem to manifest some independence, as they can host clitics and exhibit final consonant devoicing (see Eythórsson 1995: 125 for details). Moreover, their distribution is similar to the distribution of prepositions, given that prepositions (which are independent syntactic units) are also immediately followed by *u* and *uh*. See also Eythórsson (1995: 131) for an alternative analysis, which assumes that the aspectual prefixes head Aspect Phrase located between TP and VP. In Eythórsson's view, the verb moves out of VP, picks up the prefix *ga-* from Asp^0 on the way to T^0, where Tense is checked. Finally, the whole complex *ga* + verb adjoins to the interrogative particle *u* located in C^0.

Summarizing, this section has overviewed cases of verb movement to second position in Gothic. In contrast to contemporary continental Germanic languages, the movement is restricted to the context of non-indicative Force marking. In addition, Gothic displays Force-encoding particles, which also occur after the first element in a clause and may compete with the verb for the same position. These facts indicate that Gothic employs two ways of Force marking: via particle insertion and verb movement to second position.

2.4. Diachrony of the V2 order in English

This section investigates the position of the verb in the history of English. English represents a special case among contemporary Germanic languages as it requires the V2 order only in operator contexts. Diachronically the V2 order was more

[18] I thank Hagen Pitsch for a discussion of this issue.

frequent in early English, but it was lost in the transition from Old English to early Middle English. This section examines the ways this loss has been accounted for in the literature. The examination is important for two reasons. First, it may shed light on the hypothesis about V2 being a source of Force marking. If this hypothesis is on the right track, the loss of V2 should coincide with the way Force is encoded in the clause. Second, as will be shown in Chapter 4, a change in the opposite direction occurred with respect to second position cliticization, which emerged in some Slavic languages. It might be instructive to verify whether these changes took place due to related factors.

2.4.1. Generalizations about word order in Old English

As was mentioned in section 2.2, there exists a traditional assumption about OV as the basic word order in Old Germanic, including Old English (see, for example, Fourquet 1938). Subordinate clauses in Old English seem to conform to this basic pattern though there is considerable variation between OV and VO orders (see Fischer et al. 2004: 51). In Old English main clauses, the verb is located closer to the left periphery than in subordinate clauses, often targeting second position. According to Haeberli's (2002: 250) calculations, V2 orders constitute approximately 70% of word order patterns in declarative clauses with a non-operator (that is, without an element that triggers V2 in Modern English, such as a *wh*-word) in the clause-initial position. This observation has been interpreted in two ways. On the one hand, some scholars, particularly in early generative analyses (for example, van Kemenade 1987, 1993; Pintzuk 1991, 1993; and Cardinaletti and Roberts 1991) postulate that Old English was a V2 language on a par with contemporary Dutch and German. For instance, in her seminal work that was the first generative account of post-Beowulf English, Van Kemenade (1987) claims that the verb always moves to C^0, the way it does in Dutch and German in Den Besten's (1977/1983) analysis (see the discussion in Chapter 1, section 1.4.3.1). Likewise, Pintzuk (1991), whose investigation also includes the language of *Beowulf*, and Cardinaletti and Roberts (1991) postulate obligatory verb movement in main clauses, but they argue that the verb reaches C^0 only in *wh*-questions, fronted negations, and with certain clause-initial adverbs. Otherwise, they assume that the verb raises to a lower functional projection than C^0.

On the other hand, some other analyses, especially more recent ones (for example, Hulk and van Kemenade 1995; Pintzuk 1999; Haeberli 1999; Fuss 2003; Roberts 1996, 2007; van Kemenade and Los 2006; and Fuss 2008) point out that the V2 syntax in Old English exhibited exceptions and violations that are not found in contemporary V2 languages, which suggests that the V2 requirement was much more restricted in Old English than it is in contemporary continental Germanic.

In the subsections below, I first outline the general properties of V2 syntax in Old and Middle English. Then I show how these properties have been analyzed and motivated in some of the approaches.

2.4.2. Generalizations about verb placement in Old and Middle English

As far as main clauses are concerned, in Old and Middle English the verb usually follows the subject, but occasionally it may also be placed in a lower position. If the clause-initial element is not the subject, the usual pattern involves subject-verb inversion (with the verb preceding the subject). In such a scenario, there are two distinct orders that may depend on the type of material located in the prefield: the first one, in which subject-verb inversion is obligatory and the verb is in second position (see 16a), and the second one, in which subject-verb inversion is predominant with nominal subject but rather infrequent with pronominal subjects (see 16b); (Van Kemenade 2012: 823).

(16) a. On ðam dæge worhte God leoht, and merigen, and æfen
on that day made God light and morning and evening
"On that day God made light, morning, and evening"
(Old English, *ÆCHom* I, 6.100.5)

b. Be ðæm *we* magon suiðe swutule oncnawan ðæt…
by that we may very clearly perceive that
"By that, we may perceive very clearly that… "
(Old English, *CP* 26.181.16, Fischer et al. 2004: 50)

Importantly, in contrast to Modern English, in which subject-verb inversion is restricted to auxiliary verbs, in Old English the inversion was possible with lexical verbs as well. These patterns are described in more detail in the subsections below.

In subordinate clauses the verb normally occurs in a low position, and subject-verb inversion is not observed. However, there are some instances of finite verb fronting (see Pintzuk 1991), especially in complex structures involving more than one verb (see 17a) and with particle verbs, in which the verb is fronted and the particle remains at the end of a clause (see 17b).

(17) a. ðæt we ealle *sculon* ænne geleafan *habban*
that we all must one faith have
"that we all must have one faith" (Old English, *Or* 5.14.131.13)

b. gif hio ne *bið* hrædlice *aweg* adrifen
if she not is quickly away driven
"if it is not quickly driven away" (Old English, *CP* 13.79.23, Fischer et al. 2004: 50)

There are also frequent instances in which the verb is located in the clause-initial position in main clauses, in front of the subject, resulting in the V1 order, illustrated in (18). The exact function of the V1-clauses is a matter of debate (see Fuss

2008: 186); some analyses imply that the clause-initial verb placement might be due to prosodic requirements, such as the necessity to insert the verb in front of the first stressed syllable in verse texts (initially with non-pronominal subjects, but later also with subject pronouns, see Campbell 1970). Some other scholars relate the V1 placement to discourse strategies; for instance, Mitchell (1985: 978) states that V1 could be used to link sentences in oral narratives, to introduce new facts, or to switch the emphasis. For this reason this type of initial verb placement is sometimes referred to as "narrative inversion" (see Fischer et al. 2004: 106).

(18) *wæs* se fruma þus awriten […]
was the beginning thus written
"The beginning was written as follows […]"
(Old English, *Bede* 48.4, Pintzuk 1991: 68, quoted in Fuss 2008: 186)

Otherwise, V1 structures are found in imperatives and *yes-no* questions, as illustrated in (19).

(19) Hæfst þu ænigne geferan?
have you any companions
"Do you have any companions?" (Old English, *ÆColl* 28, Fischer et al. 2004: 106)

The subsequent sections address the contexts in which the verb occurred in second position in Old and Middle English as well as the ones in which the V2 rule was not observed. The generalizations concerning verb placement are based mainly on Fischer et al. (2004), Fuss (2008: 191ff.), and van Kemenade (2012).

2.4.2.1. The position of the verb in main clauses in Old English

2.4.2.1.1. WH/NEG/*þa*/*þonne*–V–nominal subject/subject pronoun

In Old English, the V2 order is obligatory without exception in operator contexts, that is when the verb follows a *wh*-phrase, as in (20a) or the negative (clitic) adverbial *ne*, as in (20b); see Mitchell (1985), van Kemenade (1987), Kroch and Taylor (1997), Pintzuk (1999), Fischer et al. (2004: 106), Kemenade and Los (2006), Trips and Fuß (2009), and van Kemenade (2012: 823).

(20) a. Hwæt *sculon* we þæs nu ma secgan?
what shall we afterwards now more speak
"What shall we afterwards speak now more?" (Old English, *Bede* 2:9.132.1.1253)
b. ne *bið* he lengra þonne syfan elna lang
NEG is he longer than seven ells long
"He is not taller than seven ells" (Old English, *Orosius*, 1.15.2.149, Fuss 2008: 189–190)

The position of the verb in the sentences in (20) roughly matches the distribution of the "residual V2," though unlike in Modern English, verb movement in Old English is not restricted to auxiliary verbs. Significantly, van Kemenade (2012: 824) points out that negative-initial V2 clauses found in Modern English of the type

Never before has Marlon been so happy are not a continuation of the negative-initial order given in (20b). Namely, Nevalainen (1997) shows that such structures emerged only in late Middle English. Moreover, the exact counterparts of (20b) do not exist in Modern English any more: with the loss of the negative clitic adverbial *ne*, the negative-initial context triggering verb movement was lost as well (see van Kemenade 2012: 828).

Furthermore, the V2 order is "extremely dominant" (Fischer et al. 2004: 106) in Old English after temporal and discourse sequencing adverbs such as *þa*, *þonne* 'then,' and *nu* 'now,' as exemplified in (21). The counterparts of these adverbs in Modern English do not trigger V2.

(21) a. Þa *for* he norþryhte be þæm lande
then went he northwards to that land
"Then he went northwards to that land" (Old English, *Orosius*, 1.14.7.128)
b. Þonne *ærnað* hy ealle toweard þæm feo
then run-to they all towards the treasure
"Then they all ran towards the treasure"
(Old English, *Orosius*, 1.17.21.233, Fuss 2008: 190)

Exceptions to the V2 rule after such adverbs are very infrequent and according to Koopman's (1995) estimates quoted in Fischer et al. (2004: 108), they range between 0.5 and 6% depending on a particular text. An example of such an exception is given in (22), in which the finite verb *wolde* follows the non-finite verb *feran*.

(22) Baloham Þonne fulgeorne *feran* wolde Þær hine mon bæd
Balaam then very-willingly go wanted there him one bade
"Balaam would very willingly have proceeded whither he was told"
(Old English, *CP* 36.255.22, Fischer et al. 2004: 108)

According to van Kemenade (2012: 825), these adverbs are discourse-anaphoric expressions, which resemble Dutch R-pronouns and their German counterparts. As is often the case with other prefield constituents in continental Germanic, they establish a link with preceding discourse elements.

Apart from the position of the verb right after the clause-initial element, one of the strongest motivations for the assumption of verb movement in the patterns such as the ones in (20) and (21) comes from the position of the particle in particle verbs (Fischer et al. 2004: 107). As shown in (23a–b) for a V2 clause with the temporal adverb *þa*, in such structures particles (such as *up* in 23a and *ut* in 23b) are stranded and remain in the position that is assumed to be the base position from which the verb has moved (as has also been postulated for Modern Germanic languages such as Dutch by Koster 1975 and followers).

(23) a. þa *astah* se Hælend *up* on ane dune
then rose the Lord up on a mountain
"then the Lord went up on a mountain" (Old English, *ÆCHom* I, 12.182.1)

b. þa *eodon* hie *ut*
then went they out
"then they went out" (Old English, *ChronA* (Plummer) 894.83, Fischer et al. 2004: 108)

By contrast, in subordinate clauses particles by default occur before the non-fronted verb, as illustrated in (24).

(24) a. þæt hie mid þæm þæt folc *ut* *aloccoden*
that they with that the people out enticed
"that they might entice the people with it (to come) outside" (*Or* 5.3.117.5)
b. swa þæt se scinenda lig his locc *upateah*
so that the shining flame his locks up-drew
"so that the shining flame drew his locks up"
(Old English, *ÆCHom* II, 39.1.295.241, Fischer et al. 2004: 189)

In the contexts presented in the examples in (20) and (21), subject-verb inversion applies irrespective of the categorial/prosodic status of the subject. In some of the patterns discussed below, the form of the subject does matter for the availability of V2.

2.4.2.1.2. XP–V–nominal subject

One of these patterns involves verb placement with non-pronominal (nominal) subjects, illustrated in (25). The verb targets second position, following a non-subject element (such as the fronted direct object in 25a or the adverbial of place in 25b, both interpreted as topics) in the prefield. The non-pronominal subject occurs in third position, following the verb.

(25) a. Þæt hus *hæfdon* Romane to ðæm anum tacne geworht…
that house had Romans to the one sign made
"The Romans had made that house to their sole sign"
(Old English, *Orosius*, 3:5.59.3.1042)
b. [On þysse dune ufanweardre] *bæd* Sanctus Albanus fram Gode…
on this hill higher up bade Saint Alban from God
"On this hill higher up Saint Alban asked from God…"
(Old English, *Bede*, 1:7.38.30.323, Trips 2002: 231)

In contrast to the examples in (20), which represent verb movement triggered by an operator and are obligatory, the V2 order in the pattern exemplified in (25) is highly dominant but not invariant. According to Haeberli's (2002: 250) estimates, the verb occurs in second position in more than 70% of the cases in which the prefield does not contain an operator. At first sight the structure of the clauses in (25) may give the impression that Old English was a V2 language on a par with Modern Dutch or German. However, the distribution of the verb is different when the subject is instantiated by a pronominal subject, as shown in the subsection below.

2.4.2.1.3. XP–(subject) pronoun–V...

Thus, as exemplified in (26), the V2 order is violated if the subject is instantiated by a pronoun[19] rather than a full DP and when there is no operator present in the prefield (a *wh*-element or a negative adverbial, as in the examples given in 20). In such cases, the verb occurs in third position and must follow the pronominal subject that appears in second position, after the prefield constituent.

(26) a. Be ðæm we *magon* suiðe swutule oncnawan ðæt
by that we may very clearly perceive that
"By that, we may perceive very clearly that…"
(Old English, *CP* 26.181.16, van Kemenade 2012: 824)

b. þas þing we *habbaþ* be him gewritene
these things we have about him written
"These things we have written about him"
(Old English, *PC*, 1087, 143, van Kemenade 1987: 110)

The pronominal elements may be either subjects or objects, but when they co-occur, they follow the "subject–direct object–indirect object" order, illustrated in (27); see van Kemenade and Los (2006: 235) and Fuss (2008: 189). It seems that there is no requirement for object pronouns to appear in second position.

(27) and seofon ærendracan *he him* hæfde to asend
and seven messenger he him had to send
"and he had to send him seven messengers"
(Old English, Parker, 905, Pintzuk 1999, quoted in Fuss 2008: 189)

2.4.2.1.4. XP–nominal subject–V...

Another type of order that exemplifies a violation of the V2 pattern is found with non-pronominal subjects when they follow temporal adverbs functioning as so-called "scene setters" (see Kroch and Taylor 1997: 304), as illustrated in (28).

(28) a. Æfter þeossum wordum se Hælend *cwæþ* to his leornerum…
after these words the Savior spoke to his disciples
"After these words the Savior said to his disciples…"
(Old English, *Blickling* 135, Swan 1994: 241, quoted in Fuss 2008: 187)

b. Her Oswald se eadiga arceb *forlet* þis lif
in-this-year Oswald the blessed archbishop forsook this life
(Old English, *ASC*, Laud, 992, Kroch and Taylor 1997: 304)

Kroch and Taylor (1997: 305) point out that the V2 violations are not restricted to the temporal "scene setters," as they are also observed with adverbs of manner, ad-

[19] It has been customary to treat these pronouns as clitics (see, for instance, van Kemenade 1987; Cardinaletti and Roberts 1991; and Fuss 2008), though Axel (2007: 254) states that there is little evidence to be found in the texts showing that these forms are morphologically reduced or prosodically weak. Therefore, I refer to them as pronouns.

verbs of cause, as well as adverbs that seem to me to function as conjuncts (see 29). Kroch and Taylor assume that these examples may correspond to structures with left dislocation or a linking adverb followed by a pause in Modern German and Dutch, which also allow V3 orders in such contexts.

(29) a. Eac þis land *wræs* swide afylled mid munecan
also this land was very filled-up with monks (Old English, *ASC*, Laud, 1087)
b. þeahhweder his hiredmen *ferdon ut* mid feawe mannan of þam castele
Nevertheless his household men went out with few men from the castle
(Old English, *ASC*, Laud, 1088, Kroch and Taylor 1997: 304)

According to Haeberli's (2002: 250) estimates, in 28.7% of the cases in which the prefield does not contain an operator in the Old English text he investigated, subject-verb inversion does not take place and the verb does not occur in second position. Thus, non-V2 orders are relatively frequent in Old English. They include examples of the types given in (28) and (29), which as Fuss (2008: 187) observes are not found in Old High German, a language with a very regular V2 system (see section 2.5). Although Fuss (2008) argues that the subject in such structures is located in Spec, TP (see section 2.4.2.3), it is not entirely clear to me whether these clauses represent actual non-V2 orders given that in at least some of their counterparts in contemporary Germanic languages the clause-initial adverb is followed by a pause.

2.4.2.1.5. XP (XP)–V–subject

The final pattern is sometimes referred to as the "late subject clause" (see Warner 2007), and it normally features unaccusative verbs. The term "late subject clause" describes a crucial property of this structure, namely the fact that the subject can be placed either in its regular subject position or following the verb. The post-verbal position of the subject is particularly common when it is indefinite and when it is accompanied by the auxiliary and the passive participle (see Warner 2007: 94–95). The verb may appear in second position in the late subject clause, but it can also surface lower in the structure. The pattern is exemplified in (30) with a sentence coming from a Middle English text.

(30) Aftir hem *were* ysette hondslinges and stafslynges
behind them were placed handslings and stick-slings
"Behind them were placed handslings and stick slings"
(Middle English, *Vegetius De Re Militari* 91.23, Warner 2007: 92)

The late subject clause is also attested in non-root contexts, with both preverbal (see 31a) and clause-final (see 31b) positions of the subject possible.

(31) a. þæt eallum folcum *sy* gedemed beforan ðe
that all $\text{peoples}_{\text{DAT}}$ be judged before thee
"that all the peoples be judged before you" (*PPs* (prose) 9.18)

b. for þan þe on me *is* afunden ætforan Gode rihtwisnyss
because that in me is found before God justice$_{N.SG}$
"because justice before God is found in me"
(Old English, *ÆHom* 21.326, Fischer et al. 2004: 116–117)

Van Kemenade (2012: 826) remarks that the late subject structure is still available in Modern English with unaccusative verbs, in which the subject may follow the verb rather than precede it, as in (32).

(32) From the lips of a cab driver *came* an enlightened expression that I thought should be shared (Birner 1995: 241, quoted in Van Kemenade 2012: 826)

Summarizing, the data presented in this section indicate that although the verb frequently occurs in second position, Old English is not a V2 language on a par with modern continental Germanic languages. The V2 rule is (near-)obligatory in operator context, when the verb appears after a *wh*-word, as in Modern English; and, unlike in Modern English, in clauses introduced by a class of temporal and discourse sequencing adverbs and the negative (clitic) adverbial *ne*. Furthermore, there is also a context in which the V2 order is unavailable, which is found when the subject of a clause is instantiated by a pronoun. Regardless, a generalization that can be made is that the V2 pattern was considerably more frequent in Old and Middle English than it is now. Moreover, in contrast to Modern English, movement to second position contexts affected all verbs in Old English and was not restricted to auxiliary verbs.

The next section presents selected analyses of the loss of the V2 pattern in English. As has been pointed earlier, on the assumption that V2 is related to Force marking, it is expected that the loss of V2 can be motivated by a change in the way Force is expressed in English. However, as will be shown, it seems that the decline of the V2 pattern was not related to the verb movement per se, but rather to the distribution of the prefield material.

2.4.2.2. The loss of the V2 pattern in English

The present section overviews analyses of V2 placement in Old and Middle English and shows how they account for the loss of some of the V2 orders.

As has been pointed out in section 2.4.2.1, the verb raises to second position in Old English, though the movement is restricted to the contexts of *wh*-movement, the clause-initial negative particle *ne*, and temporal and discourse sequencing adverbs, so it is not as generalized as the V2 order in modern continental Germanic languages. Furthermore, the movement is contingent on the type of subject present in the clause, and it does not occur if the subject is a pronoun. This type of contingency is not observed in modern Germanic languages either. As far as the landing site of the verb in V2 contexts is concerned, in the early approaches (for instance, van Kemenade 1987) it was assumed to be C^0, on a par with Dutch and German in Den Besten's (1977/1983) analysis (see section 1.4.3.1, Chapter 1). This postulate

was motivated by the observation that, as in modern continental Germanic languages, movement of the verb is blocked by an overt complementizer such as *þæt* or *gif*, as shown in (33). This observation also shows that V2 is a root phenomenon in Old English, in contrast to Old Scandinavian languages (see section 2.5.5.2).

(33) a. þæt he *mehte* his feorh generian
that he could his life save
"so that he could save his life" (Old English, *Or* 2.5.48.18, Fischer et al. 2004: 109)
b. gif ðam gifran ungemetlicu spræc ne *eglde*
if the greedy eloquent speech not afflicted
"if the greedy are not afflicted by loquacity"
(Old English, *CP* 43.309.2, Fischer et al. 2004: 117)

In the absence of a complementizer, the verb raises to second position, as in the example with direct speech in (34a), the way it also does in Modern German, as well as in Modern English in complementizer-less embedded clauses that have the form of direct questions (see 34b).

(34) a. And þa axodon hine Pharisei & þa boceras hwi ne *gað*
and then asked him Pharisees and the learned men why not go
þine leorningcnihtas æfter ure yldrena gesetnysse. ac besmitenum
your disciples after our forefathers' law but with defiled
handum hyra hlaf þicgað?
hands their bread eat
"Then the Pharisees and scribes asked him, Why walk not your disciples according to the tradition of their elders, but eat bread with unwashed hands?"
(Old English, *Mk* (WSCp) 7.5, Fischer et al. 2004: 115)
b. Macbeth wondered why *would* Banquo have made an appearance at the banquet
(Fischer et al. 2004: 113)

Recall from section 2.4.2.1.3 that the movement of the verb to second position is blocked when the subject is a pronoun, though the pattern is more complex, as will be shown below.[20] Thus, the blocking effect of a subject pronoun on the V2 order is illustrated in (35). In (35a) the subject is instantiated by the non-pronominal DP *God* (interpreted as a topic) and the verb is placed in second position, following the topicalized PP. In (35b), the subject is the pronoun *we* and the preposed verb occurs in third position, following the subject pronoun.

(35) a. On twam þingum *hæfde* God þæs mannes sawle gegodod
in two things had God the man's soul endowed
"With two things God had endowed man's soul" (Old English, *ÆCHom* I, 1.20.1)
b. Forðon we *sceolan* mid ealle mod & mægene to Gode gecyrran
therefore we must with all mind and power to God turn
"Therefore we must turn to God with all our mind and power"
(Old English, *HomU*19(BlHom 8) 26, Fischer et al. 2004: 118)

[20] The data presented in this subsection come mostly from Fischer et al. (2004, ch.4). Fischer et al. (2004, ch.4) also contains a detailed overview of the analyses of V2 placement put forward in the literature until the early 2000s.

The contingency of the V2 order on the form of the subject is not observed in the environments that regularly trigger verb movement to second position, that is in sentences with clause-initial temporal adverbs, *wh*-questions, and negative-initial sentences, as illustrated for the negative-initial context in (36).

(36) Ne *sceal* he naht unaliefedes don
not shall he nothing unlawful do
"He shall not do anything unlawful" (Old English, *CP* 10.61.14, Fischer et al. 2004: 118)

Furthermore, a parallel distribution is attested in the case of pronominal objects. As first observed by van Kemenade (1987), an object pronoun may occur in second position after the topicalized subject, thus blocking the V2 order (see 37a); whereas in *wh*-questions, sentences with clause-initial temporal adverbs, and negative-initial sentences, the verb targets second position and the pronominal object follows it, as shown in (37b), which illustrates a sentence with a clause-initial negation.

(37) a. God him *worhte* þa reaf of fellum
God them wrought then garments of skins
"Then God made garments of skin for them" (Old English, *ÆCHom* I, 1.18.18)
b. Ne *geseah* hine nan man nateshwon yrre
not saw him no man so little angry
"No-one ever saw him so little angry"
(Old English, *ÆLS*(Martin) 306, Fischer et al. 2004: 119)

The role of the pronominal elements in the blocking of verb movement has been interpreted in the analyses of V2 in Old English in various ways. In her earliest generative account of the V2 order in Old English, van Kemenade (1987) treats the pronouns as clitics and postulates that they cliticize onto the verb. She proposes that in the default cases, in which the verb occurs in third position, pronouns procliticize on the verb (recall that in such cases the prefield element is assumed to be interpreted as a topic, see 38a). Conversely, in *wh*-questions, sentences with clause-initial temporal adverbs, and negative-initial sentences, the pronouns encliticize on the verb, see (38b).

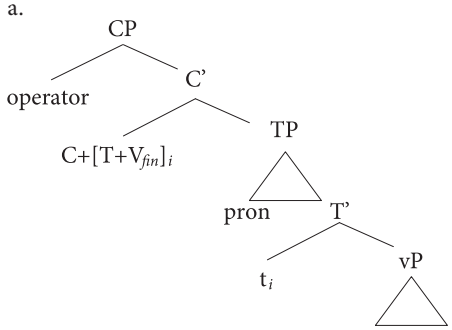
(38) a. [$_{\text{Spec,CP}}$ topic [$_{\text{C}}$ pron–Vfin [$_{\text{IP}}$ …]]]
b. [$_{\text{Spec,CP}}$ wh/neg/adv [$_{\text{C}}$ Vfin–pron [$_{\text{IP}}$ …]]] (Fischer et al. 2004: 119)

Van Kemenade claims that the directionality of cliticization is determined by the presence of a logical operator located in Spec, CP, which prohibits any intervening material between the operator and C^0, which she assumes is the position where the verb and the clitics are located. I would like to point out that this part of van Kemenade's proposal is problematic. Although in a number of Romance languages and, within Slavic, in Macedonian, the directionality of cliticization depends on the type of verb (for instance, in Macedonian imperative and gerund forms in general host enclitics, while other verbs host proclitics, see Tomić 2000, 2012), the situation in which clitic directionality is related to the nature of the first constituent in a clause

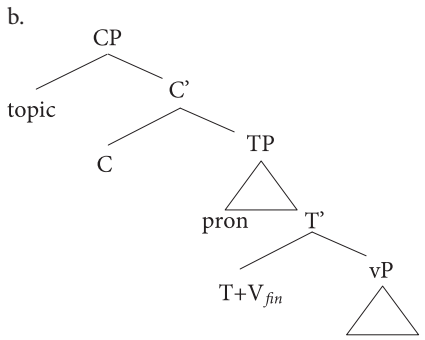
is rather uncommon. Furthermore, it seems that van Kemenade's proposal is also problematic for empirical reasons, as there is little evidence suggesting that the pronouns in Old English were in fact clitics (see Koopman 1997 and Axel 2007: 254).

A number of subsequent accounts of the V2 order in Old English adopt a different approach and presume that the pronominal subjects occupy a fixed position in the IP/TP area of the clause (for example, adjoined to IP in Pintzuk 1999 and Kroch and Taylor 1997; to Spec, AgrsP in Haeberli 1999, and to Spec, TP in Fuss 2003 and Trips and Fuß 2009), whereas the position of the verb is not uniform: it can be located in C^0 or in a lower projection. In such a scenario, the position of the verb in the structure can be determined through its placement with respect to the pronoun. Thus, since in topicalizations as well as in the contexts with clause-initial temporal adverbs, *wh*-questions, and negative-initial sentences the verb is situated to the left of the non-pronominal subject, it is assumed that it is then located higher in the structure (for example in C^0) than when it occurs to the right of the subject and object pronouns. An example of such an analysis is presented in (39), as assumed by Fuss (2008: 192); see also section 2.4.2.3 for details. The structure in (39a) illustrates the derivation of a sentence with clause-initial "operators" (an umbrella term used by Fuss to refer to *wh*-questions, negation, and also clause-initial adverbs, which in fact are not operators per se), in which the finite verb moves to C^0 crossing the subject pronoun. The derivation in (39b) does not contain "operators" and the verb targets a lower position to the right of the subject pronoun.

(39) a.



b.



An important empirical finding that has influenced research on the V2 order in Old English is related to the distribution of negation, first noted by van Kemenade (1999) and Haeberli (1999). Old English is a negative concord language, and constituent negation is morphologically expressed by the negative elements *na*/*no* (replaced by *not* in Middle English; see Fischer et al. 2004: 130), which co-occurs with the particle *ne* procliticized on the verb (Fischer et al. 2004: 123), such as *mehte* in (40a), with the negated constituents italicized. In the case of sentential negation, whose interpretation involves negation of the whole statement, the only negative element present is *ne*, which is procliticized on the finite verb (see 40b).

(40) a. þæt *heora* *nan* *ne* mehte *nanes* *wæpnes* gewealdan
that of-them none not could no weapon wield
"that none of them could wield any weapon" (*Or* 4.10.103.24)
b. He *ne* andwyrde ðam wife æt fruman
he not answered the woman at first
"He didn't answer the woman at first"
(Old English, *ÆCHom* II, 8.68.45, Fischer et al. 2004: 124)

There are also instances of multiple negation (discussed in detail in van Kemenade 1999), in which sentential negation is expressed by both the particle *ne* procliticized on the verb and the negative element *na*. Although multiple negation instantiates a very minor pattern in Old English texts, it provides an interesting contrast concerning the distribution of subjects. Namely, when the subject is a pronoun (as in the case of *þu* 'you' in 41a), it precedes *na*, whereas if the subject is a noun (as in the case of *leorningcniht* 'apprentice' in 41b), it follows *na* (see also Haeberli 1999: 340ff.).

(41) a. þonne *ne* miht þu *na* þæt mot ut ateon of ðæs mannes eagan
then not could you not the speck out draw of the man's eye
"then you could not draw the speck out of the man's eye" (Old English, *ÆHom* 14.153)
b. *Ne* bið *na* se leorningcniht furðor þonne his lareow
not is not the apprentice further than his master
"The apprentice is not ahead of his master"
(Old English, *ÆHom* 14.134, Fischer et al. 2004: 124)

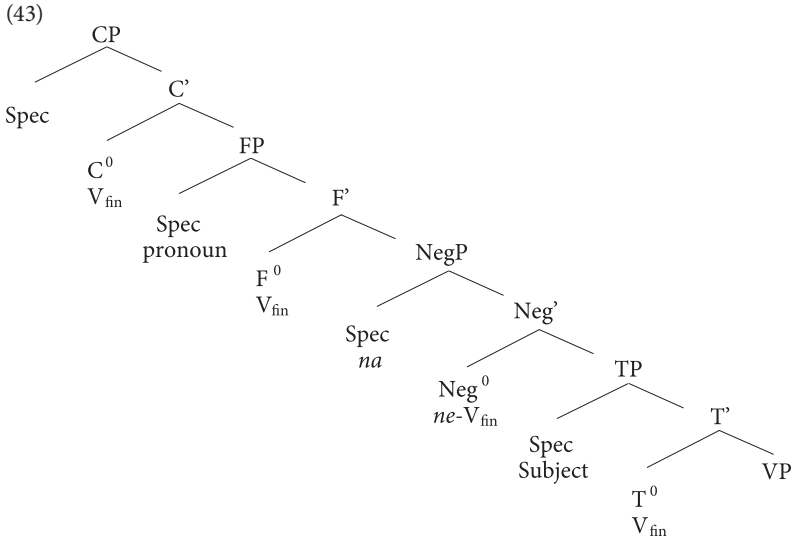
Furthermore, negative adverbs such as *næfre* 'never' show the same distribution as *na* and precede non-pronominal subjects, such as *Eadmund Hingware* in (42).

(42) *ne* abihd *næfre* Eadmund Hingware on life…
not surrenders never Edmund Hingwar on life
"Edmund never surrenders to Hingwar alive…"
(Old English, *ÆLS*, IV, 322.116, Haeberli 1999: 340)

This contrast indicates that subjects in Old English do not target a uniform syntactic position and that there are two distinct projections that they may occupy. Moreover, this contrast has led to the postulate of a more elaborate sentential

structure for Old English, which is given in (43). It is based on the template provided by Fischer et al. (2004: 126), though similar structures are also assumed by Pintzuk (1999), Fuss (2008), and van Kemenade (2012).

(43)



As shown in (43), NegP splits Spec, TP, the canonical subject position, from Spec, FP, which is the position occupied by pronouns. Although the sentence in (41a) contains a subject pronoun, object pronouns may target this projection as well (see section 2.4.2.1.3). This property indicates, as pointed out by Fischer et al. (2004: 126), that Spec, FP is a designated pronoun position and it does not host a particular feature such as nominative case. More recent research on this topic (see, for example, van Kemenade and Westergaard 2012) shows that this position is in fact reserved for discourse-given and known subjects, whereas the lower subject position, Spec, TP, is targeted by new subjects, including generic subjects, indefinites, and focused subjects. NegP is headed by *ne*, which is a proclitic that requires incorporation of finite verbs. *Na*, the second sentential negation element, is assumed to be located in Spec, NegP.

The empirical facts related to the position of the subject with respect to negation exemplified in (41) and sketched in the phrase structure in (43) have shed new light on the research concerning the "loss" of V2 in English. As shown in (43), in negated clauses the verb incorporates into the proclitic *ne* hosted in Neg^0. Otherwise, the data indicate that there are three syntactic positions in which the finite verb may land in Old English: C^0, F^0, and T^0. Verb movement to C^0 in *wh*-questions (such as *What did you buy?*) is still attested in Modern English, but it is restricted to auxiliary verbs and does not apply to lexical verbs. Other cases of verb movement to C^0 have been lost, but as van Kemenade (2012: 824) points out, the loss is due to

the decline of some of the contexts in which V–to–C movement applied. Thus, V2 placement in the context of the clause-initial negation was lost in Middle English with the decline of the negative proclitic *ne*. Correspondingly, van Kemenade (2012) and Hinterhölzl and van Kemenade (2012) show that the loss of V2 order after temporal and discourse linking adverbs in Early Modern English was not related to the loss of verb movement to C^0 either, as auxiliary verbs continue to raise to this position in Modern English, but rather it coincided with the loss of the discourse linking interpretation of these adverbs (see also section 2.4.2.3 for a discussion of Fuss's 2008 analysis of the adverb data). These facts indicate that the diachronic changes in the V2 order in English are rather related to the changes to prefield elements, including subjects, and not to the availability of verb movement to C^0.

Thus, it has been noted in the literature (see Fischer et al. 2004: 129–130) that in the transition period between Old and Middle English the patterns of the V2 order remain the same. Likewise, clauses with multiple negation in Middle English continue to display the same contrast with respect to the position of the verb and nominal versus pronominal subjects as they did in Old English. However, toward the end of the 14th century and the beginning of the 15th century, there was a sharp decline in the number of V2 orders in topicalizations.[21] Recall from section 2.4.2.1.2 that in Old English topicalizations the verb appeared in second position when the subject was a nominal element, but when the subject was a pronoun, the verb targeted third position and followed the pronoun. This positional discrepancy came to an end in Middle English, and the first texts in which V2 orders with nominal subjects are no longer attested were prose writings by Richard Rolle from the mid-14th century (Fischer et al. 2004: 132), as exemplified in (44).

(44) a. Thare-fore Ihesu *es* noghte funden in reches
Therefore Jesus is not found in riches (Middle English, *Rolle* 5.8)
b. Sothely þe ryghtwyse *sekys* þe Ioye and…
Truly the righteous seeks the joy and
(Middle English, *Rolle* 4.24, Fischer et al. 2004: 133)

An early analysis of the V2 pattern in Old and Middle English by van Kemenade (1987) attributes the loss of the V2 pattern with nominal subjects to the decliticization of pronouns. The subject pronouns, which van Kemenade assumes in her (1987) account were clitics that procliticized on the verb in Old English, lost their clitic status in Middle English and became prosodically invariant from nominal subjects. The lack of the variation between the subject forms gave rise to the loss of V2 at that time. However, van Kemenade's (1987) proposal has been invalidated by subsequent research (see Rissanen 1994), which shows that the pronominal and nominal forms maintained their positional discrepancy with respect to multiple negation, which existed until the 17th century. This discrepancy is unaccounted

[21] Van Kemenade (1997), see also Haeberli (1999), provides detailed timing of the decline and states that the V2 orders were lost around the years of 1350 to 1425.

for on the assumption that the pronominal and nominal forms became syntactically invariant due the loss of clitichood.

The syntactic change that I assume did seem to matter is related to the richness (or the "strength") of the TP projection and a switch in the null subject parameter setting. This issue is discussed in the next section, where I present an approach due to Fuss (2003, 2008), which relates the (apparent) change in the V2 pattern to a modification of the TP-system.

2.4.2.3. The modification of the TP-system in Middle English

The previous section has noted that the end of the 14th century saw a sudden decline in the number of V2 orders in topicalizations in Old English. It has been observed in the literature (see, for example, van Kemenade 1997; Fuss 2003, 2008: 215ff.) that this process conspicuously coincides with other syntactic changes, such as the loss of subject-less clauses that existed in Old English and are exemplified in (45), following Fuss (2008: 215–216). They include structures with weather verbs (see 45a), experiencer verbs (see 45b), and impersonal passives (see 45c), which uniformly all lack an overt subject.

(45) a. norþan sniwde
from-north snowed
"It snowed from the north" (Old English, *Seafarer*, 31, Kiparsky 1997: 471)

b. him ofhreow þæs mannes
him$_{DAT}$ pitied the man$_{GEN}$
"he pitied the man" (Old English, *AColl*, 192.16, Allen 1995: 68)

c. þæt eallum folce sy gedemed beforan ðe
that all people$_{DAT}$ be judged before thee
"that all the people be judged before you"
(Old English, *Paris Ps*. 9.18, van Kemenade 1997: 335)

Importantly, it has been noted that the decline of these subject-less structures is accompanied by the emergence of the expletive *there*. This fact is assumed to be significant for the loss of V2 structures in topicalizations in a number of analyses. For instance, van Kemenade (1997) proposes that the expletive *there* arose with the loss of *pro*. This process is in turn attributed to the decline of verbal morphology in Middle English, in particular the loss of the contrast between singular and plural number. In a slightly more recent analysis of this process, Haeberli (1999, 2002) recasts van Kemenade's (1997) analysis in the early 2000s Minimalist terms and suggests that in Old English *pro* was located in Spec, AgrsP, where it was licensed by rich verbal morphology and satisfied the EPP feature of Agrs^0. With the impoverishment of verbal agreement in Middle English, *pro* could not be licensed any more and was lost. In this scenario, the only way to satisfy the EPP on Agrs^0 was via movement of an overt subject to Spec, AgrsP. The movement of the subject gave rise to the loss of the V2 order. However, the loss did not occur due

to any changes in the mechanism of verb movement, but it was a side effect of the new requirement for an overt subject placement in Spec, TP, which put an end to the adjacency between the prefield material in Spec, CP and the finite verb (the mechanism of this process is presented in the phrase structure in 47 below, which illustrates it in the terms of Fuss's 2008 analysis). Fuss (2003, 2008) proposes a similar account for the loss of V2 in topicalizations to the one developed by Haeberli (1999, 2002). He shows that the hypothesis of the divergent syntactic placement of the pronominal and nominal subjects is supported not only by the position of the negative element *na*, which intervenes between the verb and the nominal subject located below it, but also by different types of adverbs which may appear in the same position as *na*. They include single-word adverbs and longer adverbial adjuncts (italicized in 46, following Haeberli's 1999 observations).

(46) a. ta cwæd *eft* se dry …
then said again the magician
"Then, the magician said again…" (Old English, *ÆLS*, I, 312.71)

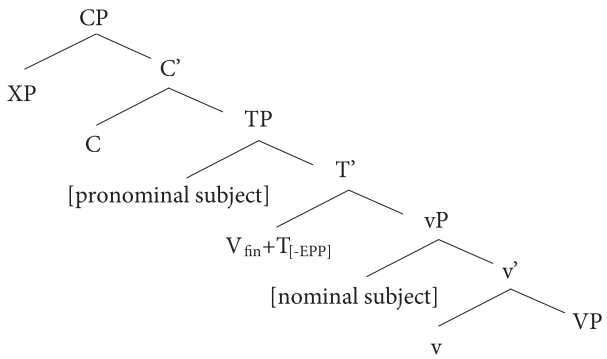
b. & ðonne wyrð *þurh* *Godes mihte sona* deofol swyðe geyrged
and then gets through God's power soon devil very-much terrified
"Then, soon, the devil is very much terrified through God's power"
(Old English, *Whom*, 176.28, Haeberli 1999: 341)

In view of these facts, Fuss adopts the assumption of a non-uniform subject position in Old English that was postulated in the previous analyses discussed above and argues that whereas pronominal subjects land in Spec, TP, nominal subjects may remain in a low, vP-internal position. The verb moves to C^0 in operator contexts, but in all other cases it remains in T^0, regardless of whether it occurs with pronominal or non-pronominal subjects. However, in contrast to Haeberli (1999, 2002), Fuss does not assume the existence of *pro* in the subject position (Spec, TP for Fuss, rather than Spec, AgrsP posited by Haeberli) in Old English. He proposes instead that the presence of the EPP feature on T^0 is a matter of parametric variation. This feature becomes available in Middle English, and it requires that Spec, TP be filled by a noun phrase marked for nominative case or a newly formed expletive. Thus, on a par with the previous proposals, Fuss argues that the "loss" of V2 in Middle English is not related to a change in verb movement, as the verb remains in the same position. The verb starts to "appear" to be lower, as with the emergence of the EPP feature on T^0, the Spec, TP position is required to be filled. As a result of this new requirement, the linear adjacency between the prefield material in Spec, CP and the verb in a lower position is disrupted, so the finite verb appears not to be located in second position any more.

As an illustration, the template in (47) presents the phrase structure of an Old English clause in a non-operator context assumed by Fuss (2003: 219, 2008: 196). The nominal subject may remain in a low, vP-internal position, and Spec, TP does not need to be filled due to the absence of the EPP feature on T^0. The pronom-

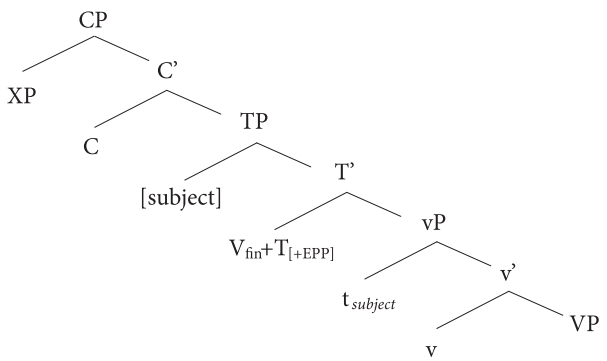
inal subject lands in Spec, TP, as suggested by the negation and adverb data discussed earlier. The finite verb moves to C^0 only in the operator contexts, and in all other cases it remains in T^0, regardless of whether it occurs with a pronominal or a non-pronominal subject.

(47) Old English clause structure (Fuss 2003: 219, 2008: 196)



The template in (48) below illustrates the phrase structure of a Middle English clause in a non-operator context, as proposed by Fuss (2003: 219, 2008: 196). With the development of the EPP feature on T^0, all subjects must target Spec, TP. As a result, the verb may seem to be located in a lower position than in Old English structures with nominal subjects when Spec, CP is filled by a topic or some other element. However, this is a side effect of the newly developed requirement of subject placement in Spec, TP. The verb raises to T^0, the way it does in Old English, and the diachronic process referred to as the "loss" of V2 does not involve any changes to the position of the verb in the structure.

(48) Middle English clause structure (Fuss 2003: 219, 2008: 196)



It seems that there are two properties of the V2 order in Old English that are still not captured by the syntactic mechanism presented so far. The first one is the spe-

cial position occupied by the pronouns with respect to the verb. The second one is the underlying trigger that motivates verb movement to second position in the context of clause-initial temporal and discourse linking adverbs (see section 2.4.2.1.1).

As far as the first property is concerned, it has been pointed out earlier in this chapter that in the early analysis of the V2 order in Old English the special placement of pronominal subjects is accounted for in two ways. Thus, on the one hand van Kemenade (1987) and Tomaselli (1995) among others postulate that the pronouns are clitics that need to adjoin to the verb due to their prosodic requirements. On the other hand, Cardinaletti and Roberts (1991), Roberts (1996), and Hulk and van Kemenade (1995) and others posit that due to their clitic status the pronouns must be licensed in a designated syntactic projection, which results in their divergent placement in comparison to nominal subjects. However, an empirical weakness of these accounts is the fact that, as has been pointed out earlier, there is little evidence suggesting the clitic status of pronouns in Old English. On his own part, Fuss (2003: 216) proposes a feature checking mechanism to explain the restriction on the movement of the pronouns to the higher subject position. Namely, he suggests that while nominative pronouns in Old English are "pure formal feature bundles: [D, nom, ϕ]," nominal subjects display a structure with more features, including phonological and semantic features, such as [+animate]. Following Bobaljik (1995, 2002), Fuss (2003: 216) suggests that these additional features may be pied-piped in the process of moving formal features to T^0 in the presence of an EPP feature. The pied-piping is excluded in Old English due to the lack of the EPP feature on T^0, and in consequence nominal subjects cannot raise to the higher subject position. Although this idea is quite attractive, it seems to me that it is not immediately clear how this mechanism is supposed to derive movement of object pronouns to the higher position, or a combination of a subject and an object pronoun, which may occupy the higher subject position simultaneously. For instance, it is necessary to explain how two pronominal elements can check the formal features of T^0 in the context shown in (49), in which the subject pronoun precedes the object pronoun, and both are assumed to target the higher subject position.

(49) and seofon ærendracan *he him* hæfde to asend
and seven messenger he him had to send
"And he had to send him seven messengers"
(Old English, *Parker*, 905, Pintzuk 1999, quoted in Fuss 2008: 189)

In his later work, Fuss (2008: 210) postulates a more general [+anaphoric] feature, which allows him to capture the possibility of both pronoun and temporal adverb placement in front of the finite verb located in second position. Concerning pronouns, Fuss (2008: 208) suggests that on the assumption that anaphoricity is related to specificity, which in turn is linked to the morphosyntactic feature [D], it is plausible to assume that in Old English T^0 encodes a ("strong") [D] feature

that forces overt movement of specific and anaphoric elements to Spec, TP. In such a scenario, pronouns, which are inherently anaphoric and specific, are required to raise to Spec, TP in Old English, whereas non-anaphoric and non-specific nominal subjects remain in their base position in Spec, vP. Still, Fuss (2008: 209–210) admits that a problematic part of his account is that definite nominal subjects such as *the bishop* also carry a [D] feature and yet they do not raise to Spec, TP. To circumvent this issue, Fuss (2008: 210) claims that pronouns are more likely to be raised to Spec, TP than anaphoric topical subjects because pronouns realize the anaphoric properties "in a more prototypical way." It is far from obvious to me how this relation can be captured in a discrete, feature-based syntactic system. Irrespective of this problem, Fuss's (2008) proposal is interesting and is also similar in spirit to the accounts developed from the mid-2000s onwards, which link the loss of the V2 contexts in Old English to changes to the way information structure is rendered in the clause. For instance, recent findings due to van Kemenade (2012), van Kemenade and Milicev (2012), van Kemenade and Westergaard (2012), and Hinterhölzl and van Kemenade (2012) indicate that the characterization of the two subject positions in Old English should not refer to their pronominal/nominal status but rather to the discourse-given/known distinction. Thus, the subjects that have a discourse-given interpretation are located in the higher subject position, whereas discourse-new elements, which include generic and indefinite subjects as well as subjects requiring focus, target the lower subject position.

The postulate of anaphoricity as the trigger for the movement of pronouns to the higher subject position allows Fuss (2008) to extend his analysis and account for the requirement of the V2 order after temporal and discourse-linking adverbs such as *þa*, *þonne* 'then,' and *nu* 'now,' as well as to explain why the V2 requirement was lost in this context in Middle English. This type of V2 structure has been discussed in section 2.4.2.1.1 and is illustrated in (50) below for convenience.

(50) Þa *for* he norþryhte be þæm lande
then went he northwards to that land
"Then he went northwards to that land"
(Old English, *Orosius*, 1.14.7.128, Fuss 2008: 190)

The clause-initial adverbs render temporal interpretation and/or discourse-continuity. In some earlier accounts, such as van Kemenade (1987) (see also van Kemenade and Los 2006: 226 for an overview), these elements were referred to as "discourse operators" and assumed to trigger verb movement to C^0 coupled with XP-movement to Spec, CP, on a par with the *wh*-operator and the negative operator in *wh*-questions and negated statements, respectively. However, Fuss (2008: 198) observes that the term "discourse operator" is an overgeneralization, given that elements such as *nu* 'now' and *þær* 'there,' 'then' could also be treated as such operators, yet they do not trigger verb movement to second position in a consistent way. Furthermore, another question that arises is why, unlike the other

operators, the counterparts of these adverbs do not trigger V2 orders in Modern English any more. A potential explanation might be the assumption that these elements have lost part of their "operator" semantics, but this does not seem to be the case, given that the meaning of *þa* and *þonne* closely corresponds to that of *then* in Modern English (see Kroch and Taylor 1997: 303), which does not trigger verb inversion and is not an operator. Rather, the crucial property of these elements according to Trips and Fuß (2009) and Fuss (2008) is that they express anaphoricity and temporality. Concerning anaphoricity, *þa* and *þonne* share this property with pronouns; moreover, they developed from demonstrative pronouns, which are inherently anaphoric. As regards temporality, Trips and Fuß (2009) and Fuss (2008: 201) refer to Thompson's (1999) study of the semantics of *then*. Thompson notes that depending on its position in the clause, *then* may receive different interpretations, illustrated in (51).

(51) a. Mary visited the exhibition. She spoke to the reporters **then**.
b. Mary visited the exhibition. **Then** she spoke to the reporters.

According to Thompson (1999), when *then* occurs clause-finally, as in (51a), it functions as a VP-adverb and the event characterized by the 'then'-clause is understood as overlapping with the event described in the previous clause. In contrast, when *then* is clause-initial, as in (51b), it functions as a sentential adverb, adjoined to TP. In this type of usage the events characterized by these two clauses are interpreted as occurring in a temporal sequence, so in (51b) the event of visiting the exhibition precedes the event of speaking to the reporters. Thompson (1999) argues that the different readings of *then* are a result of its placement in different positions in the clause structure. Thus, when *then* is adjoined to VP, as in (51a), it links the Event time (associated with VP) of the consecutive clauses. Conversely, when *then* is adjoined to TP, as in (51b), it links the Reference time (associated with TP/IP) of its own clause with the Reference time of the preceding clause, and as a result the events described by these clauses are interpreted as subsequent to each other.

Fuss (2008: 202) examines the interpretation of clauses with initial adverbs triggering the V2 order in Old English, such as *þa* and *þonne*, and he points out that they always characterize events that occur in a sequence, and there is no temporal overlapping between them. This means that they express the relationship illustrated by the sentence in (51b). If Thompson's (1999) assumption about the syntactic placement of *then* is correct, Fuss's (2008) observation indicates that *þa* and *þonne* are located in Spec, TP, rather than Spec, CP. Their placement in Spec, TP implies that these adverbs are not operators, and it also suggests that in the presence of these adverbs the verb does not raise to C^0, but rather it stays in T^0, the way it does in any other clause that does not contain an operator. Moreover, the placement of the adverbs in Spec, TP also implies that subjects cannot move to Spec, TP and must remain in their base position, Spec, vP, whenever the clause-in-

itial adverbs are present. According to Fuss (2008: 206), this pattern instantiates a case of the *Merge over Move* principle (Chomsky 1995): the adverbs are merged in Spec, TP, which precludes the less economical option of raising a pronominal subject to this projection.

Diachronically, Fuß and Trips (2003) estimate that the adverb *þanne* 'then' stopped triggering V2 around the years of 1340–1475, which is also the time when English lost null subjects and developed expletives. The data coming from *Ayenbite of Inwit* (1340) are instructive in this regard, as the clause-initial *þanne* may occur with both V2 and V3 orders, which in Fuß and Trips's (2003) view exemplifies a case of Grammar Competition (Kroch 1989; see also the Introduction). However, in the clauses in which *þanne* is accompanied by the newly formed expletive *þer* (which occurs after the adverb), the verb is relegated to the third position, as shown in (52).

(52) a. þanne þer *nys* prowesse arizt
then there not+is prowess properly
"Then there is no proper prowess […]" (Middle English, *Ayenbite*, 83.1613)

b. þanne þer ne *is* non noblesse
then there not is no nobleness
"Then there is no nobleness …" (Middle English, *Ayenbite*, 87.1702, Fuss 2008: 219)

Fuß and Trips (2003) argue that with the development of the EPP feature on T^0, Spec, TP could only be filled in by the subject. In this way they follow Alexiadou (2000), who posits that Spec, TP is available for temporal adverbs as long as there is no EPP feature on T^0.

To conclude, along with a number of other analyses (see, for example, van Kemenade 1987; Hulk and van Kemenade 1995; and Haeberli 1999, 2002), Fuss (2008) associates the "loss" of V2 in Middle English with a modification of the TP-system, interpreted in a more recent work in general terms as the emergence of the EPP feature on T^0, which results in the loss of null subjects. Interestingly, in his earlier work Fuss (2003) postulates another correlation between the decline of the V2 patterns and a modification of another TP-related property, namely the emergence of elaborate tense distinctions. Old English featured only two tenses, past and non-past (see Denison 1993). Fuss (2003) points out that the decline of subject-less clauses and the V2 patterns was contemporaneous with the differentiation of the perfect and the past tense, which occurred toward the end of the 14th century (see Bauer 1970). Furthermore, Fuss observes that synchronically this type of correlation is seen in German, where the absence of some EPP effects coincides with a less rigid tense system: although German features both the simple past and the present perfect tenses, in contrast to English they are largely interchangeable and the present perfect tense can be used in a larger set of contexts than in English. Fuss's observation is certainly intriguing. Although it seems to me that a straightforward generalization about the presence of the generalized V2 order

and a non-rigid system of tense distinctions is too strong (for instance, Norwegian maintains a clear opposition between the present perfect and the simple past tenses in spite of having generalized V2; Terje Wagener, p.c.), as will be shown in Chapter 4, another second position effect, namely second position cliticization, exhibits a strong synchronic and diachronic correlation with respect to the availability of tense morphology in a language. This correlation receives further support from the observation about the relationship between V2 and the presence of tense marking made in Chapter 1 (see section 1.4.3.3), which is attested in V2 languages such as Karitiana, where the V2 order is only possible in tensed clauses. See also Roberts and Roussou (2002) for an insightful discussion of the link between TP and V2.

Summarizing, this section has overviewed changes to the V2 pattern in the history of English. It has been shown that two types of verb movement are attested in Old and Middle English. The first type involves V–to–C movement, which as in Modern English occurs in operator contexts such as *wh*-movement. This type of movement is somewhat more robust in Old English, as it also applies in the presence of the negative particle *ne* and temporal and discourse sequencing adverbs such as *þa*, *þonne* 'then,' and *nu* 'now.' The second type involves verb movement to T^0, which at first sight seems to be more frequent in Old English than in Middle English because its effect is masked by the obligatory presence of the subject in Spec, TP in Middle English due to the emergence of the EPP feature on T^0. However, the actual movement of the verb is not affected by the rise of the EPP feature on T^0; the verb targets the same position in Old and Middle English. The loss of V–to–C movement, which affects lexical verbs, occurs much later, and it coincides with other syntactic changes, such as the grammaticalization of modal verbs and the rise of *do*-support (see the Introduction and van Kemenade 2012). The change that is often described as the "loss of V2" in English in the literature does not involve any changes to verb placement. Rather, it is a result of a modification of the requirements concerning the prefield, related to the modification of the TP-system, in particular the emergence of the EPP feature on T^0.

2.5. V2 placement in Old High German

This section analyzes V2 placement in Old High German, which in comparison to Old English represents an advanced stage of the extension of the V2 pattern. Thus, Old English and Old High German represent opposite changes in the V2 system: whereas the ratio of (surface) V2 orders declines in the history of English, Old High German develops a regular V2 grammar. Still, although Old High German requires the V2 order in most instances, it also features a number of exceptions that are not found in contemporary continental Germanic languages. This section overviews two recent syntactic analyses of the development of the V2 grammar

in Old High German; the first one is due to Axel (2007), whereas the other one is due to Fuss (2008, ch.3.5), which also critically evaluates Axel's account (see section 2.5.5.1). In section 2.5.5.2 I show that although Fuss correctly points out some shortcomings in Axel's analysis, his account is in turn challenged by the properties of the development of the V2 order in Old Norse. Furthermore, in section 2.5.5.3 I scrutinize a prosodic account of the emergence of the V2 pattern by Dewey (2007), who postulates that the V2 order in Modern Germanic is a product of the reanalysis of a prosodic phenomenon as a syntactic one.

2.5.1. Properties of V2 in Old High German

By and large, there is a general consensus in the literature that Old High German (OHG) displays a more robust V2 system when compared to Gothic or Old English, with a wider range of environments in which V2 is required or permitted. On a par with Old English, Old High German exhibits systematic V2 placement in the presence of operators, including *wh*-questions (see 53a), *yes/no*-questions (see 53b), negative inversion (see 53c), and imperatives.

(53) a. Odho *mahti* angil so sama so got mannan chifruman?
or could angels so same as God man$_{ACC}$ make
"Or could an angel make Man the same as God does?"
(OHG, *Isidor*, 187, Axel 2007: 53)

b. bihuuiu *uuard* christ in liihi chiboran?
why became Christ in flesh born
"Why was Christ born in the flesh?" (OHG, *Isidor*, 487, Axel 2007: 55)

c. ni *liugu* ih dauid
NEG lie I David
"I will not lie to David" (OHG, *Isidor*, 612, Axel 2007: 62)

Yet, Old High German displays the V2 order in environments in which the verb remains in a lower position in Gothic and Old English (Axel 2007: 4, 190; Fuss 2008: 224–225). These contexts include clauses with elements such as a PP (see 54a), an adverb (see 54b), a predicative adjective (see 54c), and an infinitive (see 54d) occurring in the prefield position.

(54) a. [In dhemu nemin cyres] *ist* christ chiuuisso chiforabodot
in the name Cyres is Christ certainly presaged
"By the use of the name 'Cyres' Christ is certainly presaged"
(OHG, *Isidor*, 162, Axel 2007: 5)

b. [Chiuuisso] *chioffanodom* uuir nu hear dhazs
certainly revealed we now here that
"Certainly we have now revealed that…" (OHG, *Isidor*, 484, Axel 2007: 5)

c. [toot] *ist her*
dead is he
"He is dead" (OHG, *Tatian*, 313, 14, Axel 2007: 5)

d. [Zi uuizsanne] *ist* nu uns chiuuisso, dhazs fater einemu ist dhurahchunt
to know is now us certainly that father alone is well-known
"We should certainly know now that only the father really knows"
(OHG, *Isidor*, 120, Axel 2007: 5)

Another innovation concerning the position of the verb in Old High German when compared to Gothic and Old English is the fact that the V2 rule is operative irrespective of the type of subject contained in a clause; namely, it applies both with nominal and pronominal subjects. Recall that the V2 order was systematically precluded in Gothic (see section 2.3.1) and Old English (see section 2.4.2.1.3) in the presence of pronominal subjects. Example (55), with the subject pronoun *her* preceded by the finite verb *ersteig* in second position demonstrates that this restriction does not hold in Old High German. However, as will be shown in section 2.5.3.2, pronouns did cause a violation of the V2 rule in the early period of Old High German.

(55) tho *ersteig* her úf zi themo itmalen dage
then climbed he up to the feast day
"Then he went also up unto the feast" (OHG, *Tatian*, 347, 12f., Fuss 2008: 229)

Moreover, unlike Gothic, Old High German allows V2 placement in topicalizations. Thus, Axel (2007: 195) provides examples in which the preposed, clause-initial element in front of the verb uncontroversially refers to a given element. For instance, in (56a') the object pronoun *in* has the anaphoric antecedent *man* in the preceding sentence given in (56a), whereas in (56b') the prepositional phrase *umbi dhiz* relates back to the content of the preceding *dhazs*-clause in (56b).

(56) a. (… Inti uuas thár man/ thes zesua hant thurri uuas)
"and there was a man whose right hand was withered"
a'. /[ín] *bihieltun* thó thie scribara
him$_{ACC}$ watched PRT the scribes
"the scribes watched him" (OHG, *Tatian*, 227, 8, Axel 2007: 195)
b. (… dhazs dher aerloso man … christ, got endi druhtin uurdi chinemnit)
"that the impious man … was named Christ, God and Lord"
b'. [Umbi dhiz] *nist* auh so chiscriban in dhero sibunzo tradungum…
about this NEG+is also so written in the Septuagint
"about this is not written thus in the Septuagint…"
(OHG, *Isidor* 168, 171, Axel 2007: 195)

Correspondingly, Axel (1997: 120) observes that Old High German allows prefield to be filled by elements that are never analyzed as topics, such as negative quantifiers (see 57a) and adjuncts (see 57b).

(57) a. [Neoman] *niuuirdit* fona gote festi
nobody NEG+becomes by God strengthened
"Nobody will become strengthened by God"
(OHG, *Monsee Fragments*, XL, 19, *St. Augustini sermo*, Axel 2007: 120)

b. endi [chiuuisso] *ist christus* in dheru selbun salbidhu chimeinit
and certainly is Christ in that same salve meant
"And certainly is Christ meant in that same salve" (OHG, *Isidor*, 144, Axel 2007: 120)

Such a distribution stands in contrast with the patterns found in the other old Germanic languages, such as Old English, in which clause-initial XP-elements in the prefield position were frequently interpreted as topics (see section 2.4.2.2). In Axel's (2007: 120) view, this fact suggests that in Old High German movement of XP-elements to the prefield was not subject to any semantic restrictions with respect to the interpretation of the preposed constituent. In fact, the movement could be entirely vacuous in semantic or pragmatic terms. It may correspond to Formal Movement (see Frey 2006), addressed in section 1.4.4.2 in Chapter 1, which consists in raising the highest phrasal element from the middle field to the prefield without adding any new semantic import to the interpretation that the element already had in the middle field. Still, Axel (2007: 119) observes that in some contexts that in principle could correspond to Formal Movement in Modern German, verb movement did not apply in Old High German, in consequence giving rise to non-V2 patterns. This observation indicates that the generalized movement of the verb to second position had not been yet entirely innovated at that time. The cases of non-V2 orders in Old High German include V1 and V3 orders and are discussed in the next sections. The overview of these V2 order violations serves as an empirical background for the analysis of the development of V2 in Old High German carried out in section 2.5.5.

2.5.2. V2 violations in Old High German — V1 orders

The first group of V2 order violations includes verb-initial (V1) structures. Although they are found in Modern German as well, they are considerably more frequent in Old High German. According to Axel (2007: 113), this frequency contrast indicates that although verb movement to second position was largely generalized in Old High German, the other component of this operation, which consists in XP-fronting of some lexical material to the prefield, had not been yet generalized to the same degree and in some instances it failed to occur.

The contemporary V1 pattern attested in Modern German is not a continuation of the Old High German distribution. Axel (2007: 115, 170) points out, referring to Maurer's (1924: 183) observation, that V1 structures are virtually absent in late Old High German and Middle High German texts; they re-emerge only in the second half of the 15th century and continue onwards to the present day. Furthermore, not all verb-initial orders found in Old High German display the same contextual distribution observed in contemporary German. Fuss (2008: 236) distinguishes among three types of V1 declaratives in Old High German.

(i) V1 pattern with the prefield left unfilled because of reasons related to pragmatics or information structure, as in the existential construction presented in (58). In Modern German the prefield in such structures is occupied by the expletive *es*, which had not been yet developed in Old High German.

(58) *uuas* tho zit nah sehsta
was then/there hour after six
"It was about the sixth hour" (OHG, *Tatian*, 275, 29, Axel 2007: 142)

(ii) V1 order with unaccusative predicates and passive forms of verbs (see Axel 2007: 124ff. for a discussion), as in (59a). Underlyingly, the nominative element in unaccusative structures is the internal argument, which may explain the clause-initial position of the verb in these contexts. In Modern German, the verb in such structures is usually preceded by the expletive *es* or an adverbial, such as *da* 'then, there' (Fuss 2008: 239). Axel (2007: 121) points out that in Old High German this order was also common in "presentational constructions," which were sometimes preceded by an interjection, such as *see* 'lo, see, behold,' as illustrated in (59b).

(59) a. *arstarp* ouh ther otago Inti uuard bigraban
dies also the rich and became buried
"The rich man also died and was buried" (OHG, *Tatian*, 363, 11, Axel 2007: 125)
b. [See qui] *mit* der bruti gomo gaat uz ingeginimo
behold comes the bridegroom go out toward him
"See, the bridegroom is coming! Go out to meet him!"
(OHG, *The Monsee Fragments* XX, 8, Mt 25: 6, Axel 2007: 121)

(iii) V1 pattern in negated clauses, with the verb in the clause-initial position, preceded by the proclitic negation *ni*, as demonstrated in (60). Fuss (2008: 239, fn. 67) observes that such instances could be assumed to exemplify verb preposing in operator contexts, in this case with an empty operator located in Spec, CP. Interestingly, verbs are attracted by negation also in many Slavic languages, in which they form a prosodic unit with negation (see Migdalski 2006, ch.2), so this pattern may exemplify a more general interaction of verb movement with negation, attested in many language families.

(60) ni*santa* got sinan sun
NEG+sent God his son
"God did not send his Son" (OHG, *Tatian*, 407, 30, Axel 2007: 61)

As has been pointed out earlier in this section, V1 structures represent a marked word order option in declaratives in Modern German and other contemporary Germanic V2 languages. It is used in specific types of narrations such as jokes and story telling, as exemplified for Modern German in (61).

(61) *Kommt* da ein Kerl herein und *fragt* mich, …
comes then a guy in and asks me
"A guy comes in and asks me …" (German, Lenerz 1985: 104, quoted in Axel 2007: 162)

According to Lenerz (1985), sentences of the type illustrated in (61) display a special type of information structure: the whole proposition is rhematic (that is, it represents new information) and there is no thematic element present. Lenerz hypothesizes that V1 structures in Old High German could be the historical counterparts of the present day V1 declaratives, with a similar semantic import. Axel (2007: 163) states that although Lenerz's generalization is largely correct, there is a considerable number of examples in Old High German that do not conform to the type of information structure content presented in (61). Moreover, Axel (2007: 165) points out that the postulate of a direct link between the V1 declaratives in Old High German and Modern German is problematic, as there are examples of Old High German V1 clauses that would be excluded in Modern German because of their special illocutionary status that is incompatible with contemporary verb-initial structures. They include cases of V1 following the clausal conjunction *wanta* 'because, for,' which can be found outside narrative contexts. For instance, Axel (2007: 165) provides the example of a verb-initial declarative clause given in (62), which is a fragment of a prophesy and represents a direct speech.

(62) Wanta *químit* noh thiu zít thaz…
because comes still the time that
"for the time is yet to come that…" (OHG, *Otfrids Evangelienbuch*, Axel 2007: 165)

On her own part, Axel (2007: 167) points to a special characteristic of V1 declaratives in Old High German, which is the presence of the particle *thō* in second position after the clause-initial verb in most V1 cases. Although *thō* was originally a temporal adverbial with the meaning 'then' and is a cognate of *þā* in Old English (see section 2.4.2.1.1), it does not seem to express any fully-fledged temporal semantics in V1 clauses in Old High German. Axel hypothesizes that *thō* instead triggers the special narrative-emphatic effect typical of V1 declaratives. In this way, *thō* could be a residue of the relatively large system of discourse particles found in the previous stages of the Germanic languages, which went into decline in Old High German when a generalized V2 system started to develop (see section 2.5.4 for a discussion of other sentential particles in Old High German and section 2.3.2 earlier in this chapter for a discussion of particles in Gothic). As far as its syntactic position is concerned, Axel points out that *thō* always occurs in the left periphery and is never located clause-internally. This fact leads Axel to assume that the presence of *thō* on the edge of a clause made movement of other XP material to the position in front of the verb redundant and in consequence Formal Movement to the prefield position, otherwise already a robust operation in Old High German (see section 2.5.1), did not need to apply. In Axel's (169–170) view, declarative V1 clauses coupled with the discourse particles are vestiges of the Old Germanic syntactic system, which was replaced by generalized V2 structures in contemporary continental Germanic when the discourse particles were lost. I return to the issue of particle placement and its effect on V2 in Old High German in section 2.5.5.1.

2.5.3. V2 violations in Old High German — V3 orders

Another property that distinguishes V2 in Old High German from V2 in contemporary continental Germanic is a more widespread occurrence of V3 structures. Recall from Chapter 1 (section 1.3.2) that in the present-day Germanic languages placement of more than one constituent in the prefield requires special pragmatic or phonological circumstances and is by and large very uncommon. Axel (2007: 200–201) shows that the occurrence of V3 in Old High German changes with time, and in Late High German it is hardly attested. It is considerably more common in the prose from the 8th and 9th centuries. As far as the distribution of V3 patterns in Old High German is concerned, there are two distinct classes observed: one involving two unambiguously XP elements preceding the verb and another one that characterizes pronouns occurring between the clause-initial XP material and the verb. They are addressed in the following subsections.

2.5.3.1. V3 after two XP elements

These structures comprise several distinct syntactic constructions, most of which are attested in Modern German as well. Thus, Axel (2007: 204–207) notes several V3 occurrences that roughly correspond to two types of Left Dislocation found in contemporary German, which give rise to a violation of the V2 rule, with the finite verb occurring in third position: German Left Dislocation and Hanging Topic Left Dislocation (see Frey 2004 for Modern German examples and a detailed discussion). Furthermore, the finite verb may be also located after two adverbial expressions, mainly PPs and AdvPs. These two expressions are frequently claimed to form a unit and their placement is exemplified in (63), in which two different types of modifiers (a temporal and a locative adjunct) of two different categories (DP and PP) precede the finite verb.

(63) [$_{DP}$ Dés náhtes] [$_{PP}$ an mînemo bétte] uórderota íh mînen uuíne
the$_{GEN}$ night$_{GEN}$ at my bed demanded I my beloved
"At night in my bed, I demanded my beloved"
(OHG, *Hohen Liedes* 87, 15, Axel 2007: 212)

Axel (2007: 212) suggests that in these cases the modifiers form a single constituent, as has been argued for Modern German by Haider (1982: 14) and Wunderlich (1984: 79). According to Wunderlich, who addresses similar structures in Modern German involving two PPs, both phrases form a single complex PP, in which the first one is modified by the second one.

Furthermore, a verb may also occur in third position in Old High German due to intervening sentence adverbs, such as *giwisso* 'certainly,' 'indeed,' or *wārlīh(h)o* 'truly,' 'really,' which are preceded by a clause-initial fronted subject,

object, or an adjunct, and which in turn precede the finite verb. This type of V3 placement is illustrated in (64).

(64) a. [Dhiu] [chiuuisso] ist bighin gotes sunes
that$_{F.NOM}$ certainly is origin God's Son
"That certainly is the origin of the Son of God" (OHG, *Isidor* 116, Axel 2007: 217)
b. [iu] [giuuesso] nisint zuuei ouh ein fleisg
already indeed NEG+are two but one flesh
"So they are indeed no longer two, but one flesh"
(OHG, *Tatian* 335, 26, Axel 2007: 217)

Axel (2007: 212) points out that related examples are also attested in Modern German, in the case of which it is a matter of debate whether the two elements preceding the verb form a single constituent or two independent constituents. However, if it can be shown that these two elements can undergo movement together as a unit, it means that they form a single, large constituent. Axel (2007: 220) makes use of this movement test for Old High German data and finds "XP–AdvP" sequences of the type presented in (64) in left-dislocations, which indicates that they indeed form a single (merged) constituent. For instance, the clause in (65a) exemplifies left-dislocation that affects both the pronoun *ir* and the adverb *uuarliho* 'indeed,' which are both hosted to the left of the adverb *nū* 'now' in Spec, CP, with the derivation given in (65b). This derivation has been slightly modified with respect to the variant given in Axel (2007: 183), who follows Kiparsky's (1995) assumption of the S node rather than TP.

(65) a. /Inti [ir uuarliho]$_i$ /nu habet ir$_i$ gitruobnessi/
and you indeed now have you sorrow
"and you will indeed now have sorrow" (OHG, *Tatian* 587, 26, Axel 2007: 183)
b. [$_{CP}$ [ir uuarliho]$_i$ [$_{CP}$ nu$_k$ [$_{C'}$ [$_C$ habet$_j$] [$_{TP}$ iri t$_k$ gitruobnessi t$_j$]]]]

The V3 structures that have been overviewed so far illustrate cases in which one or both of the prefield elements have been base-generated in the left periphery of the clause and for which corresponding structures are attested in Modern German. The next type of construction involves V3 placement after preposed adverbial clauses. In such instances, an adverbial clause modifies a declarative main clause, and there is additional material located between the adverbial clause and the finite verb, giving the Adverbial Clause–XP–V_{fin} order, as shown in (66).

(66) [Dhuo ir himilo garauui frumida], [dhar] uuas ih
when he heavens' equipment created there was I
"When he fashioned the heavens, I was there" (OHG, *Isidor* 91, Axel 2007: 228)

According to Axel (2007: 228), this type of structure is not possible in Modern German, in which most adverbial clauses (especially the core types, such as temporal, causal, and conditional clauses) must immediately precede the finite verb locat-

ed in second position. In Chapter 1, section 1.3.2, I referred to a related Modern German example of a V3 order provided by Boeckx (1998), which is repeated in (67). It involves comma intonation after the initial sequence, and the verb *heirate* is the second prosodic word following a pause, which has led Bošković (2001) to suggest that V2 is determined by prosodic requirements.

(67) a. Wie reich sie auch sei, # ich heirate sie nicht
however rich she too may-be I would-marry her not
"I would not marry her, rich as she might be"
b. Wie reich sie auch sei, heirate ich sie nicht (German, Boeckx 1998: 276)

It might be the case that the Old High German structures of this type represent a corresponding pattern. In her own account Axel (2007: 228) assumes, following Kiparsky's (1995: 157ff.) analysis of related Old English structures, that the adverbial clauses are adjoined to the main clause. See section 2.5.5.1 for details and a critical overview of her analysis.

2.5.3.2. V3 structures involving pronouns

The second type of V2 order violation observed in Old High German is a consequence of pronoun or short adverb placement after the prefield material and in front of the verb, which results in a V3 structure. The order is exemplified in (68) for clauses with personal pronouns.[22] This is a different pattern than the one found in Modern German, where personal pronouns occur after the finite verb located in second position, as shown in (69).

(68) a. [Erino portun] [*ih*] firchnussu
iron portals I destroy
"I destroy iron portals" (OHG, *Isidor* 157, Axel 2007: 223)
b. [Auuar] [*iu*] sagem
again $you_{DAT.PL}$ say_{1SG}
"Again I say to you …"
(OHG, *The Monsee Fragments* XI, 18, Mt 18:19, Axel 2007: 223)

(69) [Eiserne Portale] zerschmettere *ich*
iron portals destroy I
"I destroy iron portals" (Modern German, Axel 2007: 237)

Axel (2007: 239–240) points out that the position of personal pronouns changed throughout the history of Old High German. In the oldest texts the subject and object pronouns are found either (i) located in second position following the topicalized constituent in the prefield preceding the finite verb (see 70), or (ii) in third

[22] Recall from section 2.4.2.1.3 that Old English exhibits a largely similar distribution of personal pronouns, which also results in V3 placement.

position, following the finite verb located in second position (see 71). This distribution is subject to variation even within individual texts.

(70) [{for} laz an] *i{mo}* uuir{dit}
forgiven him_{DAT} becomes
"He will be forgiven" (OHG, *The Monsee Fragments* VI, 9, Mt 12: 32, Axel 2007: 239)

(71) ioh [fona allem himilfleugendem] ist *siu* chiborgan
and from all sky-flying is she_{NOM} hidden
"And it is hidden from all the angels" (OHG, *Isidor* 112, Axel 2007: 239)

In the later texts the pronouns are located to the right of the verb in virtually all contexts, adopting the current distribution, as shown in (72).

(72) uuánta [dúrch míh] quám *ér* uóne hímele
for through me came he_{NOM} from sky
"For he has come from the sky because of me"
(OHG, *Hohen Liedes* 73, 8, Axel 2007: 240)

Interestingly, in the earlier texts the pronouns can be preceded by XP elements of virtually any category, including noun phrases (such as the object in 73a), adjective phrases (see 73b), prepositional phrases, adverb phrases, and CPs. Such a distribution of pronouns strongly resembles the pattern of second position cliticization attested in Slavic (see Chapter 3). Moreover, it is possible to find two pronominal forms adjacent to each other (see 73c, which exemplifies the co-occurrence of the nominal and accusative pronouns), but according to Axel, these are sporadic instances.

(73) a. endi [dhiu chiborgonun hort] *dhir* ghibu
and the hidden treasures you_{DAT} give
"And I will give you the hidden treasures" (OHG, *Isidor* 158)
b. [Salic] *du* b{ist}
blessed you_{NOM} are
"You are blessed"
(OHG, *The Monsee Fragments* XXXVIII, 4, *St. Augustini sermo*, Axel 2007: 241)
c. [Fona hreue] [aer lucifere] *ih* *dhih* chibar
from womb before Lucifer I_{NOM} you_{ACC} bore
"I bore you out of the womb before Lucifer" (OHG, *Isidor* 409, Axel 2007: 242)

In Chapter 4 I examine a diachronic change in the position of pronominal clitics in Slavic. I show that the clitics move from a position adjacent to the verb to second position, and that the change is contemporaneous with the loss of morphological tense marking. It is quite evident that the shift in the pronoun placement in Old High German represents a different scenario. First, it proceeds in the opposite direction: the pronouns shift from second position to post-verbal placement. Second, although many traditional analyses assume that the pronominal elements in Old High German are X^0-clitics (see, for example, van Kemenade 1987; Cardinaletti

and Roberts 1991; and Tomaselli 1995), Axel (2007, ch.5) shows that this assumption is not borne out by the data. First, she points out that there is virtually no evidence for a process of phonological cliticization of pronouns preceding the final verb. Second, she observes that the pronouns can be coordinated or modified by relative clauses (see 74), which is not an option for clitics in the contemporary German dialects that have clitic forms. In these dialects, only strong forms can be modified and coordinated.

(74) a. Niodo nist [uns] ioh [iu] hear kanoga
NEG+or NEG+is us_{DAT} and $you_{DAT.PL}$ here enough
"Lest there be not enough for us and for you"
(*The Monsee Fragments* XX, 13, Mt 25: 9)

b. thoh bín *ih* [then ir súachet]
yet am I_{NOM} whom you seek
"Yet it is me who you are looking for"
(OHG, *Otfrids Evangelienbuch* IV 16, 40, Axel 2007: 263)

Some of the other V3 orders in Old High German are a result of placement of short adverbs in second position. The short adverbs include elements such as *sō̆* 'so, thus, thusly' and *thă̆r* 'there,' and *thō* (*dhuo*) 'then.' When they occur in second position, their temporal meanings are usually not preserved; rather, they are most often used as discourse connectives (Axel 2007: 224–225). It seems that they perform similar roles to the ones assumed by sentential particles, which are overviewed in section 2.5.4. For instance, *thō* (see 75) may add emphasis to the element located to its left or it may switch a discourse topic.

(75) a. her *tho* antuurtita inti quad in
he THO answered and said them
"but he answered and said to them" (OHG, *Tatian* 335, 18)

b. siu *tho* giuuanta sih
she THO turned herself
"she then turned around" (OHG, *Tatian* T 665, 19, Axel 2007: 224)

In some analyses (for instance, Pintzuk 1996) these elements are assumed to be clitics, though as in the case of pronouns, their clitichood is a matter of controversy. Thus, Axel (2007, ch.5) points out that their clitic status is not reflected through their orthography in Old High German or in their Old English counterparts. It seems to me though that the lack of a special morphological or orthographic make-up of these forms is not necessarily a strong objection against their clitic status, as these adverbs could be "simple" clitics (in the sense of Zwicky 1977), which have the same morphological form as their non-clitic counterparts, but whose only distinguishing property is the lack of lexical stress.[23] Another point of objection

[23] Zwicky (1977) proposes a distinction between "simple" and "special" clitics. Simple clitics have the same syntactic distribution and morphological form as their non-clitic counterparts.

put forward by Axel is related to the observation that while a number of Germanic languages have pronominal clitics (these languages include Dutch, some dialects of German, and West Flemish), none of them have adverbial clitics (Haeberli 1999: 346). Still, I observe that this objection does not seem to be a strong one either. Adverbial clitics are common in some Romance languages (for instance in Romanian, where they typically express aspectual meanings) as well as in some Slavic languages such as Bulgarian (see Bošković 2001: 181) even though they are not attested in most other Slavic languages. Their clitic status, however, is also a matter of debate. Regardless of the controversy concerning their clitichood, there is a close parallel between the pattern found in Old High German and the structures involving complex tense constructions in Bulgarian. In both cases, the only lexical items that can intervene between the finite verb (in the case of Bulgarian, the auxiliary "be") and the leftmost XP element (the subject or some other phrasal material, such as a PP in Bulgarian) are X^0 elements, including pronominal clitics and elements analyzed as adverbial clitics, such as *ošte* 'still' and *veče* 'already' in (76).

(76) a. Ivana ne e *ošte* napisala domašnoto si
Ivana NEG is$_{AUX}$ still write$_{PART.F.SG}$ homework-the her
"Ivana has not finished her homework yet"
b. Da utre šte sŭm gi *veče* pratila
by tomorrow FUT am$_{AUX}$ them$_{ACC}$ already send$_{PART.F.SG}$
"By tomorrow I will have already sent them" (Bg, Krapova 1999)

The discussion of short adverbs concludes the overview of V2 order violations in Old High German. Before presenting an analysis of the facts overviewed in the previous sections, the subsequent section examines properties of second position particles, as they have an influence on the distribution of the verb in Old High German.

2.5.4. Sentential particles in Old High German

Old High German preserved some operator particles, which were common in Gothic and played an important role in Gothic syntax with respect to clause-typing (see section 2.3.2), but whose descendants were much less frequent in the later stages of Germanic (Axel 2007: 43). Recall that in Gothic these particles occurred in second position, and if the initial position was occupied by an operator such as a *wh*-question, they gave rise to a violation of the V2 rule, as their presence blocked verb movement to second position. One of the most common sentential particles

Their only distinguishing property is the lack of stress. Special clitics display distinct syntactic and phonological behavior when compared to their non-clitic counterparts. For instance, they may require a designated syntactic position in the clause. See Chapter 3 for an analysis of different clitic forms in Slavic.

in Old High German was *inu*, which was used to mark interrogation. It occurred either in front of a *wh*-phrase (see 77a), or, more commonly, it introduced *yes-no* questions (see 77b).

(77) a. *Inu huueo* ist in salomone zi firstandanne…?
INU how is in Solomon to understand
"How is that to be understood in Solomon…?" (OHG, *Isidor* 633, Axel 2007: 43)
b. *Inu* ni angil nist anaebanchiliih gote?
INU NEG angel NEG+is identical God_{DAT}
"Is an angel not identical to God?" (OHG, *Isidor* 184, Axel 2007: 44)

It seems that the main contribution of *inu* was the semantic marking of interrogation (thus, it performed a similar function to the question particle *li* in Slavic, see section 3.4 in Chapter 3). By and large, this particle did not perform any syntactic function, as it had no effect on verb movement. Namely, the general rule of forming *yes-no* questions involved preposing the verb to the initial position, but the particle placement had no influence on the position of the verb, as the verb movement systematically took place in interrogative clauses also in the presence of this particle (see Gering 1876: 37, fn. 1, quoted in Axel 2007: 45).

Another sentential particle attested in Old High German is *thô*, which appeared in second position and whose occurrence gave rise to V3 orders. Originally *thô* functioned as a temporal adverb with the meaning 'then,' but in examples such as the one in (78), the temporal meaning is not present. Rather, *thô* functions as a contrastive discourse particle, which characterizes a change in the topic of a discourse (see Axel 2007: 225).

(78) her *tho* antuurtita inti quad in
he then answered and said them
"But he answered and said to them" (OHG, *Tatian*, 335, 18, Axel 2007: 224)

In Fuss's (2008) analysis, *thô* plays an important role in the development of the regular V2 grammar in late Old High German and its properties are discussed in more detail in section 2.5.5.1.

Another sentential particle found in Old High German is *jā*. This particle had a special semantic contribution, as it marked the speaker's presupposition of the confirmation or agreement on the part of the hearer (see Wauchope 1991: 128).

(79) *Ia* ist thaz ferah furira thanne tház muos
IA is the life more than the food
"Life is more important than food, right?" (OHG, *Tatian* 155, 9, Axel 2007: 169)

As in the case of *inu*, *jā* preceded the verb and occurred in the left-periphery of a clause (never clause-internally). Thus, as Axel (2007: 46) points out, in Old High German there was no complementary distribution between verb preposing and

particle placement, which means that the interaction between the particles and verb movement was somewhat different in Old High German than in Gothic. Recall from section 2.3.2 that in Gothic the enclitic particle *-u* triggered verb movement. In Axel's (2007: 46) view, though, verb movement in Gothic was not motivated by the need of marking interrogation via verb movement, but rather because of the necessity to provide a prosodic host for the particle *-u* onto which it could encliticize. It seems to me, however, that Axel's assumption about the trigger of the operation is problematic, as it presupposes look-ahead in syntax. Moreover, Axel admits herself that verb movement in Gothic could at times occur independently of the presence of particles (see also Roberts 1996). Regardless of an analysis, it is quite evident that the role of sentential particles as clause type markers was considerably less significant in Old High German than in Gothic. Furthermore, the lack of a relation between verb movement and the presence of particles suggests that the V2 pattern in Old High German was generalized to a larger degree than it was in Gothic and that it resembled the V2 system of contemporary continental Germanic languages, which lack sentential particles altogether.

2.5.5. An overview of analyses of V2 placement in Old High German

To summarize the data presented so far, it is evident that verb movement to second position in Old High German was not confined to operator contexts, the way it was in Gothic. It was also generalized to a larger degree than in Old English, in particular with respect to the wide range of elements that could occupy the prefield position. As has been argued by Axel (2007: 198ff.) and Fuss (2008: 232ff.), a comparison of the V2 contexts across diachronic stages of different Germanic languages suggests that although the operation was initially motivated by special semantic and pragmatic factors (such as clause typing, topicalization, and focus properties of the prefield constituent), in Old High German all kinds of elements gradually became eligible as prefield constituents, and the special semantic motivation for the application of the movement was lost. Still, the preceding sections have shown a number of exceptions to the generalized V2 placement, which include a relatively high frequency of verb-initial clauses and the possibility of inserting an additional XP-element in the prefield, which gives rise to the V3 order. Furthermore, the position of the verb could also be influenced by sentential particles, which are not attested in contemporary Germanic languages. The next section overviews an analysis of V2 placement by Axel (2007) and its criticism by Fuss (2008). It also points out some problems with the generalizations made in Fuss's analysis that are posed by Old Norse data. Finally, it scrutinizes a prosodic account of the spread of V2 structures in Old Germanic proposed by Dewey (2007) and provides a syntactic analysis of Dewey's empirical findings.

2.5.5.1. Axel's (2007) and Fuss's (2008) analyses of V2 in Old High German

In order to account for the properties of the V2 order as well as its violations in Old High German, Axel (2007: 233ff.) adopts Kiparsky's (1995) proposal concerning the structure of the Left Periphery in Proto-Germanic. Kiparsky assumes that Proto-Germanic projected two separate positions in the CP domain: a Focus position (targeted by *wh*-movement, interrogative and relative *wh*-phrases and some demonstrative adverbs) and a Topic position located above it and hosting left-dislocated elements. According to Kiparsky, English had preserved these Proto-Germanic properties for the longest period of time, projecting two separate layers within CP. However, Old English projected the CP layer only in sentences that featured V–to–C movement, that is in clauses with *wh*-phrases or the negation *ne* (see section 2.4.2.1.1), otherwise CP was not present. By contrast, in Old High German all clauses projected CP, and verb movement from V^0 to C^0 applied in all clauses without complementizers. Yet, unlike in English, the two XP-projections for topics and *wh*-phrases within the CP layer were conflated into a single projection that hosted prefield elements. This contrast between Old English and Old High German explains, in Kiparsky's view, why verb movement to second position was generalized in Old High German.

Axel (2007: 201ff.) adopts some insights from Kiparsky's (1995) proposal, but she points out that a number of his assumptions are not confirmed by the Old High German data she has examined. First, Old High German exhibits a number of V3 structures that in her view cannot be accommodated in an analysis that postulates just a single XP projection within the CP layer. Second, the fact that in a number of V3 orders some adverbs are placed between the prefield constituent and the finite verb indicates in her view that the prefield XP-elements do not necessarily target the specifier of the head occupied by the verb. According to Axel, the lack of spec-head relationship between the verb and some prefield elements is further supported by the observation that these elements could be semantically vacuous and bore no syntactic relationship with the finite verb.

A general template postulated by Axel (2007: 201ff.) as a representation of the left periphery in early Old High German is given in (80). The CP is split into a number of separate projections, following Rizzi's (1997) split-CP hypothesis.

(80) $[_{\text{ForceP}}$ adv $[_{\text{ForceP}}$ *inu/eno* $[_{\text{Force'}}$ $[_{\text{TopP}}$ topic $[_{\text{Top'}}$ $[_{\text{FocP}}$ focus/*wh* $[_{\text{Foc'}}$ $[_{\text{FinP}}$ $[_{\text{Fin'}}$ V_i+Fin [… t_i]]]]]]]]]]

Axel proposes that the verb targets Fin^0, the head in a lower layer of the CP domain. The assumption of the split-CP domain, with each functional head projecting a specifier that can host a preposed phrasal constituent, allows her to capture the observation that more than one XP element could precede the finite verb, giving rise to V3 orders (see section 2.5.3). Furthermore, the structure in (80) predicts that while some of the movement operations had a transparent semantic or prag-

matic motivation (focus fronting, topicalization, and *wh*-movement), some others did not and were triggered by a semantically vacuous EPP feature, targeting Spec, ForceP. Moreover, Axel posits that sentential particles, such as *inu/eno*, are merged in Spec, ForceP, whereas adverbial phrases, which are the only elements in V3 orders that are not base-generated in the prefield, are adjuncts to ForceP.

To account for the decline of V2 order violations and the emergence of a strict V2 system in later stages of Old High German, Axel (2007) proposes that the change was a consequence of the collapse of the CP domain, as a result of which the split-CP template became conflated into a single projection FinP, as presented in (81).

(81) $[_{\text{FinP}}\ \text{XP}_i\ [_{\text{Fin}},\ \text{V}_j\text{+Fin}\ [\ \ldots\ \text{t}_i\ \ldots\ \text{t}_j\ ]]]$

The simplification of the CP domain resulted in the loss of V3 patterns in Old High German. Furthermore, it also gave rise to the configuration in which the constituent occupying the prefield in Spec, FinP uniformly enters the spec-head relationship with the verb located in Fin^0, resulting in a strict V2 grammar observed in contemporary continental Germanic languages.

As far as the motivation for the observed diachronic change is concerned, Axel (2007: 235) admits that "[i]t is unclear how this process was triggered." She hypothesizes that the change may have been influenced by the loss of sentential particles, which assumed different syntactic positions within the split-CP domain and whose role was to encode the clause type. Their decline may have triggered the loss of the projections that they had formerly occupied, which in addition coincided with a rise of a semantically-vacuous Formal Movement of the verb to second position. As a result, clause type distinctions began to be signaled exclusively by word order manipulations (such as V1 and V2 orders) rather than by designated clause-typing particles.

Fuss (2008: 284) overviews Axel's (2007) analysis of the emergence of a strict V2 grammar in late Old High German and points out a problem with her hypothesis that attributes the development of the regular V2 system to the decline of sentential particles. Namely, he remarks that although the rise of a generalized V2 grammar has often been motivated by the loss of the particles in the literature (see, for instance, Eythórsson 1995; Roberts 1996; and Ferraresi 1997), it is doubtful whether this was the exclusive factor driving the change. In particular, it is not clear whether such a change could be initiated during the process of language acquisition (that is the period during which language change is assumed to arise, at least in the generative framework, see the Introduction). Namely, for the change to occur, language learners would need to be capable of detecting and repairing "functional deficits" of the acquired grammar. Furthermore, Fuss observes that it is far from obvious that word order manipulations would be sufficient to perform the clause-typing function of the particles (especially the matrix/embedded distinction), given that

in early Germanic the differences between main and subordinate clauses were manifested mainly through the presence or absence of a complementizer. Word order differences between matrix and subordinate clauses were far less pronounced in early Germanic than they are in contemporary Germanic V2 languages, so it seems they would not be sufficient to mark clause typing distinctions.

Moreover, from a theoretical perspective, Fuss (2008: 268) points out two problems with Axel's analysis of verb placement in Old High German. First, he notices an incompatibility between the assumption of the split-CP architecture and the postulate of adjunction of adverbial clauses to the root node. As has been mentioned earlier in this section, Axel posits the adjunction of adverbial clauses to ForceP in order to accommodate the only XP-elements that occur in the prefield of V3 structures as a result of movement rather than base-generation. Fuss notes that within the split-CP approach (and in cartographic approaches in general), adjunction to phrasal categories is precluded, following Kayne (1994). Second, Fuss shows that there is little empirical support for multiple head positions which, as the split-CP hypothesis predicts, would be occupied by the verb in different structures in Old High German. Namely, Fuss argues that the only lexical candidates for the head positions in the left periphery are the complementizer and the verb. The sentential particles most likely occupy XP-positions, thus they target specifiers rather than heads, as they do not seem to interact with verb fronting but rather with phrasal movement. In fact, this is also an assumption made by Axel (2007: 209ff.), who posits that *inu*/*eno* is located in Spec, ForceP, whereas *ia* targets Spec, FinP.

As an alternative to Axel's split-CP account, Fuss (2008: 270ff.) develops a multiple specifiers analysis of the V2 system in Old High German. This analysis postulates C^0 as the unique head in the left periphery of the clause. The C-head may project multiple specifiers that are target of multiple XP-movement, which gives rise to V3 orders. The movement operations of XP material to the specifiers are argued to be driven by discourse-related features, including topic and focus, which are located in C^0. Unlike in the split-CP analysis, there is no set of functional projections occurring in a designated order. Instead, it is assumed that the sequence of the XP-elements located in the specifiers is dictated by a strict hierarchical order of semantic/pragmatic features that trigger Merge operations (see Grewendorf and Sabel 1999 for a related approach assumed in relation to scrambling, and Lahne 2009 for a discussion of the implications of such a system for the structure of the left periphery). The hierarchical order of the features ensures that the movement operations triggered by these features conform to the feature hierarchy, as the features are checked off in the required sequence.

The analysis of the CP domain in terms of multiple specifiers allows Fuss to attribute the emergence of the strict V2 grammar in late Old High German to a single parametric change, which consists in the loss of the ability to project multiple specifiers by C^0. In his view, the loss was triggered by two factors. First, he assumes that although originally C^0 hosted different semantic and pragmatic

features (for instance, topic, focus, or the *wh*-feature), the feature hierarchy responsible for the fixed order of prefield elements was apparent to the first language learner only in the presence of multiple features in C^0, which triggered movement of different XP-elements to multiple specifiers. In case only one feature was on C^0, only one XP-element was preposed to the single specifier. In such a scenario, the feature hierarchy was not available to the learner in the primary language data, as a result of which C^0 may have been reinterpreted as a multi-purpose projection, and the original semantic/pragmatic motivation for the movement to C^0 may have become opaque and could not be identified any more. In consequence, it is likely that the learners instead postulated a semantically vacuous, generalized EPP feature on C^0 that was able to trigger movement of any phrasal constituent to Spec, CP, giving rise to the generalized V2 order found in contemporary continental Germanic languages (see also Simpson 2004 and Hinterhölzl et al. 2005 for more discussion and related analyses).

Second, another factor that in Fuss's (2008) view fostered the generalized V2 order is the clause-initial discourse-connective *thô*. *Thô* is the cognate of the Old English adverb *þa*/*þonne* 'then,' which triggered V2 on a par with a few other temporal and discourse linking adverbs in Old English (see section 2.4.2.1.1). Fuss (2008: 260) observes that sentence-initial *thô* triggers obligatory verb inversion also in Old High German. Recall from section 2.4.2.3 that Fuss (2008) postulates that *þa*/*þonne* is located in Spec, TP. He makes the same assumption for *thô* in early Old High German and finds support for his proposal in Dittmer and Dittmer's (1998: 95) study of the Old High German translation of *Tatian*. They notice that sentences with an empty preverbal position in the Latin vorlage are frequently rendered in Old High German with clauses that contain *thô* 'then,' *thanne* 'then' or a pronoun such as *ih* 'I' in the clause-initial position, in front of the verb, as illustrated in (82). This fact may indicate that the subject pronoun as well as *thô* and *thanne* target the same syntactic projection.

(82) a. **dixit** illi (Latin) → *thô* **quad** her imo (OHG)
said him then said he him
"then he said to him" (*Tatian*, 357, 1 [106, 2], Dittmer and Dittmer 1998: 92)

b. **rogo** ergo te pater (Latin) → *ih* **bitiu** thih fater (OHG)
$pray_{1SG}$ therefore you father I pray you father
"I pray thee therefore father" (*Tatian*, 365, 5 [107, 3], Dittmer and Dittmer 1998: 95)

Fuss (2008: 261) points out that the clause-initial *thô* in examples such as the ones in (82) does not have any direct semantic equivalence in the Latin vorlage. For instance, *thô* is not semantically related to sentence conjunctions or connectives that occur in the corresponding Latin clauses. Fuss suggests that this fact shows that *thô* was semantically underspecified, which in turn indicates that *thô* was a precursor of the expletive *es*, which emerged in Middle High German, as was also proposed in traditional descriptive analyses such as Brugmann's (1917: 37).

Furthermore, Fuss (2008: 263) observes that *thô* is often placed immediately to the right of the verb in V1 clauses, as illustrated in (83). He assumes that in such instances *thô* is merged in Spec, TP, on a par with the context given in (82), whereas the clause-initial verb raises to C^0.

(83) quad tho maria zi themo engile
said then/there Mary to the angel
"Mary said to the angel" (OHG, *Tatian*, 71, 24, Axel 2007: 150)

Finally, recall from section 2.5.4 that *thô* could also perform the function of a discourse connective. It appeared then in second position in front of the verb, which occurred in third position, as shown in (84). In this type of usage *thô* did not express any temporal meaning but rather it introduced a contrast in the flow of discourse.

(84) siu tho giuuanta sih
she then turned herself
"She then turned around" (OHG, *Tatian*, 665, 19, Axel 2007: 224)

Fuss (2008: 264) posits that when used as a discourse particle, *thô* was not located in Spec, TP. Instead, it was attached to the fronted XP constituent and marked this element as contrastively focused or as a new discourse topic.

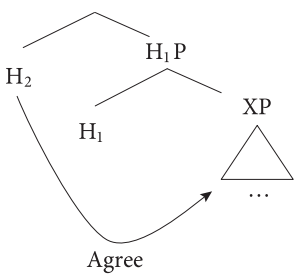
The distribution of *thô* in Old High German leads Fuss to make a number of assumptions about its syntactic behavior. First, *thô* did not occupy a uniform syntactic position: although it targeted Spec, TP in clause- and verb-initial contexts exemplified in (82) and (83), it raised higher than Spec, TP when it functioned as a discourse particle and was attached to the preposed XP, as in (84). Second, in spite of the variation in its syntactic placement, after the loss of its temporal meaning, *thô* displayed similar semantics irrespective of its position in syntax. For instance, Fuss (2008: 275) argues that the placement of *thô* in front of the verb may be a result of Formal Movement, which affects the highest constituent located in the middle field and raises it to the prefield, but does not bring about any changes in the semantic import of the moved element. This type of syntactic variation, which was not accompanied by semantic variation, may have resulted in a situation in which an element located in Spec, TP had the same interpretation as it did when it moved to Spec, CP. In this scenario, *thô* may have contributed to a generalization of the EPP feature on C^0, which in consequence triggered movement of any phrasal element to Spec, CP.

In Fuss's view, the two empirical cases discussed above may have led to the generalization of the V2 rule in late Old High German. What still needs to be accounted for is the factor that precluded the possibility of projecting more than one specifier by C^0, putting an end to the V3 patterns that were available in early Old High German. Fuss (2008: 283) argues that the relevant factor is the explet-

ive, which "signals to the learner that a functional head may project only a single specifier." Expletive *es* (termed "Vorfeld-*es*") developed in Middle High German (Lenerz 1985; Axel 2007), and as has been mentioned above, *thô* was its predecessor in late Old High German as a semantically underspecified element that could be located in Spec, TP or in Spec, CP. Fuss develops a theoretical mechanism that prevents projection of more than one specifier if an expletive is available in the grammar. On the empirical side, he notes that the presence of expletives indicates not only that a relevant position in syntax (Spec, TP in the case of subject-type expletives in English and the Scandinavian languages or Spec, CP in the Germanic V2 languages; see Chomsky 1995: 362ff.) must be overtly filled, but also that this syntactic position is unique and may host only one specifier. This property may in his view explain the lack of scrambling to the position preceding the subject in English and Scandinavian and the unavailability of V3 patterns in the Germanic V2 languages.

On the theoretical side, Fuss (2008: 289) proposes that expletives have the function of "closing off the projection of a functional head," which prevents projecting more than one specifier. This function follows from Fuss's assumption about the mechanism of strict cyclicity. Namely, following Chomsky 1995: 234ff., 2000: 132ff.), he proposes that a lower head (such as H_1 in 85) may not trigger further syntactic operations (Agree or external/internal Merge) once a higher head (such as H_2 in 85) has been merged, acting as a probe. Thus, once H_2 has initiated an Agree operation, H_1 becomes inert.

(85)



The mechanism of strict cycle has repercussions for the status of expletives. In general, expletives are assumed to be merged directly in Spec, TP, in which they check the EPP/edge feature of T^0. However, the derivation of expletives is problematic in the framework developed in Chomsky (2000), in which the elimination of the EPP/edge feature is parasitic on prior establishing an Agree relation between a probe that seeks a matching goal in its c-command domain. Namely, if expletives are merged directly in Spec, TP, T^0 cannot establish a checking relation with the expletive, as Spec, TP is not part of the checking domain of T^0 any more.

To circumvent this issue, it is suggested (see Chomsky 2000: 128, 2004: 114) that expletives act as probes themselves and that they initiate an Agree relation with a functional head (C^0 or T^0) as the closest goal as soon as they have been merged in Spec, TP. Subsequently, C^0 or T^0 becomes inert and no further operations may be triggered. On Fuss's (2008: 292) analysis, this mechanism precludes projection of multiple specifiers once the expletive has been merged, which leads him to postulate a generalization (Fuss 2008: 289), which states that "a functional head can project multiple specifiers only if the grammar does not contain an expletive related to F." In Fuss's view, this generalization accounts for the empirical observation that correlates the emergence of expletives with the loss of the V3 order, which results in a regular V2 grammar.

2.5.5.2. Problems with Fuss's (2008) analysis of V2 orders in Old High German

I would like to point out a theoretical and an empirical problem with Fuss's generalization. On the theoretical side, it seems to me that it is not sufficiently substantiated. Namely, the generalization restricts the projection of multiple specifiers to structures with expletives, but it is entirely unclear how multiple specifiers can be precluded in the absence of expletives in the derivation. Thus, while the generalization captures the impossibility of V3 structures in languages with expletives in clauses that contain an expletive, it is not immediately obvious how V3 orders can be excluded in all other clauses.

On the empirical side, the link between a strict V2 grammar and the presence of expletives is challenged by Old Norse/Old North Germanic data. Namely, Eythórsson (1995, ch.2) observes that Old Norse languages developed a generalized V2 grammar very early. Although the oldest Runic relics (from the period around 150–450 A.D.) are in many cases verb-final, Eythórsson (1995: 180–189) shows that the verb-final order is not predominant and the verb may move to C^0 in specific syntactic environments, for example in topicalizations. The V2 rule becomes more generalized in the later stages of Old Norse. In *Poetic Edda*, the oldest Icelandic relic that dates back to the 9th century, the verb displays a regular V2 order in main and subordinate clauses, with some deviations attributed by Eythórsson (1995: 191) to the poetic nature of the text. In later Old Icelandic texts (12th–14th c.), V2 is a strict, obligatory rule both in main and subordinate clauses except for V1 structures. In main clauses the verb is preceded by a number of different elements, such as subjects, topics, and *wh*-words. In subordinate clauses it follows the subject or the topic. Furthermore, Eythórsson (1995: 189–190) observes that this rule becomes obligatory also in other Old Norse languages: the verb is placed after the first constituent in both main and subordinate clauses in Old Norwegian (which together with Icelandic is classified as West Norse) as well as Old Danish, Old Gutnish, and Old Swedish (classified as East Norse), especially

in the relics that are regarded as relatively free from foreign language influences, such as Latin or Low German.[24]

Old Norse languages pose a problem for Fuss's (2008) analysis, which attributes the emergence of a generalized V2 system in Old High German to the development of expletives, because V2 orders had been robustly present in Old Scandinavian languages in all contexts long before the emergence of expletives. For instance, in her study of Old Swedish (1225–1526), Falk (1993) shows that it was a regular V2 language before both the development of expletives and the EPP feature on T^0. Falk observes that Old Swedish allows dropping of both referential (see 86a) and non-referential subjects (see 86b). In addition, no expletive subject is required in clauses with weather-verbs, such as (86c). In Modern Swedish, an overt subject is obligatory in all the clauses that are parallel to the ones in (86).

(86) a. at iak födde han hemæ i husum ok hæskap
that I brought him [the foal] up home in house and household
Þer diþi ok drak miolk af moþor spina
There sucked [e] and drank milk of mother's teats (13th c. Swedish)

b. Är grauit vnder syll
is dug under sill (13th c. Swedish)

c. Oc rängde ower iordhina fyretighi dagha och fyretighi nätter
And rained over the earth forty days and forty nights
(14th c. Swedish, Falk 1993: 143–144)

Falk (1993) attributes the emergence of expletives to the loss of subject agreement on the verb. She shows that person agreement was lost towards the end of the Old Swedish period (the 15th century) and what was left was number agreement, with two forms marked on the verb, singular and plural. The number agreement on the verb was lost in spoken Swedish (the central dialects) in the 17th century, though it was marked in writing till the 20th century (Falk 1993: 156). Falk (1993: 174–175) establishes that *det* started to be actively used as an expletive after 1600. This fact indicates a considerable temporal discrepancy between the emergence of expletives and the development of a regular V2 grammar. This fact also suggests that the emergence of expletives may be entirely unrelated to the loss of V3 orders in Old High German, assumed by Fuss (2008).

Summarizing, the previous sections have overviewed diachronic variation in the application of the V2 rule in Old High German. It has been shown that in contrast to Gothic and Old English, in Old High German the V2 order applies in nearly all contexts. Still, in comparison to contemporary continental Germanic languages, Old High German displays a relatively high proportion of V2 order violations, which diminish in the course of language history. The violations

[24] With the exception of Icelandic, the V2 order was lost in subordinate clauses in other Scandinavian, and on a par with German and Dutch, these languages normally do not permit the V2 order in embedded contexts (however, see a detailed overview of exceptions discussed in Chapter 1, section 1.4.2).

consist in V1 and V3 placements. This section has also addressed two recent accounts of these violations, which show the way a uniform V2 grammar may have emerged. Axel (2007) attributes the emergence of such a grammar to the conflation of functional projections within the split-CP domain, which is in turn caused by the decline of sentential particles that previously occupied different projections within CP. Fuss (2008) finds Axel's proposal of a rich CP field to be empirically unmotivated, mainly due to the lack of evidence for verb movement to the different head positions within the split-CP. On his own part, Fuss proposes that CP in Old High German projects multiple specifiers, and that a V2 grammar becomes regular and exceptionless when this projecting ability is lost. In his view, this happens due to the emergence of expletives, whose crucial property is that of closing off the projection of a functional head, which prevents merge of more than one specifier. Although Fuss's analysis is certainly interesting, I observe that it is empirically challenged by diachronic facts from Old Norse, in which expletives emerged a long time after the V2 grammar had been regularized. Moreover, Old Swedish facts indicate that the presence of expletives does not need to be related to the availability of a fully-fledged V2 grammar but it may be connected with subject agreement marking on the verb.

The next section provides a brief overview of an analysis of the development of the V2 grammar due to Dewey (2007), which attributes the emergence of the V2 rule to prosodic modifications.

2.5.5.3. A note on a prosodic account of the development of the V2 grammar

It has been mentioned in the Introduction and in Chapter 1 that the V2 rule is a rather unusual syntactic process because it requires verb placement after the clause-initial constituent virtually irrespective of the category of this constituent. In consequence, some analyses have assumed that the V2 order may be a result of a prosodic requirement (see, for example, Boeckx 1998 and Bošković 2001; see also Rice and Svenonius's 1998 prosodic analysis of V2 placement in Northern Norwegian discussed in section 1.3 in Chapter 1). Some of the prosodic analyses may have been inspired by Wackernagel's (1982) original insight concerning the position of clitics and the verb in early Indo-European. Namely, Wackernagel claimed that the elements located in second position in main clauses were unstressed and occurred after the first stressed element because of their need for prosodic support. This type of assumption is adopted in Dewey's (2007) study of verb placement in Old Saxon, Old Icelandic, and Gothic. On the basis of evidence coming from intonation marking and meter, which in her view may reflect characteristics of spoken language, she postulates that auxiliaries, which she observes were never stressed, were placed after the first stressed element, in line with requirements related to intonation, such as Kuhn's Law (1933) (see also Stockwell and Minkova 1994 for a discussion). By contrast, lexical verbs were normally stressed

and in consequence, they occurred at the end of a clause, where their placement coincided with a prosodic lift in meter/verse.

Furthermore, Dewey examines the elements occurring in front of the verb located in second position and she points out that they did not form a natural class with respect to their grammatical category. She also observes that in some cases the first element could be a non-constituent, such as the demonstrative/article split from the noun phrase in (87a), the quantifier separated from the noun phrase in (87b), and the *wh*-element split from the dative NP in (87c). This observation is her strongest argument for the prosodic account of verb placement.

(87) a. Þat man hon fólcvíg fyrst í heimi
the$_{ACC}$ remembers she people-war$_{ACC}$ first$_{ACC}$ in world$_{DAT}$
"She remembers the first war of people in the world" (12th c. Old Norse, *Voluspá* 21)

b. Maneg uundrode Iudeo liudio
many$_{NOM}$ wondered Jewish$_{GEN}$ people$_{GEN}$
"Many of the Jewish people wondered"
(9th–10th c. Old Saxon, *Heliand* 4109a–4110b, Dewey 2007: 32)

c. hveriom ertu sveini um borinn
which$_{DAT}$ are-you guy$_{DAT}$ PRT born
"To what guy have you been born?" (13th c. Old Norse, *Fáfnismál* 1, Dewey 2007: 86)

This type of V2 placement, with the verb giving rise to discontinuous constituency, is not attested in Modern Germanic. Dewey claims that the unavailability of V2 orders corresponding to the ones in (87) in contemporary continental Germanic languages is a result of the grammaticalization of the V2 pattern as a syntactic, rather than a prosodic/intonational phenomenon. This process was in her view triggered by prosodic changes that influenced properties of the meter in early Germanic dialects.

In Migdalski (2010) I argue that it is not entirely clear whether the lack of stress on the auxiliary verbs in early Germanic had any syntactic repercussions. In fact, such an interaction is unexpected in the current model of narrow syntax, which postulates that prosodic requirements bear no direct influence on syntactic operations.

Moreover, it is not immediately obvious that verb placement indeed triggers discontinuous constituency in the examples given in (87). If Left Branch Extraction was permitted in early Germanic languages, it might be the case that they calculated constituency in a different way than Modern Germanic languages. In fact, the Slavic languages that allow Left Branch Extraction display the same patterns as the ones in (87) irrespective of prosody, as the initial element in such contexts can potentially be separated from the rest of a clause by a clitic or a tonic (non-clitic) element, as shown in section 3.5.1.2 in Chapter 3.

An important typological diagnostic related to the availability of Left Branch Extraction concerns the presence of articles in a language. It has been observed

(see, for example, Corver 1992) that languages without articles, which are assumed not to project the DP layer in noun phrases, allow Left Branch Extraction. Tonya Dewey (p.c.) informs me that in the early Germanic languages she investigates in her work the definite article was homophonous with the demonstrative. This fact indicates that it is not certain whether these languages had articles and whether the noun phrases in these languages projected DP at this stage at all. Importantly, the clause-initial elements in (87) display nominal morphology. In particular, the element *þat* glossed as an article in (87a) is marked for accusative case, which makes it morphologically similar to demonstratives in Slavic, which show adjectival morphology and inflect for case, gender, and number.

If the DP layer was not projected in the early Germanic languages exemplified in (87), the alleged discontinuous constituency could be attributed to the availability of Left Branch Extraction. A number of analyses have been postulated in the literature to account for the syntactic contrast between languages that allow and disallow Left Branch Extraction. For example, Bošković (2005), who assumes that languages without articles do not project the DP layer, proposes a different configuration for adjective phrases within NPs in the respective two groups of languages. Namely, he posits that in languages with articles the head of AP takes NP as its complement, as shown in (87a), whereas in languages without articles APs are hosted in the Specifier of NP, so that NP dominates AP, as illustrated in (87b).

(88) a. $[_{DP}\ [_{AP}\ A\ [_{NP}\ N]]]$ (languages with articles)
b. $[_{NP}\ AP\ N]$ (article-less languages)

Bošković's proposal, coupled with the assumption that the DP layer is found only in article languages, deduces the workings of Left Branch Extraction. AP may be extracted in DP-less languages because it is a separate constituent. Conversely, AP is not a constituent to the exclusion of NP in DP languages; therefore Left Branch Extraction is precluded, as it would involve extraction of a non-constituent.

If the early Germanic languages exemplified in (87) indeed lack the DP layer and allow Left Branch Extraction in contrast to contemporary Germanic languages, the alternative analysis of such cases developed in Migdalski (2010) accounts for the placement of the prefield elements in early Germanic without taking recourse to prosodic requirements. If correct, this is a welcome result, given that prosodic requirements are assumed not to play a role in syntactic derivations.

2.6. Summary

To conclude, this chapter has investigated the diachrony of the V2 order in Germanic. It has examined verb placement in Gothic, Old English, Old High German, and Old Norse. These languages present different stages and directions in the de-

velopment of a uniform V2 grammar. Thus, in both Gothic and Old English the verb moves to C^0 only in operator contexts. Furthermore, in some cases of topicalization, the verb appears linearly in second position in Old English, but the ratio of such occurrences decreases in the language history. It has been shown that this decrease is not due to a change in verb placement per se, but it is rather caused by the emergence of the EPP feature on T^0 in Middle English, which requires overt subject placement in Spec, TP, which in turn may give the appearance of a lower position of the verb. In contrast to Gothic and Old English, Old High German and Old Norse display highly regular V2 grammars, and V2 placement steadily becomes more systematic in the course of their history.

The diachronic properties of V2 structures observed in this chapter provide more support for the idea developed in Chapter 1 concerning a non-uniform verb placement in V2 orders. It has been shown that diachronically the V2 rule is initially restricted to Force-related, operator contexts and that it subsequently becomes generalized in some Germanic languages, independently of the already existing operator V2. Moreover, the diachronic facts are instructive for the verification of the hypothesis overviewed in section 1.4.2 in Chapter 1, which states that V2 structures overtly encode the illocutionary force of a clause. If the V2 order were to be uniformly applied as a marker of Force, it is to be expected that any changes to the V2 contexts (for instance, the apparent decline of the V2 pattern in Middle English or the expansion of V2 structures in the history of Old High German) should possibly be related to a modification of the Force-marking strategy. The data examined in this chapter show that this is not necessarily the case. For instance, the decline of the V2 order in English seems not to have been related to Force-marking or the loss of verb movement, but rather to the modification of the TP-system and its "strengthening" through the emergence of the EPP feature on T^0. Correspondingly, the emergence of the V2 grammar in Old High German has been attributed in the literature to many factors, including the decline of sentential particles (which in fact could render illocutionary force specification) or the reanalysis of a temporal adverbial as an expletive.

Thus, finding a uniform parametric value that determines the presence or absence of the V2 order in a particular language is not an easy task because V2 does not seem to be a uniform phenomenon. However, two properties of V2 that have been established so far will prove to be important for the analysis of another second position effect, second position cliticization, which is carried out in Chapters 3 and 4. Firstly, second position effects occur in tensed domains and secondly, Force-related second position placement is diachronically and synchronically distinct from the generalized second position order.

Chapter 3

Properties of second position cliticization in Slavic

3.1. Introduction

This chapter investigates another type of second position effect, namely second position cliticization. It makes use of contemporary Slavic languages as the empirical basis for the investigation.

From a theoretical point of view, although both V2 and second position cliticization involve placement of an element that belongs to a certain natural class after a category-neutral, clause-initial constituent, second position cliticization poses a greater conceptual challenge for the theory of syntax. Clitics comprise elements of different categories (verbal, nominal, and sentential) which do not share any morphosyntactic features. What unifies them is their prosodic deficiency. Furthermore, although they are prosodically weak and their positioning is sensitive to phonological requirements, Slavic data show that clitic placement in the clause cannot be determined exclusively by prosody. Some of them may only encliticize to elements of a specific morphosyntactic category, and in general they observe syntactic constraints; for instance, they only allow syntactic constituents, rather than prosodic units, as their clause-initial prosodic hosts. Still, given the interplay of prosodic and syntactic mechanisms involved in clitic distribution, it is difficult to provide a purely syntactic account of their placement or to determine a feature checking mechanism that is responsible for their movement to second position.

Slavic languages afford a unique opportunity to investigate second position cliticization in a comparative perspective. They show remarkable variation within the group, with two languages, Bulgarian and Macedonian, featuring verb-adjacent clitics on a par with Romance languages; the majority of South and West Slavic languages exhibiting second position cliticization; Polish having weak pronouns, and East Slavic languages conspicuously lacking any pronominal clitics.

The scale of the variation within Slavic allows us to make strong hypotheses about the distribution of different types of clitics crosslinguistically, as well as to verify the assumptions that have been made about the nature of cliticization on the basis of data from other language groups, such as Germanic and Romance languages, which do not display comparable internal variation.

This chapter has the following organization. Section 3.2 provides a general introduction to the phenomenon of second position cliticization. Section 3.3 presents the distribution of second position clitics in Slavic and examines potential interpretations of the pre-clitic material, which correspond to the potential interpretations of prefield elements in V2 clauses in Germanic, discussed in Chapter 1. Section 3.4 proposes a new division of second position clitics, with generalized second position clitics that include pronominal and auxiliary forms attested in a subset of Slavic languages, and operator second position cliticization, observed in most Slavic languages irrespective of whether they have second position pronominal and auxiliary clitics or not. This division, initially developed in Migdalski (2009a, 2010), corresponds to the one observed in Germanic with respect to operator and generalized V2, described in Chapters 1 and 2. Section 3.5 overviews different analyses of second position cliticization, with phonological accounts addressed in section 3.5.1, and syntactic ones in section 3.5.2. As in the case of V2 placement in Germanic, a major theoretical issue in Slavic has been related to the question of whether the second position clitics all target a designated syntactic projection, such as C^0, or whether their placement is not uniform. This chapter (as well as Chapter 4) provides arguments for the latter assumption. Finally, section 3.5.2.4 addresses a scattered deletion account of second position cliticization, initially proposed by Franks (1998), and points out empirical and conceptual issues faced by this analysis.

3.2. Defining second position cliticization

Second position cliticization, also referred to as Wackernagel cliticization, consists in placement of a prosodically weak element, such as pronominal, auxiliary or sentential clitics, in the position right after the clause-initial element, be that a single word or a phrase. This particular placement of clitics was first described in detail by Wackernagel (1892) on the basis of several ancient languages including Sanskrit and Classical Greek and is commonly referred to as Wackernagel's Law.[25] For Wackernagel, the law was motivated by phonological considerations:

[25] Although this observation has traditionally been ascribed to Wackernagel, the generalization was originally formulated by Bartholomae (1886) on the basis of cliticization in Avestan. However, Wackernagel (1892) provided a considerably more comprehensive analysis, taking into account greater crosslinguistic data (see Hale 2007: 200).

clitics appear in second position after the first stressed element because — he assumed — they need prosodic support to their left.

The workings of Wackernagel's Law and a potential interaction between clitic placement and prosodic requirements are illustrated in the Classical Greek example from Herodotus given in (1). The third person singular accusative clitic *min* is hosted here by the verb *eíretó*, which is the first word in this clause. According to Goldstein (2014: 598), the presence of the pronominal clitic gives rise to the secondary accent on the ultima, which for him is "canonical second position behaviour." Note though that *min* could also be interpreted as a verb-adjacent clitic. See also Goldstein (2015) for an in-depth discussion of the mechanism of Wackernagel's Law in Classical Greek.

(1) eíretó←*min* ho Astuágēs
asked him the Astyages
"Astyages asked him" (Ancient Greek, *Herodotus* 1.17.2, Goldstein 2014: 598)

As has been noted in the Introduction and in Chapter 1, Wackernagel's (1892) tentative hypothesis was that second position cliticization in Early Indo-European languages may have been the source of V2 placement in Germanic. Wackernagel's postulate was based on empirical facts from Sanskrit, which indicate that finite verbs in matrix clauses in Indo-European were unstressed and followed the clause-initial element as clitics provided that this element was not longer than two syllables. Conversely, in subordinate clauses the verb was stressed and located in the sentence-final position. Thus, Wackernagel's conjecture was that verbs in main clauses were clitic-like elements and that the syntax of verb placement was dictated by prosodic concerns.

The group of languages with second position cliticization studied in this chapter comprises contemporary Slavic languages. As has been mentioned in the introduction to this chapter, these languages are quite unique among other contemporary European languages with respect to the richness of cliticization patterns. Bulgarian and Macedonian have verb-adjacent clitics, Serbo-Croatian, Slovenian, Czech, and Slovak display second position cliticization, Modern Polish has weak pronouns, whereas East Slavic languages (including Russian and Ukrainian) have only strong pronouns, without any corresponding weak pronominal forms.[26]

Slavic cliticization has been subject to extensive research in the last twenty years (see, for example, Halpern 1992, 1995; Tomić 1996; Franks 1998, 2010; Franks and King 2000; Bošković 2001, 2004, 2016; and Migdalski 2006, ch.4). The main

[26] With a few exceptions, most of the data exemplifying second position cliticization in this chapter come from Serbo-Croatian. Although second position cliticization is also found in Czech, Slovenian, and Slovak, these languages permit clause-initial clitics in some contexts and as such might give less insight into the study of Wackernagel cliticization. Moreover, clitics in Serbo-Croatian have been investigated in more depth than in the other Slavic languages. See Franks and King (2000) for a detailed analysis of cliticization across Slavic.

research question addressed in these studies is related to the derivation of second position cliticization: since clitics are phonologically dependent on their host and, on a par with V2, they can be preceded by virtually any overt syntactic material occupying the clause-initial position, some linguists have hypothesized that their placement is dictated by prosodic requirements, which may disregard syntactic considerations. For example, this is the assumption made by Radanović-Kocić (1988) and Halpern (1995), whose analyses are scrutinized in section 3.5.1. These purely phonological accounts were later challenged by the empirical observations made by Franks and Progovac (1994), Progovac (1996), Tomić (1996), Franks (1998), and Bošković (2001), among others, and they are described in section 3.5.2. Another property of Slavic clitics that has been subject to investigation is concerned with the contrast between verb-adjacent and second position cliticization. Initially, the two cliticization patterns were assumed to differ solely with respect to the position of the clitics in the syntactic structure. Subsequently though, starting with Stjepanović's (1998, 1999) and Bošković's (2001) work, the two cliticization types have been recognized as involving different syntactic mechanisms. Namely, verb-adjacent clitics have been shown to adjoin to a designated head in the extended verbal projection (such as T^0 in Migdalski 2013). By contrast, it has been determined that second position clitics do not cluster and adjoin to a uniform functional head, but rather each of the pronominal clitics targets a separate specifier above VP and as such they do not form a syntactic constituent together. However, none of the previous analyses provided an independent syntactic principle that conditions the presence of either type of cliticization.[27] In this work I argue that the relevant condition is the availability of tense morphology, which makes verb-adjacent cliticization possible by providing the appropriate adjunction site, T^0, for pronominal clitics. The argumentation is based on my observations

[27] The exception is Bošković (2016), who in a recent analysis proposes a generalization saying that second position clitic systems are found only in languages without articles. This is a one-way correlation confirmed by a large set of data from many unrelated languages. However, this correlation does not capture the diachronic development from a verb-adjacent to a second-position clitic system that occurred in Slavic in languages such as Serbo-Croatian. As far as I can determine, this development did not coincide with a modification of the DP/NP layers. Thus, it is a matter of debate whether Old Church Slavonic, which featured verb-adjacent pronominal cliticization (see Chapter 4), had articles. On the one hand, Dimitrova-Vulchanova and Vulchanov (2012) point out that *Codex Suprasliensis*, a late Old Church Slavonic relic from the 11th century, features the demonstrative *тъ*, which in some contexts may function as an article. These contexts include environments in which it cliticizes on different categories within nominal expressions and lacks the deictic function of the demonstrative. Dimitrova-Vulchanova and Vulchanov argue that *тъ* was the source of the article in Bulgarian and Macedonian. On the other hand, to my knowledge there is no evidence for the emergence or decline of the article in the history of Serbian, including the Montenegrin dialects, which had verb-adjacent clitics till as late as the 19th century (see section 4.3.2 in Chapter 4). Furthermore, both Old Church Slavonic and Old Serbian exhibit numerous cases of Left Branch Extraction, which is typical of languages that lack the DP projection.

concerning the historical development of the two cliticization patterns in Slavic and is presented in Chapter 4.

Another property that had not received significant attention in the literature on Slavic clitics before Migdalski's (2009a, 2010) analyses is the fact that the division between second position versus verb-adjacent cliticization is not the only one that is observed. As has been mentioned in the introduction to this chapter, apart from "generalized" second position clitics, which include auxiliary and pronominal forms found only in a subset of Slavic languages, there are also operator clitics, which all encode the illocutionary force of a clause and which are attested in all Slavic languages whether they have other second position clitics or not. Operator clitics also target second position but they may display distinct properties that distinguish them from pronominal and auxiliary clitics. These properties include special requirements about the syntactic and categorial status of their hosts and their position in the phrase structure.

The distinction of the two second position cliticization types in Slavic matches the division of the V2 effect observed in Germanic. Namely, only a subset of Germanic languages exhibits generalized V2, yet, on a par with operator cliticization in Slavic, Force-related V2 is more widespread, as it is also attested in English in the form of "residual V2." Chapter 4 will show that the correspondence between these two processes also extends to the historical context, with operator second position placement being the underlying mechanism that predates generalized second position cliticization.

3.3. Patterns of second position cliticization in Slavic

As has been mentioned earlier, most Slavic languages have a rich clitic inventory. In contrast to the Romance languages, the clitics are not limited to pronominal forms, but they also include the auxiliary verb "to be," future auxiliaries that are derivatives of the verb "want," such as *ću* in Serbo-Croatian, *šte* in Bulgarian, *ќе* in Macedonian; the perfective form of the verb "be" *bo* in Slovenian used as a future auxiliary, as well as the conditional/subjunctive auxiliary *by* in Czech and Polish and the corresponding form *bih* in Serbo-Croatian. All of these clitics, except for *šte* (Bulgarian), *ќе* (Macedonian), *bo* (Slovenian), and *by* (Czech and Polish) have strong, non-clitic counterparts. The strong forms of pronouns and auxiliaries display a greater freedom of distribution in the clause and may occur clause-initially. The usage of strong pronouns instead of the corresponding pronominal clitics may give rise to their focused or topicalized interpretation, as indicated in the translations of the structures with clause-initial dative and accusative forms in (2) and (3). In contrast to strong pronouns, second position pronominal clitics may not occur clause-initially, as shown in (4).

(2) Meni *ga* *je* Marija zaboravila dati
me$_{DAT}$ it$_{ACC}$ is$_{AUX}$ Marija forget$_{PART.F.SG}$ give$_{INF}$
"It was to me that Marija forgot to give it" (S-C, Franks 2010)

(3) Njega *mi* *je* Marija zaboravila dati
it$_{ACC}$ me$_{DAT}$ is$_{AUX}$ Marija forget$_{PART.F.SG}$ give$_{INF}$
"It was this thing that Marija forgot to give me" (S-C, Franks 2010)

(4) a. Marija *mi* *ga* *je* zaboravila dati
Marija me$_{DAT}$ it$_{ACC}$ is$_{AUX}$ forget$_{PART.F.SG}$ give$_{INF}$
"Marija forgot to give it to me"
b. **Mi ga je* Marija zaboravila dati (S-C, Franks 2010)

The strong auxiliary forms are used as auxiliaries in pluperfect structures. They may occur at the beginning of a clause, as illustrated in (5), in contrast to the auxiliary clitic, as indicated in (6).

(5) a. Ja bejaše čitao knjigu
I be$_{PAST.1SG}$ read$_{PART.M.SG}$ book
b. Čitao bejaše knjigu
read$_{PART.M.SG}$ be$_{PAST.1SG}$ book
"I had read the book"
c. Bejaše čitao knjigu (S-C)

(6) a. Ja *sam* čitao knjigu
I am$_{AUX}$ read$_{PART.M.SG}$ book
b. Čitao *sam* knjigu
read$_{PART.M.SG}$ am$_{AUX}$ book
"I have read the book"
c. **Sam* čitao knjigu (S-C)

In addition, as has been mentioned earlier, most Slavic languages have second position clitics that encode the illocutionary force of a clause, which in this work are referred to as operator clitics. They do not have strong, non-clitic counterparts and are morphologically invariant (that is, unlike auxiliary and pronominal clitics, they do not have different person/number forms). Operator clitics include the particle *li*, which is often termed the "interrogative complementizer" in the literature. It is used to mark interrogation or focus on the element that precedes it. In addition, Czech, Polish, and Russian have the operator clitic *że*/*że*, which similarly to *li* marks focus. Operator clitics were more common in Old Slavic. Apart from *li* and *że*, Old Church Slavonic had the indicative complementizer *bo* and the ethical dative. *Bo* has been preserved in the complementizer function in languages such as Czech and Polish, but it has lost its clitic status. The ethical dative is still attested in many Slavic languages, with various degrees of productivity. It is morphologically the same as the dative pronominal clitic, but it is not argumental, that is it does not instantiate an argument selected by the verb. It performs the pragmatic func-

tion of attracting the hearer's attention. Finally, Czech features a curious case of the operator clitic *prý*, which is used to render non-witnessed events (exemplified in 8 below). Operator clitics are examined in detail in section 3.4.

The ordering of clitics with respect to each other is roughly the same in all Slavic languages, whether they have second position or verb-adjacent clitics. It is presented in an abridged version in (7). The sequence opens with operator clitics, such as the particle *li*. *Li* can be followed by a modal clitic, such as the future particle *ќе* in Macedonian. Next follow pronominal clitics. Slavic languages have object clitics, but in contrast to Romance languages, they do not have subject clitics. The dative clitic precedes the accusative clitic, while the reflexive occurs as either the first one or the last one in the group of pronominal clitics.[28] The auxiliary clitics show an intriguing split concerning their respective positions in the sequence: the 1st, 2nd singular and plural as well as the 3rd person plural forms precede the pronominal clitics, whereas the 3rd person singular form follows the pronominal variants and appears as the last one in the whole group.[29]

(7) Operator clitics (*li*, *bo*, *że*) > Modal > AUX (except 3rd SG) > (REFL) > DAT > ACC > (REFL) > 3rd SG AUX (Tomić 1996; Franks and King 2000: 45)

As an illustration, the clitic order is exemplified for Czech (a language with second position clitics) in (8), and in (9) for Macedonian (a language with verb-adjacent clitics).

(8) Jan *prý* *se* *jim* *ho* rozhodl nedávat
Jan supposedly REFL_{ACC} them_{DAT} it_{ACC} $\text{decide}_{\text{PART.M.SG}}$ $\text{NEG-give}_{\text{INF}}$
"They say that Jan decided not to give it to them" (Cz, Franks 2010)

(9) Po Marija *li* *ќе* *ti* *go* prati?
by Maria Q FUT you_{DAT} it_{ACC} send_{3SG}
"Is it with Maria that (s)he will send it to you?" (Mac, Tomić 1996: 826)

3.3.1. Properties of second position clitics

A unifying property of Wackernagel cliticization and the V2 rule is the requirement that a particular element, a verb or clitics, must occur after the clause-initial constituent. Placement of these elements in any other position than the second

[28] The position of the reflexive clitic is subject to variation, both crosslinguistically and with respect to its interpretation. For instance, it precedes the pronominal forms in Serbo-Croatian, but it may occur on either side of the pronominal clitics in Czech, triggering different interpretations depending on its position, see Franks (2010) for details.

[29] A noteworthy exception to this order is found in Macedonian, in which the clitic form of the verb "be" is null in the 3rd person singular and plural when it is used as an auxiliary and overt (taking the form of *e* in the singular and *se* in the plural) when used as a copula verb. Both 3rd person singular and plural forms of the copula "be" occur last in the sequence of the clitics.

one results in ungrammaticality. The workings of this requirement are illustrated in (10) for the dative clitic *mi* in Serbo-Croatian.

(10) a. Zoran *mi* stalno kupuje knjige
Zoran me$_{DAT}$ constantly buys books
"Zoran is constantly buying me books"
b. *Zoran stalno *mi* kupuje knjige
c. *Zoran stalno kupuje *mi* knjige
d. **Mi* Zoran stalno kupuje knjige (S-C, Franks 2010)

Recall from Chapter 1 that most Germanic languages disallow V2 structures in subordinate clauses. This restriction does not apply to Wackernagel cliticization in Slavic, as the clitics must appear in second position in both matrix and subordinate clauses. In subordinate clauses they occur to the right of the complementizer, as shown in (11).

(11) Ona tvrdi da *smo* *mu* *je* mi predstavili juče
she claims that are$_{AUX}$ him$_{DAT}$ her$_{ACC}$ we introduce$_{PART.M.PL}$ yesterday
"She claims that we introduced her to him yesterday" (S-C, Bošković 2001: 8)

Another point of difference between V2 and second position cliticization concerns the elements that are subject to this rule. In the case of V2, this is just the tensed verb. In the case of Wackernagel cliticization, all types of clitics are required to occur in second position: pronominal, auxiliary, modal, and operator clitics. In relation to this property, it is sometimes assumed that second position clitics form clusters, as they normally cannot be separated from each other (see 12).

(12) *Mi *smo* Marijinoj prijateljici *ga* dali
we are$_{AUX}$ Marija's friend it$_{ACC}$ give$_{PART.M.SG}$ (S-C, Stjepanović 1998: 528)

However, the clustering is a side effect of the second position requirement, which is violated if the clitics are not adjacent. Bošković (2001) points out that clitics in Serbo-Croatian do not cluster, as they can be split as long as they occur as second elements in their intonational phrases. The sentence in (13) exemplifies such a split. In addition, this example shows that second position cliticization should be defined in prosodic terms, as the clitics do not target a designated syntactic projection. Rather, they must be right-adjacent to the syntactic constituent that in turn immediately follows the intonational phrase boundary (see Bošković 2001: 81ff. for more discussion).

(13) ?#On *su* # kao šte *vam* rekla#, predstavili *se* Petru#
they are$_{AUX}$ as you$_{DAT}$ say$_{PART.F.SG}$ introduce$_{PART.M.PL}$ self$_{ACC}$ Peter$_{DAT}$
"They, as I told you, introduced themselves to Peter" (S-C, Bošković 2001: 126)

Moreover, the splitting possibility is one of the special properties of Wackernagel clitics in Serbo-Croatian that distinguishes them from verb-adjacent clitics in

Bulgarian and Macedonian. It is discussed in more detail in Chapter 4, section 4.2.2.

3.3.2. Different interpretations of the pre-clitic material

Another property that unifies the V2 rule with second position cliticization is the fact that the single syntactic element located in front of them can be of virtually any category: the subject, an adverbial, a direct object, or a verb, as shown in (14), respectively.

(14) a. Zoran *mi* stalno kupuje knjige
Zoran me$_{DAT}$ constantly buys books
"Zoran is constantly buying me books"
b. Stalno *mi* kupuje knjige Zoran
c. Knjige *mi* Zoran stalno kupuje
d. Kupuje *mi* stalno knjige Zoran (S-C, Franks 2010)

The examples in (14), which are complemented by the ones in (15a), (16a), and (17a) below, indicate that clitics in Serbo-Croatian may be preceded by both single words and phrasal material.[30] What is rather puzzling though is the fact that some of these clause-initial elements at first sight do not seem to be syntactic constituents, such as the demonstrative that is separated from the noun by the clitics in (15b), or the adjectival modifier split from the nominal head in (16b) and (17b).

(15) a. Taj čovjek *joj ga je* poklonio
that poet her$_{DAT}$ it$_{ACC}$ is$_{AUX}$ give$_{PART.M.SG}$
"That person gave it to her"
b. Taj *joj ga je* čovjek poklonio (S-C, Franks 2010)

(16) a. Zanimljive knjige *mi* stalno kupuje Zoran
interesting books me$_{DAT}$ constantly buys Zoran
"Zoran is constantly buying me interesting books"
b. Zanimljive *mi* knjige stalno kupuje Zoran (S-C, Franks 2010)

(17) a. Prošle godine *su* otvorili gostiteljsku školu
last year are$_{AUX}$ open$_{PART.M.PL}$ hotel school
"Last year they opened a hotel school"
b. Prošle *su* godine otvorili gostiteljsku školu (S-C, Franks 2010)

The acceptability of such sentences can be explained in two ways. On the one hand, such examples may indicate that second position cliticization is a PF-related phenomenon, solely driven by the prosodic requirements of the clitic, in dis-

[30] There are some exceptions to this generalization. For example, the interrogative particle *li* can only be preceded by heads in Serbo-Croatian, see section 3.4.3.1.

regard of syntactic restrictions on movement, such as the requirement that only syntactic constituents can undergo displacement. On the other hand, they may indicate that syntactic constituency is calculated in a different way in Serbo-Croatian than in English; that is, elements that are not interpreted as constituents in English may be analyzed as such in Serbo-Croatian. This issue will be addressed in more detail in section 3.5.1; recall also the discussion of similar Old Germanic data in Chapter 2, section 2.5.5.3.

Furthermore, as in the case of V2 in Germanic, the selection of a particular category preceding second position clitics gives rise to particular discourse effects. In the most neutral scenario, the clitics are preceded by the subject or the participle. Such word order permutations are the most felicitous ones when used as responses to the question "what happened?"

(18) Šta *se* desilo?
what REFL happen$_{PART.N.SG}$
"What happened?"
a. Petar *je* kupio knjigu
Peter is$_{AUX}$ buy$_{PART.M.SG}$ book$_{ACC}$
"Peter has bought a book"
b. Kupio *sam* knjigu
buy$_{PART.M.SG}$ am$_{AUX}$ book
"I bought the book" (S-C, Migdalski 2006: 91)

However, sentences with high adverbials, such as manner (for instance, *potpuno* 'completely') or sentential adverbs (for example, *neočekivano* 'unexpectedly') located in first position preceding the clitics are also perceived as discourse-neutral, as shown in (19).

(19) Šta *se* desilo?
what REFL happen$_{PART.N.SG}$
"What happened?"
a. Potpuno *smo* ispraznili frižider
completely are$_{AUX}$ empty$_{PART.M.PL}$ refrigerator
"We emptied the refrigerator completely"
b. Neočekivano *smo* dobili pismo
unexpectedly are$_{AUX}$ receive$_{PART.M.PL}$ letter
"We received a letter unexpectedly" (S-C, Migdalski 2006: 90)

Placement of other categories in front of the clitics, such as the direct object *Mariju* in (20), leads to a contrastively focused interpretation of the pre-clitic element.

(20) Mariju *je* Petar zagrlio
Marija$_{ACC}$ is$_{AUX}$ Petar hug$_{PART.M.SG}$
"It was Marija that Petar hugged" (S-C, Stjepanović 1999: 73)

Summarizing, the data overviewed in this section have shown that, on a par with V2, second position cliticization imposes an apparently simple restriction: the clitics must be preceded by a single element, a head or a phrase, as long as this element is a syntactic constituent. However, placement of elements in the pre-clitic position may give rise to different interpretations or the pragmatic import of a clause, depending on the category or the function of the material preceding the clitics. This fact suggests that, as in the case of V2, second position cliticization is not a uniform syntactic operation. As has been pointed out in Chapter 1, section 1.4.2, a common way of motivating the V2 requirement in Germanic is to assume that V2 is a syntactic way of expressing illocutionary force. The subsequent sections investigate properties of Force-related cliticization in Slavic in order to determine whether it is possible to motivate the phenomenon of second position cliticization by assuming that it is an overt way of encoding the illocutionary force in a clause.

3.4. Force and second position cliticization

As has been mentioned earlier in this chapter, Slavic languages display a wide array of clitics. They comprise not only pronominal clitics, as in Romance languages, but also the verb "be" and modal clitics functioning as auxiliaries. These clitics will be assumed to represent generalized Wackernagel cliticization. A special, distinct group of Wackernagel clitics that will be examined in this section is termed operator clitics. They form a natural class because they express the illocutionary force of a clause, but apart from that they may also show special syntactic properties that distinguish them from pronominal and auxiliary clitics. These properties include distinct requirements related to the syntactic or the categorial status of their hosts or their syntactic position in the phrase structure. The division between generalized and operator clitics is important because it will be used to show that, on a par with V2, Wackernagel cliticization is not a uniform syntactic phenomenon and that only a subclass of second position clitics is a Force indicator.

Apart from their distinct syntactic and categorial requirements, operator clitics are special because of their typological distribution across Slavic. Namely, although generalized pronominal and auxiliary Wackernagel clitics are found only in a subset of Slavic languages, operator clitics are attested in all Slavic languages irrespective of whether they have other second position clitics, verb-adjacent clitics (Bulgarian and Macedonian), weak pronouns (Polish) or no other clitics at all (East Slavic). See section 3.4.2 below for details on the operator clitic inventory across Slavic. An example presenting an operator clitic together with generalized clitics was given for Czech, a Wackernagel clitic language, in (8) and is repeated in (21) below for convenience. In this example, the operator clitic *prý* is followed by a sequence of

reflexive and pronominal clitics. Example (22) illustrates operator cliticization in Bulgarian, a language with verb-adjacent clitics. Notably, here the operator clitic *li* occurs in second position and is separated from the verb-adjacent pronominal and auxiliary clitics. This pattern is discussed in more detail in section 3.4.3.

(21) Jan *prý* *se* *jim* *ho* rozhodl nedávat
Jan supposedly REFL_{ACC} them_{DAT} it_{ACC} $\text{decide}_{\text{PART.M.SG}}$ $\text{NEG-give}_{\text{INF}}$
"They say that Jan decided not to give it to them" (Cz, Franks 2010)

(22) Včera *li* Penka *ja* *e* dala knigata na Petko?
yesterday Q Penka her_{ACC} is_{AUX} $\text{give}_{\text{PART.F.SG}}$ book-the to Petko
"Was it yesterday that Penka gave the book to Petko?" (Bg, Tomić 1996: 833)

In the literature operator clitics are sometimes termed sentential clitics (see Kaisse 1982; Radanović-Kocić 1988). Kaisse (1982: 2) examines properties of such clitics in a number of unrelated languages (for instance Tagalog, Pashto, Papago, Finnish, Ancient Greek, and Warlpiri) and states that they "may mark the utterance as a question, as reported speech, as polite, as firmly believed or speculative, or … they may be connectives showing the relationship of the clause to what precedes or follows" (Kaisse 1982: 2). Since by specifying Force they scope over the entire clause, I use the term "operator clitics," following Tomić (2000, 2001), who draws a distinction between operator and non-operator clitics in Macedonian. The special properties of operator clitics had not received significant attention in the literature on Slavic clitics before Migdalski's (2009a, 2010) analyses. The subsequent sections draw on some of my previous observations and extend the analysis to new data.

3.4.1. Diachronic evidence for the distinction between operator and non-operator clitics

The first piece of evidence supporting the division between operator and generalized cliticization comes from diachronic observations. The diachrony of Slavic cliticization is discussed in detail in Chapter 4; here I just outline the distribution of clitics in Old Church Slavonic. Thus, corpus studies carried out by Radanović-Kocić (1988: 151ff.) indicate that clitics in Old Church Slavonic do not assume uniform placement. She observes that only three clitics uniformly occur in second position: the interrogative particle *li*, the complementizer *bo* 'because,' and the focus particle *že*. Notably, they all specify the illocutionary force of a clause. Pronominal clitics are in most cases postverbal, as shown for the reflexive accusative clitic *sę* and the dative clitic *ei* in (23c).

(23) a. Ašte *li* oko tvoe lõkavo bõdetŭ
if Q eye your evil $\text{be}_{\text{PRES.SG.N}}$
"If your eye should be evil" (OCS, Radanović-Kocić 1988: 151)

b. I *že* *bo* *sę* sъměritъ ěko otročę se
he+FOC because REFL humble$_{FUT}$ like child this
"For who humbles himself like this child"
(OCS, Pancheva et al. 2007b)

c. Elisaveti *že* isplъni *sę* vrěmę roditi *ei*
Elizabeth FOC fulfil$_{PAST}$ REFL time give-birth her$_{DAT}$
"When it was time for Elizabeth to have her baby" (Pancheva et al. 2007a)

As has been pointed out earlier in this chapter, in many Slavic languages (Serbo-Croatian, Slovenian, Czech, and Slovak), all types of clitics appear in second position, yet the diachronic analysis of second position clitic placement presented in Chapter 4 indicates that generalized Wackernagel cliticization is an innovation. The shift of verb-adjacent pronominal clitics to second position had various timings in different Slavic languages and, as will be shown in Chapter 4, it was contingent on the availability of tense morphology. What is important for the claims made in this chapter is that operator clitics had a distinct second position in the earliest Slavic texts. Conspicuously, the distribution of these clitics and the spread of Wackernagel's Law to the other clitics resemble the diachronic development of V2 in Germanic. As was shown in Chapter 2, in Old Germanic V2 was restricted to Force-contexts, and it was generalized to second position only at a later stage, in a subset of Germanic languages.

3.4.2. The distribution and interpretation of operator clitics in Modern Slavic

As far as the distribution of operator clitics is concerned, most contemporary Slavic languages have retained the clitic *li*, which was used as an interrogative particle, a conditional complementizer, or the conjunction 'or' in Old Church Slavonic (Schmalstieg 1983: 252). The Force value expressed by this clitic varies crosslinguistically in Modern Slavic, but it usually licenses focus on the preceding element (in Bulgarian, Macedonian, Russian, and Serbo-Croatian) and/or *yes-no* questions (in Bulgarian and Serbo-Croatian). Example (24), taken from Rudin, Kramer, Billings, and Baerman (1999), exemplifies a focus structure in Bulgarian, while (25) presents a related form from Serbo-Croatian, where the object *knjige* 'books' and the *wh*-word *koga* receive additional emphasis.

(24) Niz gardinata *li* šetaše?
through garden-the Q walked$_{2SG}$
"Were you walking THROUGH THE GARDEN?" (Mac, Rudin et al. 1999: 546)

(25) a. Knjige *li* Ana čita?
books Q Ana reads
"Is it books that Ana reads?"

b. Koga *li* Petar voli?
whom Q Petar loves
"Who on earth does Peter love?" (S-C, Bošković 2001: 26–27)

Modern Polish still makes productive use of the clitic *że*, which was also used as an operator clitic in Old Church Slavonic. It is used to marks focus on the element that precedes it, so in this way it performs a similar function to that of *li* in some other Slavic languages. This usage is illustrated in (26).

(26) Chodź-*że* tutaj!
come+FOC here
"Come here!" (Polish)

Że is also found as an indicative complementizer introducing subordinate clauses in Modern Polish, but this usage is an innovation. Decaux (1955: 208–209) points out that in Old Polish *że* was exclusively an enclitic focus marker, used in sentences similar to the one in (26), whereas the complementizer had the morphological form of *iże*. In the 16th century the initial vowel *i* was lost and the complementizer became homophonous with the focus particle. Due to the homophony, the instances of *że* such as those in (26) are sometimes mistakenly taken to be a realization of the complementizer (see, for example, Richards 2006, who refers to Szczegielniak's 1999 postulate that Polish allows structures with two complementizers), but this view is not supported by diachronic considerations.

Bański (2000: 96ff.) argues that in some cases *że* may be used without the semantic import of focus, but rather for purely PF considerations. This is what happens when *że* is attached to the auxiliary clitic in Polish. In such cases, the purpose of *że*-insertion is to facilitate encliticization of the auxiliary onto the host, as in (27a–b), where the host *palec* ends in the affricate [ts] and as such is not an appropriate host for the clitic -(*e*)*ś*.

(27) a. *Palec-*ś* skaleczył
finger$_{ACC}$ + AUX$_{2SG}$ cut$_{PART.M.SG}$
"You have cut your finger!"
b. *Palec-*eś* skaleczył
c. Palec-że-*eś* skaleczył (Pl, Bański 2000: 99)
finger$_{ACC}$ + FOC + AUX$_{2SG}$ cut$_{PART.M.SG}$

Bański's postulate receives support from his observation that *że*-insertion may take place only when the auxiliary clitic needs to be prosodically supported, and it is prohibited otherwise. In such instances, it is possible to find cases of double *że*, in which one of them is an indicative complementizer, whereas the other one is a particle inserted for PF-purposes (see 28c).[31] If there is no prosodic need for

[31] Note that this occurrence of double *że* also shows that the complementizer *że* is distinct from its homophonous focus particle.

the *że*-insertion, only one *że* may surface, as in (28d), where the auxiliary clitic is affixed to the participle. See Bański (2000: 211–212) for more discussion.

(28) a. Powiedział, *że* tam poszli-ście
say$_{PART.M.SG}$ that there go$_{PART.M.PL}$+AUX$_{2PL}$
"He said you had gone there"
b. Powiedział, *że*-ście tam poszli
c. Powiedział, *że* *że*-ście tam poszli
say$_{PART.M.SG}$ that FOC+AUX$_{2PL}$ there go$_{PART.M.PL}$
d. *Powiedział, *że że* tam poszli-ście

Finally, a number of Slavic languages make use of the ethical dative. Unlike the argumental dative clitic, it does not have a strong, non-clitic counterpart. The ethical dative is commonly assumed to be an operator clitic (see, for example, Radanović-Kocić 1988, who refers to it as a sentential clitic, on a par with *li*), and it performs a special pragmatic "endearing" function of expressing sympathy and closeness between speakers, or it can also be used to attract the hearer's attention (see also Bošković 2001: 61). In Serbo-Croatian the ethical dative displays different syntactic properties than the argumental dative, discussed in section 3.4.3.3 below. It is also found in other Slavic languages, including Polish, in which it is restricted to a number of fixed expressions, such as the one given in (29). Ethical datives were more common in Old Slavic, as shown in Chapter 4, section 4.3.1 for Old Church Slavonic and in section 4.6.2.3 for Old Polish.

(29) Masz *ci* los!
have$_{1SG}$ you$_{DAT}$ fortune
"Bad luck!" (Pl)

3.4.3. Properties of operator clitics in Slavic

This section examines special properties of operator clitics in Slavic that make them different than the other clitics. It has the following organization. Section 3.4.3.1 demonstrates that operator clitics impose specific requirements with respect to the syntactic status (XP versus X^0) of their host. Section 3.4.3.2 shows that operator clitics may also be selective about the category of their host. Section 3.4.3.3 investigates their position in the clause, showing that they target a uniform second position in the structure, irrespective of whether there are other second position clitics present in a language or not. Furthermore, this section demonstrates that operator clitics may exhibit different syntactic properties than other second position clitics (such as pronominal and auxiliary clitics) in languages such as Serbo-Croatian. Section 3.4.3.4 addresses special prosodic properties that are observed in structures involving operator clitics in languages such as Czech and Macedonian, whereas section 3.4.3.5 shows that the position of operator clitics may be contingent on the semantics of their host.

3.4.3.1. Syntactic status of the host

It has been pointed out earlier in this chapter (recall example 16) that pronominal and auxiliary clitics in Serbo-Croatian can be preceded by heads and phrases alike. This property is additionally demonstrated for the auxiliary clitic *je* in (30b) and (31b). By contrast, the operator clitic *li* imposes a restriction on the syntactic status of its host and may only follow the first clause-initial element, such as the adjective in (30a) or the *wh*-word in (31a).

(30) a. Skupe (*li*) knjige (**li*) Ana čita?
expensive Q books Q Ana reads
"Does Ana read expensive books?"
b. Skupe (*je*) knjige (*je*) Ana čitala
expensive is_{AUX} books is_{AUX} Ana read
"Ana read expensive books" (S-C, Bošković 2001: 27)

(31) a. Čiju (*li*) ženu (**li*) Petar voli?
whose Q wife Q Petar loves
"Whose wife does Petar love?"
b. Čiju (*je*) ženu (*je*) Petar volio?
whose is_{AUX} wife is_{AUX} Peter $love_{PART.M.SG}$
"Whose wife did Peter love?" (S-C, Bošković 2001: 27)

In all the examples involving *li*, the only word that is focused is the one that precedes it. For instance, (30a) has the interpretation "Does Ana read **expensive** books?" rather than "Does Ana read **expensive books**?" with the focus restricted to the adjective. Bošković (2001: 31ff.) takes this to mean the focal feature of *li* is checked via head movement, and that *li* in Serbo-Croatian is defective in the sense of not being able to support a specifier. It is impossible to check this feature in a spec-head configuration, which is the reason why adjunction of XP elements to *li* gives ungrammatical results in (30a) and (31a).[32]

Bošković (2001: 27–28) notices, furthermore, that the head-status of the element occurring in front of *li* is not the only requirement. The initial head must in addition be syntactically mobile. If it is not, like the first conjunct in the coordinate structure of the type given in (32), *li* may appear neither after the first head nor the first XP, even if the latter is a syntactic unit.

[32] Nataša Milićević (p.c.) reports to me that Bošković's generalization that restricts elements occurring in front of *li* to heads is somewhat problematic. The *wh*-word *čiju* in (31) is standardly assumed to be a phrasal element and yet it may be followed by *li*. Correspondingly, PPs may precede *li* in Serbo-Croatian as well. A potential way of explaining *li* placement after the *wh*-element might be to suggest that *wh*-movement proceeds as head movement in this environment. This is what has been recently assumed as a potential option by Bayer (2015) for some Bavarian dialects. Such a proposal raises a number of new theoretical issues though.

(32) Kuću (*li*) i auto (*li*) prodaje?
house Q and car Q sells
"Is s/he selling the house and the car?" (S-C, Bošković 2001: 28)

Interestingly, native speakers inform me that *li* cannot be placed after the first syntactic constituent at all if this constituent contains more than one word, as illustrated in (33). In consequence, it is impossible to insert *li* anywhere in these sentences.

(33) a. *Prema Mariji *li* Jovan trči?
towards Marija Q Jovan runs
"Is Jovan running towards Marija?"
b. *Kuću i auto *li* prodaje?
house and car Q sells
"Is s/he selling the house and the car?" (S-C, Bošković 2001: 28)

Moving on to Russian, which does not have any other clitics except *li*, the example in (34) shows that the same requirement concerning the head status of the element preceding *li* is observed also in this language. This fact indicates that the restriction on the syntactic status of the host is a general property of operator clitics in some languages, and that it does not depend on the availability of other clitics.

(34) Doroguju *li* knigu (*li) ona kupila?
expensive Q book Q she buy$_{\text{PART.F.SG}}$
"Did she buy an EXPENSIVE book?" (Rus, Rudin et al. 1998: 215)

In contrast to Serbo-Croatian and Russian, Bulgarian does not impose any syntactic restrictions on the element located in front of *li* and allows *li* to be preceded by both heads and phrases alike, as illustrated in (35). However, *li* is still exceptional as it provides the only context in Bulgarian in which Left Branch Extraction is permitted, as (35) also shows.

(35) Novata (*li*) kola (*li*) prodade?
new-the Q car Q sold
"Was it the new car that he/she/you sold?" (Bg, Bošković 2001: 226, 231)

Still, Bošković (2001: 232) points out that the Left Branch Extraction is very local, and it may only originate from the position immediately below *li*. Thus, example (36) is ungrammatical, as the adjective *novata* is extracted from the NP that is separated from *li* by the subject *Petko* and the verb *prodade*.

(36) *Novata *li* Petko prodade kola?
new-the Q Petko sold car
"Did Petko sell the new car?" (Bg, Bošković 2001: 232)

Bošković accounts for the locality restriction on Left Branch Extraction by proposing that in Bulgarian it may only proceed via head movement, whereas in the languages with unconstrained Left Branch Extraction (that is all Slavic languages

(with some variation) except Bulgarian and Macedonian), phrasal movement is possible. The derivation proposed by Bošković for (35) is sketched in (37).

(37) $[_{CP}$ [Novata*i*+*li*] $[t_i$ kola$]_j$ prodade $t_j]$
new Q car sold (Bg, Bošković 2001: 227)

Summarizing, although Bulgarian differs from Serbo-Croatian and Russian in allowing the focal feature of *li* to be checked by either head or phrasal movement, it displays the same restriction concerning the head status of the host of *li* in the context of Left Branch Extraction. Moreover, all the languages discussed in this section require *li* to occur in second position even though only Serbo-Croatian has Wackernagel pronominal and auxiliary clitics; Bulgarian displays verb-adjacent cliticization, whereas Russian does not have any pronominal or auxiliary clitics at all. These properties indicate that operator clitics may have very similar requirements crosslinguistically even in the case of languages that have different systems of cliticization otherwise.

3.4.3.2. Categorial status of the host

Operator clitics may display special requirements concerning the category of their host. This property is illustrated for Czech, which on a par with Serbo-Croatian has second position pronominal and auxiliary clitics. In contrast to the pronominal clitics, which may be preceded by elements of any category, *li* imposes a categorial restriction and may only encliticize on finite verbs. This is shown in (38a), in which *li* encliticizes on the verb *máte*. The examples in (38b) are excluded because *li* is preceded by a noun or an adverb there.

(38) a. Máte-*li* pochyby, zatelefonujte na informace
have$_{2PL}$+Q doubts call$_{2PL}$ at information
"If you have doubts, call the information"
b. *Pochyby/*dnes- *li* máte…
doubts / today Q have$_{2PL}$ (Cz, Toman 1996: 508)

Correspondingly, the operator clitic *że* in Polish may also only adjoin to a verbal form, either an auxiliary (see 39a) or a lexical verb (see 39b) but not to a non-verbal element such as a noun (see 39c).[33] See Bański (2000: 211) for more discussion of

[33] In Old Polish *że* was attached to a number of functional elements, such as demonstratives, in order to add emphasis. Some of these emphatic structures have been lexicalized and are still found in Modern Polish, including *tenże* 'this$_{GEN}$,' *tegoż* 'this$_{GEN}$,' *temuż* 'this$_{DAT}$,' and *tymże* 'this$_{INSTR}$.' Furthermore, *że* formed a complex conjunction together with the 3rd person copula *jest* and *li* in the form of *je(st)+że+li*, which has been lexicalized as the complementizer *jeżeli* 'if/whether.' This form coexists with the non-focused counterpart *jeśli* (see Decaux 1955: 205–206). Chapter 4, section 4.6.2.3 provides more examples of the emphatic usage of *że* in Old Polish, including its combinations with ethical datives.

prosodic conditions related to *że*-attachment. By imposing restrictions on its host, *że* in Polish shows a similar restriction to the one exhibited by the operator clitic *li* in Czech. This happens in spite of the fact that non-operator cliticization patterns are entirely different in these languages: Czech has Wackernagel pronominal clitics, whereas Polish has weak pronouns.

(39) a. Skargę-*że-ś* złożył?
complaint+FOC+AUX$_{2SG}$ submit$_{PART.M.SG}$
"You have made a complaint?!"
b. Złożył-*że-ś* skargę?
c. *Skargę-*że* złożył-*eś*? (Pl)

3.4.3.3. Position in the structure

The examples in (40) display the distribution of *li* in Bulgarian and Macedonian, which are languages with verb-adjacent clitics. On a par with Serbo-Croatian, in both Bulgarian and Macedonian *li* licenses focus on the fronted element that precedes it.

(40) a. Niz gardinata *li* šetaše?
through garden-the Q walked$_{2SG}$ (Mac)
b. Prez gardinata *li* xodeše?
through garden-the Q walked$_{2SG}$
"Were you walking THROUGH THE GARDEN?" (Bg, Rudin et al. 1999: 546)

In addition to this property, when *li* is hosted after a verb in Bulgarian, it triggers a *yes/no* question interpretation of such a clause (see Rudin 1986: 64).

(41) Kupil *li* *e* vestnika?
buy$_{PART.M.SG}$ Q is$_{AUX}$ newspaper-the
"Did he buy the newspaper?" (Bg, Rudin 1986: 63)

Examples (40) and (41) display an important property of *li* related to its syntactic position. Even though Bulgarian and Macedonian do not have any Wackernagel pronominal or auxiliary clitics, *li* is the second position clitic. It normally follows the clause-initial constituent,[34] and it can also be freely separated from the pro-

[34] Admittedly, this is an overgeneralization as in specific environments more than one element may be placed in front of *li*. The element preceding *li* is normally interpreted as focused. This focused element may in turn be preceded by a topic, as shown in (i), taken from Tomić (1996: 833), in which the focused adverb *včera* occurring in front of *li* is preceded by the subject *Penka*, which is interpreted as a topic.

(i) Penka včera *li* *ja* *e* dala knigata na Petko?
Penka yesterday Q her$_{ACC}$ is$_{AUX}$ give$_{PART.F.SG}$ book-the to Petko
"Was it yesterday$_{FOC}$ that Penka$_{TOP}$ gave the book to Petko?" (Bg, Tomić 1996: 833)

nominal and auxiliary clitics occurring lower in the sentence, as illustrated in (42) for Bulgarian.

(42) Včera *li* Penka *ja* *e* dala knigata na Petko?
yesterday Q Penka her$_{ACC}$ is$_{AUX}$ give$_{PART.F.SG}$ book-the to Petko
"Was it yesterday that Penka gave the book to Petko?" (Bg, Tomić 1996: 833)

The operator clitic *li* is traditionally assumed to be hosted in C^0 (see Rudin 1986; Rivero 1994); the main motivation for this assumption being its complementary distribution with the complementizer. By contrast, the syntactic position of Wackernagel pronominal clitics is a matter of debate. It will be shown later in this chapter that there is substantial empirical evidence suggesting that Wackernagel pronominal clitics do not target a designated position in the clause structure. What matters is that they are located after the first syntactic constituent of a clause, so their actual syntactic placement may be different in various clauses.

In spite of the difficulty in establishing the syntactic placement of second position pronominal clitics, it may be assumed that they are located in a lower position than operator clitics even though both of these clitics occur in second position. This is what can be concluded on the basis of the distribution of the ethical dative in Serbo-Croatian. As was pointed out in section 3.4.2, the ethical dative does not refer to a real argument and instead it has a pragmatic function of attracting the hearer's attention. It is limited to first and second person pronouns. Bošković (2001: 60) observes a contrast in the placement of argumental and ethical datives with respect to sentential adverbs.

Thus, examples (43) and (44) contain adverbs *pravilno* 'correctly' and *mudro* 'cleverly,' which are ambiguous as they may have both manner and sentential readings. Bošković observes that when the dative clitic *ti* performs the function of an ethical dative, both the manner and sentential interpretations of the adverb *pravilno* are available (the meaning of the ethical dative is ignored in the translations, as it is difficult to render it in English). Conversely, in the presence of the argumental dative in (44), only the manner reading of the ambiguous adverbs is possible.

(43) Oni *su* *ti* pravilno odgovorili Mileni
they are$_{AUX}$ you$_{DAT}$ correctly answer$_{PART.M.PL}$ Milena$_{DAT}$
"They did the right thing in answering Milena"
"They gave Milena a correct answer" (S-C, Bošković 2001: 60)

In Migdalski (2010) I account for the possibility of inserting *li* in third position in such examples by suggesting that generalized second position cliticization, which does not tolerate any second position violations, and operator second position cliticization involve somewhat different mechanisms. Namely, I propose that the former is motivated by PF constraints, while the latter is a syntactic restriction that may be overridden if a relevant syntactic configuration is available in a language. Thus, on the assumption that operator clitics target a functional head expressing illocutionary force, this head may be dominated by a Topic projection located immediately above it.

(44) a. Oni *su* *joj* pravilno odgovorili
they are$_{AUX}$ her$_{DAT}$ correctly answer$_{PART.M.PL}$
"*They did the right thing in answering her"
"They gave her a correct answer"
b. Oni *su* *ga* mudro prodali
they are$_{AUX}$ it$_{ACC}$ wisely sell$_{PART.M.PL}$
"*It was wise of them to sell it"
"They sold it in a wise manner" (S-C, Bošković 2001: 51)

Bošković (2001: 60) proposes that since sentential adverbs are standardly assumed to be located higher than manner adverbs, the fact that only the manner reading is available with argumental datives indicates that they are located lower in the structure than ethical datives.

3.4.3.4. Special prosodic properties

This section shows that operator clitics may exhibit different requirements than other clitics in relation to the direction of their cliticization. They may also alter the stress patterns of the elements that are their hosts.

Recall that Czech has generalized second position cliticization, on a par with Serbo-Croatian. *Li* is a second position in Czech as well but it displays different requirements concerning the direction of its cliticization in comparison to the other clitics. Toman (1996: 507) observes that depending on a syntactic environment, pronominal clitics in Czech may either encliticize (as shown in 45 for the first clitic *ji* in the infinitival clause) or procliticize (as illustrated for the second clitic *ji* in the matrix clause in 45). The symbol # indicates possible prosodic breaks.

(45) Poslouchat (*#) *ji* (#) *by* *ji* (*#) asi nudilo
listen$_{INF}$ her$_{ACC}$ COND her$_{ACC}$ probably bore$_{PART.N.SG}$
"It would perhaps bore her (e.g. Ann) to listen to her (e.g. Sue)" (Cz, Toman 1996: 507)

In contrast to the pronominal clitics, *li* in Czech may only encliticize, and in addition it requires a verbal host (as shown in 38 above and repeated below in 46 for convenience).

(46) a. Máte-*li* pochyby, zatelefonujte na informace
have$_{2PL}$+Q doubts call$_{2PL}$ at information
"If you have doubts, call the information"
b. *Pochyby/ *dnes- *li* máte…
doubts / today Q have$_{2PL}$ (Cz, Toman 1996: 508)

Unlike Czech, Macedonian has verb-adjacent pronominal and auxiliary clitics, but on a par with Czech, *li* displays a special requirement with respect to the direction of cliticization, which is different than that of the other clitics. Namely, as indicated in the examples in (47), the pronominal and auxiliary clitics procliticize

on the verb, so they are left-adjacent to it. *Li* is an enclitic, and needs to be supported by some overt material in front of it, such as the participle *dal* located to its left in (48b).

(47) a. *Si mu gi* dal parite?
are$_{AUX}$ him$_{DAT}$ them$_{ACC}$ give$_{PART.M.SG}$ money-the
"You gave him the money"
b. *Dal *si mu gi* parite? (Mac, Rudin et al. 1999: 544)

(48) a. **Li si mu gi* dal parite?
Q are$_{AUX}$ him$_{DAT}$ them$_{ACC}$ give$_{PART.M.SG}$ money-the
b. *Si mu gi* dal *li* parite?
are$_{AUX}$ him$_{DAT}$ them$_{ACC}$ give$_{PART.M.SG}$ Q money-the
"Did you give him the money?" (Mac)

The examples above show that the operator clitic *li* imposes special prosodic requirements in Czech and Macedonian. Interestingly, in Macedonian other types of operators may affect the prosody of another word; in particular, they may trigger stress shift, which then may be placed even on clitics. In general, it seems that stress becomes shifted when a clause expresses a non-indicative (non-declarative) value of the illocutionary force. The subsequent part of the analysis is largely based on empirical observations due to Rudin et al. (1999) and Tomić (2000, 2001).

In the standard variant of Macedonian, word stress is placed on the antepenultimate syllable, that is the third one from the end of a word. This is shown through capitalization in (49a) for an imperative and in (49b) for an indicative clause that contains a finite verb. If a word has fewer than three syllables, the first syllable receives stress, as shown in (49c) for a sentence with the *l*-participle *prodal*.

(49) a. DOnesi!
bring$_{IMPV.2SG}$
"Bring!"
b. doNEsuvaš
bring$_{PRES.2SG}$
"You are bringing" (Mac, Rudin et al. 1999: 551–552)
c. (TOJ) PROdal MNOgu JAbolka
he sell$_{PART.M.SG}$ many apples
"He has reportedly sold a lot of apples" (Mac, Tomić 2001: 648)

The distribution of stress is not affected by the presence of pronominal or auxiliary clitics in clauses with the *l*-participle or a tensed verb. For instance, neither the auxiliary clitic *sum* nor the pronominal clitics *ti* and *go* alter stress placement in (50). Hence, stress is placed on the first syllable of the *l*-participle *kažal*, rather than on the pronominal clitic *go*, even though this clitic constitutes the antepenultimate syllable in the sequence of the clitics and the *l*-participle. This fact indicates that pronominal or auxiliary clitics do not form a prosodic word with the finite

verb or the *l*-participle (the examples in 50b–c do not contain an auxiliary, as it is null in the 3rd person singular form in Macedonian).

(50) a. (JAS) *sum* *ti* *go* KAžal
I am$_{AUX}$ you$_{DAT}$ it$_{ACC}$ say$_{PART.M.SG}$
"I have told it to you"
b. *Mi* *go* DAle (cf. **mi GO* dale)
me$_{DAT}$ it$_{ACC}$ give$_{PART.M.PL}$
"They gave it to me"
c. *Mi* *go* DAL (cf. **MI go* dal)
me$_{DAT}$ it$_{ACC}$ give$_{PART.M.SG}$
"He gave it to me" (Mac, Rudin et al. 1999: 553)

However, this pattern changes in the presence of negation. If a clause contains a finite verb or an *l*-participle, the negation particle *ne* forms a prosodic word with the verb. Therefore, if a verb has two or less than two syllables (such as *uči* in 51), it carries no stress, which is then shifted onto negation.

(51) a. Ne ZBOruva angliski
NEG speak$_{3SG}$ English
"S/he doesn't speak English"
b. NE uči angliski
NEG learn$_{3SG}$ English
"She isn't learning English" (Mac, Tomić 2000: 388)

Likewise, if there are auxiliary or pronominal clitics located between *ne* and the finite verb, they are also included in the phonological word formed by the whole complex. Hence, the stress is assigned on the antepenultimate syllable even if this syllable is a pronominal clitic, such as *te* in (52b and c) and *gi* in (52d).

(52) a. Ne *ti* ZBOruvam po angliski
NEG you$_{DAT}$ speak$_{1SG}$ in English
"I am not speaking to you in English"
b. Ne *TE* učam angliski
NEG you$_{ACC}$ teach$_{1SG}$ English
"I am not teaching you English"
c. Ne *sum* *TE* učel angliski
NEG am$_{AUX}$ you$_{ACC}$ teach$_{PART.M.SG}$ English
"Reportedly, I have not been teaching you English" (Mac, Tomić 2000: 388)
d. (TI) ne *si* *mu* *GI* dala jaBOLkata
you NEG are$_{AUX}$ him$_{DAT}$ them$_{ACC}$ give$_{PART.F.SG}$ apples-the
"Reportedly, you haven't given him the apples" (Mac, Tomić 2001: 649)

Tomić (2000: 388) concludes that this means that the negation particle (which she refers to as the "negation operator") is a clitic with particular phonological requirements. Observe that negation is also generally assumed to be a Force marker, as it licenses negative assertion acting as an operator.

Likewise, the distribution of stress may be altered in the context of imperatives, which illustrate another case of non-declarative illocutionary force marking. The structure in (49a) above exemplifies stress pattern in an imperative that does not contain any pronominal clitics. The imperative forms in (53) indicate that placement of each pronominal enclitic in imperatives moves the stress to the right by one syllable, the way it also happens in clauses with negation, but unlike in declarative clauses.

(53) a. doNEsi *go*$_{ACC}$!
"Bring it!"
b. doneSI *mi*$_{DAT}$ *go*$_{ACC}$!
"Bring it to me!" (Mac, Rudin et al. 1999: 551)

Finally, Tomić (2000) observes that *wh*-words in Macedonian (which she refers to as *wh*-operators) match the behavior of the negation operator. As shown in (54), the *wh*-operators form single prosodic words with finite verbs that occur to the right of them.

(54) a. Koj POmina?
who passed$_{3SG}$
"Who passed (on the road)?"
b. KoGO vide?
whom$_{ACC}$ saw$_{2SG}$
"Whom did you see?"
c. ŠTO baraś?
what seek/want$_{2G}$
"What do you want?" (Mac, Tomić 2000: 398)

Correspondingly to the examples with the negation operator, if there are pronominal or auxiliary clitics occurring between the *wh*-operator and the verb, they all form a single phonological word, with stress falling on the antepenultimate syllable even if this syllable is a clitic, as in (55b).

(55) a. Komu *mu* *go* PREdade proektot?
Who$_{DAT}$ him$_{DAT}$ it$_{ACC}$ hand$_{2SG}$ project-the
"To whom did you hand the project?"
b. Što *IM* storil na studentite?
what them$_{DAT}$ do$_{PART.M.SG}$ to students-the
"What is he reported to have done to the students?" (Mac, Tomić 2000: 399)

Admittedly, stress patterns in Macedonian are complex and although there is a relation between stress distribution and the presence of operators, including operator clitics, it is not entirely uniform. For instance, not all operator clitics change the stress pattern. Thus, *li* does not shift the stress rightward. When *li* is placed after a verb, as in (56b), it is excluded from the antepenultimate stress calculation of the verb.

(56) a. doNEsuvaš
bring$_{PRES.1SG}$
"You are bringing"
b. doNEsuvaš *li*?
bring$_{PRES.1SG}$ Q
"Are you bringing?" (Mac, Rudin et al. 1999: 551)

Furthermore, in some dialects of Macedonian stress becomes shifted when pronominal clitics encliticize on gerunds, which do not need to express any special, non-indicative Force value. Moreover, the stress shift applies to enclitics, so it could potentially be argued that the distribution of the stress pattern in Macedonian may be related to the division between proclisis and enclisis, with only the latter group of clitics triggering the stress shift, rather than the presence of operators. However, a problem with such a potential explanation is the fact that negation, which acts as a proclitic on the verb, also shifts the stress. Thus, it seems that operators may indeed affect stress placement. The issue certainly deserves further research; for the time being I tentatively propose that stress shift in Macedonian may be linked to the non-indicative Force value expressed in a clause.

3.4.3.5. Semantics of the host

The final subsection addressing the properties of operator clitics discusses instances of clitic placement in which the position of a clitic is related to the semantics of the host. In particular, it investigates the position of the auxiliary clitic *by*, which may occur in second position immediately following the complementizer that acts as its host depending on the Force-related interpretation of a clause. This section contains a rather detailed description of subjunctive clauses in Slavic. This description is necessary in order to present the workings of operator cliticization in a wider perspective.

As illustrated in (57) for various North Slavic languages following Tomaszewicz (2009), when the auxiliary *by* is affixed to the *l*-participle, the clauses have a conditional (*irrealis*) meaning and *by* expresses the meaning similar to that of the English modal verb *would*.

(57) a. Ja ne skazal *by*, čto film očen' ponravilsja
I NEG say$_{PART.M.SG}$ COND that film very-much please
"I wouldn't say that I liked the film very much" (Rus)
b. Som veľmi hladný. Jedol *by* som niečo
am very hungry eat$_{PART.M.SG}$ COND am something
"I'm very hungry. I would eat something" (Slovak)
c. Pożyczył-*by*-ś mu książkę
lend$_{PART.M.SG}$+COND+AUX$_{2SG}$ him book
"You would lend him a book" (Pl)

d. Půjčil *bys* mi mapku?
lend$_{PART.M.SG}$ COND+AUX$_{2SG}$ me map
"Would you lend me a map?" (Cz, Tomaszewicz 2009: 221)

The affixation of the auxiliary *by* onto the *l*-participle is not obligatory, as *by* may also precede the participle, as in (58), where it follows the subject. This is an alternative variant of the Polish example in (57c), with the same interpretation.

(58) Ty *by*-ś pożyczył mu książkę
you COND+AUX$_{2SG}$ lend$_{PART.M.SG}$ him book
"You would lend him a book" (Pl)

In some contexts though, in particular when the subordinate clause renders the subjunctive mood, the auxiliary is affixed to the complementizer and occurs in second position in the embedded clause.

(59) a. Ivan xočet, čto*by* Masha čitala
Ivan want$_{3SG}$ that+by Masha read$_{PART.F.SG}$
"Ivan wants Masha to read" (Rus)
b. Priateľ chce a*by* som schudla
friend want$_{3SG}$ that+by am lose-weight$_{PART.F.SG}$
"My boyfriend wants me to loose weight" (Slovak)
c. Chce, że*byś* mu książkę pożyczył
want$_{3SG}$ that+by$_{2SG}$ him book lend$_{PART.M.SG}$
"He wants you to lend him a book" (Pl)
d. Chci, a*bychom* byli přátelé
want$_{1SG}$ that+by$_{1PL}$ be$_{PART.M.PL}$ friends
"I want us to be friends" (Cz, Tomaszewicz 2009: 221–222)

Crucially, in contrast to examples (57) and (58), the subjunctive mood contexts require the auxiliary *by* to obligatorily occur in second position, following the complementizer. These two elements may not be separated by any lexical material, as shown in the examples in (60) for Polish, which correspond to the one in (59c).

(60) a. *Chce, że ty *byś* mu książkę pożyczył
want$_{3SG}$ that you by$_{2SG}$ him book lend$_{PART.M.SG}$
b. *Chce, że książkę *byś* mu pożyczył
want$_{3SG}$ that book by$_{2SG}$ him lend$_{PART.M.SG}$

The same adjacency requirement holds in Polish for some other clause-initial conjunctions and complementizers, which obligatorily attract the auxiliary *by*, such as *gdy+by* 'if,' *jak+by* 'as if,' *o+by* 'I wish'/'may,' and *że+by* 'so that' (see Mikoś and Moravcsik 1986; Dogil 1987; Aguado and Dogil 1989; and Borsley and Rivero 1994 for an early discussion of subjunctive and conditional clauses in Polish). Apart

from the subjunctive mood, the complementizer + *by* complex may express optative mood (see 61) and hypothetical counterfactual conditionality (as in 62; see Tomaszewicz 2012 for a detailed analysis).[35]

(61) a. Że-*by*-*ś* tylko tego nie robił!
that+by+$_{AUX.2SG}$ only this NEG do$_{PART.M.SG}$
"May you never do that!"
b. *Że tylko tego nie robił-*by*-*ś*! (Pl, Bański 2000: 113)

(62) a. Gdy*by* Janek kupił Jaguara, to by nim jeździł do pracy
when+by Janek buy$_{PART.M.SG}$ Jaguar then by it drive$_{PART.M.SG}$ to work
"If Janek (had) bought a Jaguar, then he would drive/have driven it to work"
b. * Gdy Janek kupił*by* Jaguara… (Pl, Tomaszewicz 2012: 263)

What is more, Tomaszewicz (2012: 263) observes that whereas in hypothetical counterfactual conditionals *by* must occur in second position in antecedent clauses, in main clauses there is no second position requirement and the auxiliary *by* may either precede or follow the verb or other elements. These facts are exemplified in (63). Tomaszewicz points out that this requirement strongly resembles the V2 effect in continental Germanic.

(63) a. Gdy*by* Janek kupił Jaguara, …
when+by Janek buy$_{PART.M.SG}$ Jaguar
… to *by* Marek (*by*) nim jeździł (*by*) do pracy
then by Marek (by) it drive$_{PART.M.SG}$(by) to work
"If Janek bought a Jaguar, Marek would drive it to work"
b. *Gdy Janek *by* kupił Jaguara, …
c. *Gdy Janek kupił*by* Jaguara, …
d. *Gdyby Janek kupił*by* Jaguara, …

In Migdalski (2006, ch.5) I suggest the derivations for structures with subjunctive and conditional mood given in (64). Here, *by* originates in MoodP just below TP. When *by* is not adjoined to the *l*-participle, it obligatorily moves from Mood^0 to T^0, where it adjoins to the temporal auxiliaries (see 64a). The movement is triggered by a subjunctive feature on Mood^0, and the resulting output has a subjunc-

[35] Hypothetical conditionals (Bhatt and Pancheva 2006), termed event conditionals in Haegeman (2003), are those where the antecedent describes the situations in which the proposition contained in the matrix clause is true. For instance, in example (i) taken from Bhatt and Pancheva (2006) and quoted in Tomaszewicz (2012: 260), the possible worlds (situations) in which Andrea arrives late are those possible worlds in which Clara gets upset. Example (i) is also a counterfactual conditional (CFC), as it describes a situation that is contrary to fact. Example (ii) is an indicative conditional.

(i) If Andrea had arrived late, Clara would have been upset
(ii) If Andrea arrives late, Clara will get upset

tive interpretation. When *by* is in the post-participial position, the participle raises and adjoins to the *by*+aux complex in T^0 (see 64b), and the resulting structure has a conditional (*irrealis*) reading.

(64) a. [$_C$ gdy [$_{MoodP}$ by$_i$+ś$_j$] [$_{TP}$ ty [$_T$ < t$_i$' + t$_j$] [$_{MoodP}$ t$_i$ [$_{VP}$ kupił Jaguara]]]]
when by+AUX$_{2SG}$ you buy$_{PART}$ Jaguar
"If you (had) bought a Jaguar, …"

b. [$_C$ [$_{TP}$ Ty [$_T$ kupił$_j$+by$_i$+ś] [$_{MoodP}$ [$_{Mood}$ t$_i$] [$_{VP}$ t$_j$ Jaguara]]]]
you buy$_{PART}$+by+AUX$_{2SG}$ Jaguar
"You would buy a Jaguar"

Tomaszewicz (2012: 265ff.) provides a more detailed account of the subjunctive clauses with *by*, set against a larger body of data. In contrast to Migdalski's (2006) analysis, which does not present a reason why *by* must adjoin to the complementizer, but it only postulates a subjunctive feature as the trigger, Tomaszewicz suggests that the movement is in fact not motivated by a feature encoded on a functional head in the Left Periphery, but rather it reflects operator movement that has been independently proposed for the derivation of conditional clauses. On her account, the operator is located in Spec, CP, whereas the auxiliary *by* raises to C^0 because of the requirement that C^0 be filled.

Tomaszewicz's proposal makes an interesting prediction concerning the placement of *by* and the availability of other movement operations. Namely, Tomaszewicz shows that *by* undergoes operator movement only in counterfactual conditionals, in which it must occur in second position. In other types of clauses, it can be lower in the structure (see the data in 63). She notices that when *by* undergoes operator movement to second position, some other fronting operations are blocked, such as contrastive topicalization and long extraction of adjuncts (see Tomaszewicz 2012: 266ff.). Syntactic intervention effects with the other movements are not attested when *by* is located lower in the structure, as then there is no operator movement taking place that would block them.

Irrespective of a precise account explaining the position of *by*, what is significant about the distribution of the conditional auxiliary in Polish is that it illustrates a general pattern of Force-related cliticization found not only in the other contemporary North Slavic languages, but the one that is also attested in Old Slavic. Thus, Willis (2000: 330) observes that in Old Church Slavonic placement of the conditional auxiliary *by*/*bi* depends on the type of complementizer that introduces the subordinate clause in which *by*/*bi* is hosted. For example, the conditional auxiliary is always right-adjacent to the complementizer *a*, and no lexical material may intervene between these two elements. Therefore, an adverb such as *sъde* (see 65) may only follow the clitic *by*. By contrast, there is no adjacency requirement for the complementizer *da* and the auxiliary *by*/*bi*, as shown in (66), and other lexical material such as negation may occur between these elements.

(65) a. A *by* bylъ sьde
if $COND_{3SG}$ $be_{PART.M.SG}$ here
"If he had been here"
b. A *by* sьde bylъ (OCS, Vaillant 1977: 219)

(66) Drъžaaxõ *i* da [ne *bi]/* [*bi* ne] otъšelъ otъ nixъ
$held_{3PL}$ him that NEG $COND_{3SG}$ NEG $leave_{PART.M.SG}$ from them
"And they held him, so that he would not leave them" (OCS, Willis 2000: 330)

Willis argues that the contrast presented in (65) and (66) is related to the semantics of the complementizers: *a*, which introduces conditional clauses, obligatorily attracts the auxiliary clitic *by*/*bi*, whereas *da*, which introduces declarative (indicative) clauses, does not require clitic adjacency. Thus, as in the case of the Modern Slavic data presented in this section, the position of the conditional auxiliary clitic *by* with respect to the complementizer reflects the subjunctive/indicative reading of the subordinate clause.

All the examples that require encliticization of the auxiliary *by*/*bi* onto the complementizer express some kind of non-indicative Force-related meaning, such as hypothetical counterfactual conditionality, potentiality, or optative mood. In Migdalski (2010, 2012) I suggest that this type of encliticization, which places *by*/*bi* in second position, illustrates one of the mechanisms of operator cliticization. It formally marks a sentence as deviating from declarative, with a "non-neutral" Force value. The marking may occur via the merge of an operator clitic (as in the case of *li* and *że* insertion) or via movement (thus, internal merge), such as the movement of the conditional auxiliary. Both operations target the same syntactic position, as both the operator clitics and the moved auxiliary end up in second position. I propose that this position is a functional head that hosts a Force-related feature (for instance, the Σ head encoding Force postulated by Laka 1994). The Σ head is possibly the highest one in the left periphery of the clause, given that the auxiliary *by*/*bi* and operator clitics end up in second position, potentially following the first constituent occupying Spec, ΣP. In relation to the process described here, it is worth recalling the overview of the distribution of V2 in embedded clauses in some Scandinavian dialects included in Chapter 1, section 1.4.2.1, which shows that V2 placement may be contingent on the degree of assertion or presupposition expressed by the clause or by the complementizer. It is likely that the processes investigated in the current section and the embedded V2 clauses in Scandinavian exemplify related syntactic mechanisms of overt non-indicative Force marking.

Summarizing this section, the data presented here have demonstrated that operator cliticization displays different properties than the generalized cliticization of auxiliary and pronominal clitics. Both operator and generalized clitics target second position, but the former applies only to a selection of semantically related clitics, which in addition may impose special constraints concerning the

syntactic or categorial nature of their hosts, target a different syntactic projection, or exhibit different prosodic requirements. Furthermore, operator cliticization is found in most languages, including those that do not have any other second position clitics, such as Bulgarian, Macedonian, Russian, or Polish. These facts indicate that Force-related, operator cliticization in Slavic cannot be equated with generalized second position cliticization. These are two different syntactic mechanisms that are independent of each other even though they may give rise to the same linear position of the clitics in the structure.

3.4.4. A note on operator cliticization in Sanskrit

The existence of the two distinct types of Wackernagel cliticization, operator and generalized cliticization, has been independently attested in a number of Indo-European languages. For instance, Kaisse (1985: 83) presents a study of the position of clitics in a number of languages (including Ancient Greek, Finnish, Serbo-Croatian, Tagalog, Ngiyambaa, Pashto, Papago, and Warlpiri), the results of which lead her to propose a generalization saying that the only languages that place non-operator clitics in second position are those that also have operator clitics (Kaisse uses the term "sentential clitics" to refer to operator clitics). Kaisse's generalization is confirmed by the Slavic languages with Wackernagel cliticization, as they all display operator clitics. Moreover, Kaisse proposes a condition which states that Wackernagel's Law may apply to all types of clitics only if operator clitics are available. Though this condition holds, it is obviously necessary to explain why in some cases (for instance, in Bulgarian and Macedonian) Wackernagel cliticization has not become extended to all clitics in spite of the availability of operator clitics. This issue is addressed in Chapter 4.

Hale (1987) refers to Kaisse's generalization in his investigation of Old Indo-Iranian languages. His examination of these languages is discussed here in some detail, as it provides additional support for the division between generalized and operator cliticization argued for in this chapter on the basis of Slavic data. Significantly, on a more general level, Hale also relates to Wackernagel's original observation concerning the position of clitics and points out that Wackernagel's Law was in fact stated as a statistical generalization about the distribution of prosodically weak elements such as adverbials, pronouns, and emphatic particles. These elements do not necessarily form a natural categorial class in morphosyntactic terms. Furthermore, a fact that is not captured by Wackernagel's generalization is that their distribution does not need to be uniform either (Hale 1987: 3). Thus, some of them may potentially occur more frequently in second position than others. Until Hale's (1987, 2007) work there had been no detailed studies of the categorial make-up of these prosodically weak elements. Likewise, there had been no thorough investigation of possible exceptions to Wackernagel's observations concern-

ing clitic placement in the clause. On the basis of extensive empirical investigation, Hale (2007) suggests that in Proto-Indo-European, Wackernagel's Law held only for operator clitics, whereas the extension of this law to pronominal clitics was an innovation that occurred in some daughter languages. Chapter 4 shows that Hale's generalization is confirmed by the diachrony of cliticization in Slavic.

Thus, Hale (2007) demonstrates that in Vedic Sanskrit operator clitics comprise "emphatic" clitics (which include particles that encliticize to the topicalized element located clause-initially) as well as disjoiners or conjoiners (for example, *vā* 'or' and *ca* 'and'). In the majority of cases, both pronominal and operator clitics target second position, especially when both of them are present in a clause (see example 67b).

(67) a. kás *te* mātáraṃ vidhávām acakrat
who$_{NOM.SG}$ you$_{DAT.SG}$ mother$_{ACC.SG}$ widow$_{ACC.SG}$ made
"Who made your mother a widow?" (RV 4.18.12a, Hale 2007: 196)

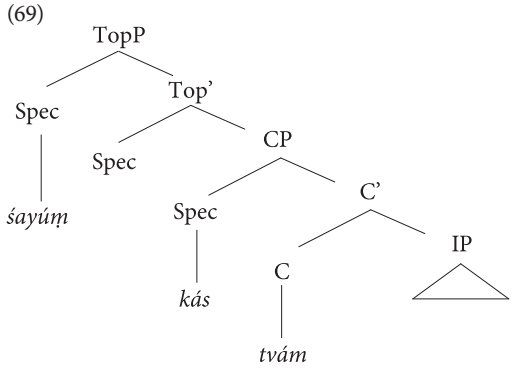
b. kéna *vā te* mánasā dāśema
by what$_{INST.SG}$ or you$_{DAT.SG}$ intent$_{INST.SG}$ we-worship
"or by what intent would we worship you?" (RV 1.76.1d, Hale 2007: 196)

Still, although both types of clitics show a strong tendency to appear in second position, Hale (1987, 2007) observes that their syntactic behavior is far from uniform. Namely, pronominal clitics always occupy second position if they are preceded by a *wh*-word. However, in case a clause contains a topic, pronominal clitics are in third position, following the sentence-initial topic and the *wh*-element. This is exemplified in (68) for the enclitic pronoun *tvám* 'you.'

(68) śayúṃ kás *tvám* ajighāṃsac cárantum
resting$_{ACC.SG}$ who$_{N.SG}$ you$_{ACC.SG}$ would-slay moving$_{ACC.SG}$
"who would slay you (as you were) resting (or) moving?" (RV 4.18.12b, Hale 2007: 196)

The data in (68) indicates that pronominal forms can be defined as Wackernagel clitics only if the clause-initial placement of topics is disregarded. Hale (2007: 197) proposes that the clause-initial element in (68) is a weak topic or a focalized element that has moved to Spec, TopP, which is a position above CP. The *wh*-element *kás* targets Spec, CP located immediately below, whereas the pronominal clitic adjoins to C^0. Irrespective of the divergent linear placement, Hale (2007) presumes in his account that the pronominal clitics target C^0. The pronominal clitic may be placed lower than in second position if there is another functional layer present above CP, but they are then still hosted in the same functional head, namely C^0. Thus, in (68) the pronominal clitic is adjoined to the *wh*-word located in C^0, and the CP layer is dominated by TopP. The topicalized phrase (such as *śayúṃ* in 68) is hosted in Spec, TopP, as sketched in the phrase structure in (69).

(69)



By contrast, operator clitics occur in second position even if they are preceded by topics. For instance, example (70) contains the emphatic particle *cid*, which is a Wackernagel clitic that occurs immediately after the topic *áśmānaṃ*, but also in front of the *wh*-word *yé*.

(70) áśmānaṃ *cid* yé bibhidúr vácobhiḥ
rock$_{ACC.SG}$ FOC who$_{NOM.PL}$ smashed words$_{INST.PL}$
"who smashed *even rock* with (mere) words" (RV 4.16.6c, Hale 2007: 198)

Correspondingly, both pronominal and operator clitics are found in example (71), which illustrates the contrast between the two types of clitics more prominently. Here the pronominal clitic *no* surfaces in third position, to the right of the *wh*-element *yó* (located in C^0), whereas the disjoiner *vā*, which is an operator clitic, is found to the left of the relative pronoun.

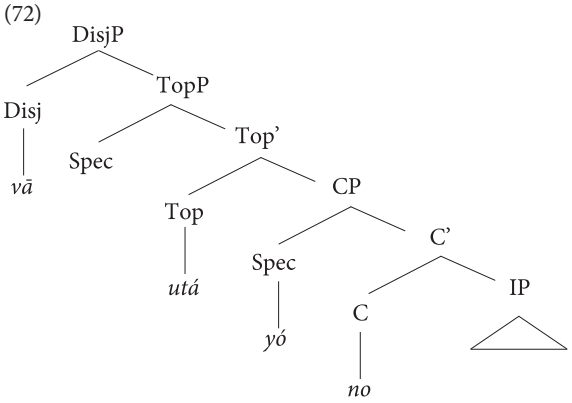
(71) utá *vā* yó *no* marcáyād ánāgasaḥ
also or who us would harm innocent
"or also who would harm us, though innocent" (RV 2.23.7a, Hale 2007: 198)

Hale (2007: 199) suggests that example (70) may have the following derivation: the emphatic clitic *cid* attaches to the emphasized element *áśmānaṃ* and, subsequently, the sequence of the emphasized element and *cid* is subject to topicalization. Still, Hale points out that it is necessary to explain the contrast between (67b), which involves a *wh*-phrase followed by pronominal and operator clitics both occurring in second position, and (71), in which a topicalized constituent is followed by the operator clitic in second position but the pronominal clitic is lower in the structure. This contrast leads him to assume that the two types of clitics are "positioned not by a single, monolithic 'Wackernagel's Law,' but rather by two different algorithms, which place … these two classes of clitics … in two distinct 'second positions.'" (Hale 2007: 200).

However, the fact that pronominal clitics may be separated from operator clitics is still left unexplained on the assumption that both of them are located in C^0 (see

example 71 above). According to Hale (2007: 208), the instances of clitic separation are due to the mechanism of "prosodic flip" (also commonly referred to as Prosodic Inversion, see Halpern 1992 and the discussion in section 3.5.1), which takes place if a clitic does not have an appropriate phonological host. Descriptively, clitics in Vedic Sanskrit are enclitic, so they need an appropriate host to their left and cannot occur clause-initially or be placed in the initial position within their phrase. Given this requirement, Hale proposes the following derivation of the sentence with the non-clustering clitics in (71). The pronominal clitic *no* is located in C^0, the regular clitic position, and is preceded by the *wh*-word *yó*, located in Spec, CP. The *wh*-word is preceded by the topicalized adverb *utá*. The whole relative clause in (71) has the underlying input "utá yó *no* marcáyād ánāgasaḥ"; it has been disjoined from another relative clause, and on its own it represents a DisjP, as it is introduced by the disjunct *vā* (see the structure in 72, based on Hale 2007: 208). *Vā*, an operator enclitic, needs to be properly hosted within its domain. In the case at hand it is not, as it is on the left edge of the disjunctive phrase. Therefore, it needs to undergo phonological movement to the position following the first eligible host within its domain, which gives rise to the attested linear representation in (71).

(72)



Summarizing, in Hale's (2007) view, Wackernagel's Law in Vedic Sanskrit is a by-product of an independent syntactic derivation of the pronominal clitics. Since they target C^0, they are separated from the beginning of a clause by a single constituent located in Spec, CP, which gives the impression that they are in second position. The cases in which they appear to be located lower occur when some additional material is preposed above CP in topicalization or focusing. In addition, the clitics may be placed in second position as a result of phonological flip (see example 71), when originally they are clause-initial, but their prosodic deficiency requires them to be lowered in the phonological component and be placed in a position where they can be appropriately hosted.

An important part of Hale's (2007) account is his observation of the two distinct cliticization patterns in Vedic Sanskrit. Irrespective of whether his postulate

of the phonological flip provides an appropriate analysis of the process, it cannot be readily applied to the Slavic data. First, prosodic accounts of Wackernagel cliticization in Slavic face empirical problems that are discussed later in this chapter (see section 3.5.1). Second, it has been shown in the previous section that operator clitics in Slavic may differ from pronominal clitics not just in terms of their linear placement, but they may also impose special categorial or syntactic requirements on their hosts. It is not immediately clear how such requirements can be explained under Hale's account. Third, the Slavic data provided in section 3.5.2.2 later in this chapter suggest that at least in Serbo-Croatian pronominal clitics may not raise as high as to C^0. Finally, there seems to be no explicit motivation for the clitic movement to C^0 in Hale's account — it is not clear what particular morphosyntactic feature may trigger their movement to this position. This issue is left open in Hale's (2007) analysis. Regardless, Hale's (2007) account is important for the analysis developed in this chapter, as it provides independent support from ancient languages for the division between operator and generalized cliticization. Moreover, it may also indicate that Wackernagel's original observation was restricted to operator clitics, which target second position without exception. As will be shown in Chapter 4, clitics in Old Slavic show a similar distribution to the one observed in Vedic Sanskrit: operator clitics are located in second position, whereas pronominal clitics are hosted lower in the structure.

3.5. Analyses of generalized cliticization in Slavic

This section overviews theories of generalized second position placement. In contrast to operator cliticization investigated in the previous section, this type of cliticization is more challenging from a theoretical point of view. It was established in the previous section that operator cliticization is motivated by the need of explicit Force marking. It is far more difficult to determine a uniform trigger for generalized Wackernagel cliticization. The clitics that participate in this type of cliticization do not form a uniform class and they seem to target different syntactic projections in various sentences.

Most of the theoretical analyses of cliticization that have been put forward in the literature have been based on the properties of Romance cliticization. In the Romance languages clitics are verb-adjacent and mainly involve pronominal clitics. As was pointed out in the introduction to this chapter, generalized second position clitics in Slavic include both pronominal and auxiliary clitics. They do not need to be adjacent to an element of any category, what matters is that they are placed after the clause-initial constituent. This means that the analyses of verb-adjacent clitics in Romance cannot be applied to explain the properties of second position cliticization.

By and large, there are two types of approaches to second position cliticization in the Slavic languages: phonological and syntactic. Most of the phonological accounts, which predate the syntactic ones, focus on second position cliticization in Serbo-Croatian. They seek to propose a phonological explanation mainly because of the allegedly unclear syntactic status of the first constituent that lends support to the clitics as well as due to the (apparent) possibility of splitting the clause-initial syntactic constituent with clitics. The strongest followers of the phonological approach to cliticization, such as Radanović-Kocić (1988), argue that phonology entirely governs the cliticization patterns and deny the existence of any syntactic restrictions. A few other phonological analyses, including Embick and Izvorski (1997), Halpern (1995), King (1996), and Schütze (1994), take a less radical view and assume that although the phonological component is involved in clitic placement, it occurs only in well-defined configurations.

Conversely, a number of followers of the syntactic approaches, for example Dimitrova-Vulchanova (1995), Franks and Progovac (1994), Progovac (1996), Rivero (1994, 1997), Roberts (2010), Tomić (1996), and Wilder and Ćavar (1994), assume that the clitic placement is exclusively determined by syntactic mechanisms. Some syntactic approaches, such as Bošković (2001) and Franks (1998, 2010), are less strict in this respect and presume some PF filtering, which selects the phonologically converging outputs of syntactic movements.

A detailed overview of the approaches to second position cliticization in Slavic is offered by Bošković (2001), Ćavar (1999), Franks (1998, 2010), and Schütze (1994), among others. The main purpose of the overview given in this section is to present relevant data and show how it is handled by various theories. A major drawback of the analyses developed so far is that they do not establish an independent morphosyntactic condition that excludes or enables either verb-adjacent or second position cliticization. Such a parametric condition will be proposed in Chapter 4 on the basis of a diachronic study of the development of cliticization patterns in Slavic.

This section has the following organization. Section 3.5.1 overviews prosodic analyses of second position cliticization and presents data that have been put forward in favor of such accounts, related to the heaviness of the pre-clitic element and the apparent splitting of syntactic constituents by clitics. Section 3.5.2 addresses syntactic analyses of Wackernagel cliticization. As in the case of accounts of the V2 order in Germanic, a major theoretical issue in these analyses concerns the placement of the clitics in the syntactic structure, thus whether they are located in C^0 (as in the early analyses as well as in a recent one by Roberts 2010) or whether there is no uniform syntactic position for the clitics. Section 3.5.2.4 scrutinizes the scattered deletion approach to second position cliticization, originally developed by Franks (1998), Stjepanović (1998), and Bošković (2001), which presupposes that although second position clitics are positioned as a result of a syntactic derivation, the PF component acts as a filter and selects the highest copy of the clitics that

does not cause a violation of their prosodic requirements. I present a number of empirical and conceptual problems with this approach.

3.5.1. Phonological analyses of second position clitic placement

This section overviews the analyses of generalized second position cliticization that attribute the process to the PF component of grammar and assume that syntax does not play a role in the placement of clitics. The overview first presents data provided in support of the PF analyses, which is subsequently supplemented with empirical facts that challenge purely prosodic approaches to cliticization.

3.5.1.1. Heaviness of the pre-clitic element

One of the observations used in support of a prosodic analysis of cliticization concerns the relationship between heaviness of a pre-clitic element and its availability as a clitic host. Namely, Radanović-Kocić (1988) points out that according to her judgments of NP–V sentence-initial orders, if the NP is heavy, clitics may follow the verb and exceptionally appear in third position. If the NP is light, the clitic must occur in second position. For instance, the NPs *taj čovek* in (73a) and *Petar Petrović* in (73b) are heavy and as such allow the auxiliary clitic *je* to appear in third position. This is not possible in (73c), as here the initial noun *Petar* is light.

(73) a. Taj čovek voleo *je* Mariju
that man love$_{\text{PART.M.SG}}$ is$_{\text{AUX}}$ Mary
"That man loved Mary"
b. Petar Petrović voleo *je* Mariju
Petar Petrović love$_{\text{PART.M.SG}}$ is$_{\text{AUX}}$ Mary
"Petar Petrović loved Mary"
c. *Petar voleo *je* Mariju
Petar love$_{\text{PART.M.SG}}$ is$_{\text{AUX}}$ Mary
"Petar Petrović loved Mary" (S-C, Zec and Inkelas 1990: 373–374)

Radanović-Kocić assumes that the notions of "heaviness" and "lightness" are impossible to define syntactically. If this assumption is correct, it means that the position of the clitics in examples such as the ones in (73) cannot be explained through rules of syntax.

However, Zec and Inkelas (1990) and Schütze (1994) detect a flaw in this analysis. They notice that the outputs in (73a–b) are in fact topicalization structures and result from movement of the topicalized element to a high functional projection. They also obligatorily involve comma intonation between the initial NP and the verb. This is why the clitic *je* is exceptionally positioned after the third constituent. A related set of data is addressed by Progovac (2000, 2005), who refers to

Radanović-Kocić's (1998) examples given in (74). The problematic sentence is (74b), in which the auxiliary clitic *je* seems to be located in third position.

(74) a. Noću *je* ovde mirinije
at-night is$_{AUX}$ here more-quiet
"At night, it is more quiet here"
b. Noću, ovde — *je* mirinije (S-C, Radanović-Kocić 1998: 106)

Although both examples are regarded as grammatical by Radanović-Kocić (1998), Progovac (2005: 131) points out that (74b) is acceptable only if a heavy comma intonation is applied after the first constituent, which is in fact reflected in the punctuation. She suggests that in examples of this type, the clause-initial constituent is not internal to the kernel CP clause, but rather it is loosely attached to it, for instance via CP-adjunction. She provides a test indicating that the lexical material set off with commas is external to the CP. As shown in (75), the same lexical elements can precede *wh*-words.

(75) a. Noću, ko *bi* ovde dolazio?
at-night who COND here come$_{PART.M.SG}$
"Who would come here at night?"
b. Milanu, ko *bi* pozajmio knjigu?
Milan$_{VOC}$ who COND borrow$_{PART.M.SG}$ book
"Milan, who would borrow the book?" (S-C, Progovac 2005: 131)

Furthermore, Zec and Inkelas (1990) address the assumption, made by Radanović-Kocić (1998), that the notions of "heaviness" or "lightness" cannot be defined in syntactic terms, showing that they in fact can be defined in prosodic terms. The case in point involves the complex proper name *Rio de Žaneiro* in Serbo-Croatian, which forms two units prosodically, but only one unit syntactically. This is confirmed by the fact that the first part of this name may receive case marking only when it occurs in isolation. When the full name is used, only the second member of the name obtains locative case.

(76) a. Rio$_{NOM}$
"Rio"
b. u Riju$_{LOC}$
"in Rio"

(77) a. Rio$_{NOM}$ de Žaneiro$_{NOM}$
"Rio de Janeiro"
b. u Rio de Žaneiru$_{LOC}$ /*u Riju$_{LOC}$ de Žaneiru$_{LOC}$
"in Rio de Janeiro" (S-C, Zec and Inkelas 1990: 375)

The variation with respect to case assignment in (76) and (77) indicates, according to Zec and Inkelas, that the entire complex proper name forms one syntactic unit with a non-branching NP structure in the lexicon. However, it contains two

phonological words and as such forms a complex prosodic unit, with a branching phonological phrase. This is a condition for an element to count as prosodically "heavy" in Serbo-Croatian: it must be a branching prosodic constituent, which means its phonological phrase must contain at least two constituents.

As expected, when the "heavy" variant of this proper name is used, clitics (such as the auxiliary verb *su* in 78a) may occur in the "third" position. This option is excluded if the proper name consists of just the first part of the name, as in (78b).

(78) a. U Rio de Žaneiru ostali *su* dve godine
in Rio de Janeiro $\text{stay}_{\text{PART.M.PL}}$ are_{AUX} two years
"In Rio de Janeiro, they stayed two years"
b. *U Riju ostali su dve godine (S-C, Zec and Inkelas 1990: 375)

Bošković (1995: 264) points out that the "heavy" complex name in (78a) forms a separate intonational phrase and is followed by an intonational phrase boundary, correspondingly to the examples in (73), whereas there is no intonational phrase boundary following the "light" variant in (78b). These facts indicate that there is nothing exceptional about the placement of the clitics in the apparent third position if there is a prosodic break between the two initial constituents.

Another potential argument in favor of a prosodic analysis is also related to heaviness of a host. Thus, it has been observed (see Schütze 1994 for a discussion) that the set of potential clitic hosts cannot be uniformly defined even within a single category. For instance, it seems that only a subclass of complementizers and conjunctions may support clitics, and the property that these class members share is that they are "heavy." A potential phonological generalization might state then that clitics hosts must be accented. The relevant contrast is presented in (79) and (80), which contain light conjunctions *i* and *a* that are unable to support the clitics, versus the complementizer *ako* in (81), which is heavy and counts as a valid host (and in fact must be the pre-clitic host).

(79) a. Ivan *je* kupio vina i pio *je* *ga*
Ivan is_{AUX} $\text{buy}_{\text{PART.M.SG}}$ wine and $\text{drink}_{\text{PART.M.SG}}$ is_{AUX} it_{ACC}
"Ivan bought wine and drunk it"
b. *Ivan *je* kupio vina i *je* *ga* pio
Ivan is_{AUX} $\text{buy}_{\text{PART.M.SG}}$ wine and is_{AUX} it_{ACC} $\text{drink}_{\text{PART.M.SG}}$
(S-C, Schütze 1994: 396–397)

(80) a. A Petar *je* u kući
so Petar is_{AUX} in house
"So, Petar is in the house"
b. *A *je* Petar u kući
so is_{AUX} Petar in house (S-C, Zac and Inkelas 1992: 508)

(81) a. Ako *ga* slučajno vidiš, nazovi me
if him$_{ACC}$ by-chance see$_{2SG}$ call me
"If by chance you see him, call me"
b. *Ako slučajno *ga* vidiš… (S-C, Browne 1975/2004: 264)

However, Schütze (1994), who provides the data presented above, rejects a phonological explanation of the contrasts observed. He refers to Bennett (1986), who argues that the difference between unaccented conjunctions and complementizers may correlate with a semantic division of subordination and coordination. The contrast is syntactically represented: subordinating conjunctions are part of the following clause, whereas the coordinators are outside it. If this reasoning is on the right track, the contrasts in (79) and (80) can receive a syntactic explanation without taking recourse to phonological operations. This reasoning is further supported by the data in (82), which contains the conjunction *ali*. Even though *ali* is stressed and bi-syllabic, it can act as a clitic host only optionally.

(82) Marko *je* danas počeo raditi ali (*je*) pitanje (*je*) da li će
Marko is today start$_{PART.M.SG}$ work but is$_{AUX}$ question is$_{AUX}$ if Q FUT
ostali
stay$_{PART.M.SG}$
"Marko started working today but it's a question whether he'll stay"
(S-C, Browne 1975/2004: 267)

3.5.1.2. Apparent constituent splits

A seemingly more compelling argument in favour of a phonological approach to clitic placement in Serbo-Croatian concerns the possibility of clitics occurring after the first prosodic word, purportedly leading to a split of a syntactic constituent. For instance, in (83b) the auxiliary clitic *je* occurs in the middle of a noun phrase, separating the demonstrative *taj* from the head noun *čovek*.

(83) a. Taj čovek *je* volio Milenu
this man is$_{AUX}$ love$_{PART.M.SG}$ Milena
"That man loved Milena"
b. Taj *je* čovek volio Milenu
this is$_{AUX}$ man love$_{PART.M.SG}$ Milena (S-C, Bošković 2001: 12)

Halpern (1992), who assumes a phonological approach to Serbo-Croatian cliticization, proposes that in (83b) the clitic *je* appears clause-initially in syntax. However, since this position is prohibited due to the phonological constraints of the clitic, *je* moves at PF to the position immediately after the first stressed word, *taj*. The clitic undergoes movement through the operation of Prosodic Inversion, which may disregard syntactic constituency.

Wilder and Ćavar (1994) and Progovac (1996) challenge Halpern's assumption and argue that the separation of the demonstrative from the noun is an example of Left Branch Extraction, which is normally available in Serbo-Croatian syntax. They point out that demonstratives in Slavic are morphologically adjectival, so it is likely that they are independent constituents to the exclusion of the noun that follows them. This means that the clitic *je* in (83b) could be positioned after a phrase that has been extracted from a larger constituent. Furthermore, Wilder and Ćavar (1994) and Progovac (1996) propose a generalization that says that clitics may be preceded only by those elements which are able to undergo independent syntactic movement. The workings of this generalization are given in examples (84) and (85). Even though the clitic *je* separates the *wh*-word, the adjective, and the genitive form from the head noun in these sentences, there is nothing prosodic or exceptional about this distribution, given that the same split may be performed by the non-clitic verbs such as *kupuje* and *dolazi*. Consequently, it is unnecessary to postulate any phonological reordering in order to account for second position cliticization.

(84) a. Kakvo/zeleno *je* Jovan kupio auto
what-kind/green is$_{AUX}$ Jovan buy$_{PART.M.SG}$ car
"What kind of car did Jovan buy?"/"Jovan bought a GREEN car"
b. Kakvo/zeleno Jovan kupuje auto
what-kind/green Jovan buys car
"What kind of car is Jovan buying?"/"Jovan is buying a GREEN car"

(85) a. Čija/Anina *je* došla sestra
whose/Anne's is$_{AUX}$ arrive$_{PART.F.SG}$ sister
"Whose/Ane's sister arrived"
b. Čija/Anina dolazi sestra
whose/Anne's arrives sister
"Whose/Ane's sister is arriving" (S-C, Bošković 2001: 13)

Moreover, Wilder and Ćavar (1994), Tomić (1996), and Progovac (1996) show that the mechanism of prosodic inversion may produce empirically unmotivated results. For instance, as a phonological process, prosodic inversion should be insensitive to syntactic constituency. This fact predicts that clitics should be able to occur after the first element in coordination, violating the Coordinate Structure Constraint. Example (86a) indicates that this prediction is not correct even though the word *Mira* receives stress and should be capable of providing support for the clitic.

(86) a. *Mira *su ti ga* i Jasna dale
Mira are$_{AUX}$ you$_{DAT}$ it$_{ACC}$ and Jasna give$_{PART.F.PL}$
b. Mira i Jasna *su ti ga* dale
"It was Mira and Jasna who gave it to you" (S-C, Tomić 1996: 820)

Wilder and Ćavar (1994: 35) and Ćavar and Wilder (1999: 441) further demonstrate that some positions in which the clitics could potentially receive phonologic-

al support from a stressed element are not available for the clitics. For example, the clitics may not split a relative clause (see 87b) or occur between the head noun and the relative clause that modifies it (see 87c) even though in such contexts the clitic would follow stressed constituents.

(87) a. Djevojka, koju Ivan voli, *je* fina
girl who$_{ACC}$ Ivan likes is pretty
"The girl that Ivan loves is pretty"
b. *Djevojka, koju *je* Ivan voli, fina
girl who$_{ACC}$ is Ivan likes pretty
c. *Djevojka, *je* koju Ivan voli, fina
girl is who$_{ACC}$ Ivan likes pretty (S-C, Ćavar and Wilder 1999: 441)

Halpern (1992) recognizes the problem posed by the examples such as the ones in (87b and c) and attributes the constraint on clitic placement to the fact that these initial constituents are a "fortress" that phonological clitic placement cannot "penetrate." However, the restriction on the clitic placement within relative clauses receives a straightforward syntactic explanation. The string "head noun–relative pronoun" cannot be extracted because it is not a constituent. This is shown in (88) for a non-clitic, strong auxiliary form *jesam*, which cannot separate the noun from its modifying relative clause either.

(88) *[Djevojku$_i$] jesam vidio [t_i koju Ivan voli]
girl am see$_{PART.M.SG}$ who Ivan likes (S-C, Ćavar and Wilder 1999: 441)

3.5.1.3. Splitting of proper names

A well-known property of Serbo-Croatian clitics that was traditionally considered to be problematic for the syntactic accounts of cliticization is their ability to split complex proper names. This possibility was observed as early as in Browne (1975/2004). Given that proper names are standardly assumed to be impenetrable constituents, a potential account for the data in (89) might be the assumption that the clitic *je* is initial in syntax, but since it is an enclitic, the first stressed element *Lav* moves to the position in front of it via Prosodic Inversion.

(89) ?Lav *je* Tolstoj veliki ruski pisac
Leo is$_{AUX}$ Tolstoi great Russian writer
"Leo Tolstoi is a great Russian writer"

The possibility of splitting proper names by clitics was a major factor supporting the PF-analyses of Wackernagel clitic placement. It is worth noting though that such structures have a special type of interpretations. Progovac (1996: 419, 2005: 139) states that split proper names are marginal, but not completely ungrammatical. The continuation of the name following the clitic seems to be a parenthetical or an afterthought, "rather than what the speaker intended to say in the first place" (Progovac 2005: 139), and can be compared to the following English sentence,

"??My sister will, and her husband, come on Tuesday." Moreover, such structures become immediately worse when more than one clitic is inserted, as shown in (90).

(90) *Lav *mi* *ga* *je* Tolstoj poklonio
Leo me$_{DAT}$ it$_{ACC}$ is$_{AUX}$ Tolstoj give$_{PART.M.SG.}$
"Leo Tolstoj has given it to me" (S-C, Progovac 1996: 419)

Furthermore, the split names render a particular type of focus interpretation. Bošković (2001: 17) observes that in this type of examples, the part of a complex name that is separated by a clitic is interpreted as contrastively focused. For instance, in (91a) the first part *Gornji* of the complex town name *Gornji Vakuf* is contrastively focused. In order to contrastively focus the whole complex town name, the clitic must be placed after the whole name, as in (91b). On the other hand, it is not possible to contrastively focus the initial part of *Novi Sad* with *Zrenjanin* in (91c), as the latter town name is not complex.

(91) a. U GORNJI *su* Vakuf došli, ne DONJI
in Gornji are$_{AUX}$ Vakuf arrive$_{PART.M.PL}$ not Donji
"In Gornji Vakuf they arrived, not Donji (Vakuf)"
b. U NOVI SAD *su* došli, ne ZRENJANIN
in Novi Sad are$_{AUX}$ arrive$_{PART.M.PL}$ not Zrenjanin
"In Novi Sad they arrived, not Zrenjanin"
c. *U NOVI *su* SAD došli, ne ZRENJANIN (S-C, Bošković 2001: 17)

The possibility of proper names being split by lexical material may seem unusual but, as noticed by Franks (1997), it is not restricted to clitics. Franks shows that non-clitic finite verbs may occur between the first name and the family name, too. The translations of these examples indicate the non-neutral status of such structures.

(92) a. Lava *sam* Tolstoja čitala
Leo$_{ACC}$ am$_{AUX}$ Tolstoi$_{ACC}$ read$_{PART.F.SG}$
"Leo Tolstoi, I have read"
b. Lava čitam Tolstoja
Leo$_{ACC}$ read$_{1SG}$ Tolstoi$_{ACC}$
"Leo Tolstoi, I read" (S-C, Bošković 2001: 16)

Furthermore, Franks (1997) observes that the proper name data in (92) are subject to a morphological constraint. Namely, in the case of some name complexes in Serbo-Croatian, it is possible to inflect one of the names for a different structural case than the other one, as shown in (93).

(93) a. Lava Tolstoja čitam
Leo$_{ACC}$ Tolstoi$_{ACC}$ read$_{1SG}$
"Leo Tolstoi, I read"

b. ?Lava Tolstoj čitam
Leo$_{ACC}$ Tolstoi$_{NOM}$ read$_{1SG}$
c. Lav Tolstoja čitam
Leo$_{NOM}$ Tolstoi$_{ACC}$ read$_{1SG}$ (S-C, Bošković 2001: 16)

Strikingly, the splitting of proper names is possible only if both parts of the name are declined, and this restriction holds irrespective of whether the proper name is split by a clitic or a tonic verb (see 94 and 95). This fact suggests that the constraint related to the splitting is driven by the same syntactic principle in both cases, so it cannot be explained by appealing to prosodic mechanisms.

(94) a. Lava *sam* Tolstoja čitala
Leo$_{ACC}$ am$_{AUX}$ Tolstoi$_{ACC}$ read$_{PART.F.SG}$
"I read Leo Tolstoi"
b. *Lava *sam* Tolstoj čitala
Leo$_{ACC}$ am$_{AUX}$ Tolstoi$_{NOM}$ read$_{PART.F.SG}$ (S-C, Bošković 2001: 16)

(95) a. Lava čitam Tolstoja
Leo$_{ACC}$ read$_{1SG}$ Tolstoi$_{ACC}$
"I am reading Leo Tolstoi"
b. *Lava čitam Tolstoj
Leo$_{ACC}$ read$_{1SG}$ Tolstoi$_{NOM}$ (S-C, Bošković 2001: 16)

Bošković (2001: 16–17) points out that the contrast between the examples in (94) is in fact problematic for the Prosodic Inversion analysis. The clause-initial element is the same in both cases and has exactly the same prosodic properties. It is then unclear why this element cannot be preposed via Prosodic Inversion across the clitic *sam* when the last name *Tolstoj* is marked for nominative case.

Summing up, this section has shown that there are serious problems with phonological analyses of clitic placement. On the one hand, there are many examples of clitic placement that cannot be accounted for through the workings of prosody. On the other hand, it seems that all of the movements that have been proposed to take place in phonology may receive a straightforward syntactic explanation. Moreover, as pointed out by Ćavar and Wilder (1999), it is theoretically unwelcome to posit that clitics raise from syntactically defined positions to phonologically defined landing sites. It is also unnecessary to equip the phonological component with a power to perform movement operations that have never been ascribed to PF, especially when these "phonological" movements can be explained syntactically.

3.5.2. Syntactic analyses of second position clitic placement

This section examines syntactic accounts of second position cliticization that have been proposed for Slavic in the literature. A few general trends can be distinguished

among them. Some researchers (for instance, Dimitrova-Vulchanova 1995; Tomić 1996; Progovac 1996; Rivero 1994, 1997; Roberts 2010) assume that the position of clitics in the structure is determined solely by mechanisms of syntax. Some other linguists (for instance, Bošković 1995, 2001; Franks 1998, 2000) argue that although clitic movement obeys syntactic restrictions, phonological constraints may intervene, with PF playing the role of a passive filter, which blocks well-formed syntactic outputs when they violate phonological requirements of clitics.

There are also divergent views concerning the position occupied by the clitics in the phrase structure. For instance, Wilder and Ćavar (1994), Schütze (1994), Franks and Progovac (1994), Progovac (1996), Tomić (1996), and Roberts (2010) propose that all the clitics in Serbo-Croatian cluster in C^0, while Franks (1998) and Caink (1999) suggest that they target the highest head position available in a particular clause. By contrast, Bošković (2001) and Stjepanović (1998, 1999) argue against a designated syntactic position for the clitics. Another issue that is a matter of debate concerns the mechanism of clitic movement to second position as well as syntactic properties of the landing site of the clitics (that is, whether the clitics target heads or specifiers). This issue is addressed in detail in section 4.2 in Chapter 4.

The upcoming part of this chapter is organized as follows. In section 3.5.2.1 I overview the syntactic analyses that postulate uniform clitic placement in C^0. In section 3.5.2.2 I address the approaches that argue against a unique position for second position clitics in the structure. In section 3.5.2.3 I turn to a recent analysis by Roberts (2010), who postulates that the clitics target C^0 and provides an alternative analysis for the data that have been used to support the hypothesis of a non-uniform clitic placement. In section 3.5.2.4 I scrutinize the scattered deletion approach to Wackernagel cliticization.

3.5.2.1. Clitics located in C^0

Early syntactic analyses of second position cliticization presumed that clitics all raise and adjoin to a single syntactic node. In a way, these analyses reflect a general assumption that has been made about verb-adjacent cliticization in the Romance languages. Namely, as will be discussed in more detail in Chapter 4, section 4.4.1, verb-adjacent clitics are assumed to climb from argument positions in VP and all adjoin to a uniform syntactic head such as T^0 (or, alternatively, adjoin to a verb and raise to T^0 together with the verb). In the case of Wackernagel clitics in the Slavic languages, one of the arguments in favor of the idea that the clitics cannot stay in situ throughout the derivation and must obligatorily climb to a specific clitic site has been provided by Tomić (1996: 818ff.), who shows that in Serbo-Croatian pronominal clitics must move from the infinitival subordinate clause, such as the one in (96), with the infinitival form of the verb *dati*, whose internal arguments are the clitics *mi* and *ga*, which obligatorily form a cluster in the matrix clause.

(96) Marija *mi* *ga* *je* zaboravila dati
Maria me$_{DAT}$ it$_{DAT}$ is$_{AUX}$ forget$_{PART.F.SG}$ give$_{INF}$
"It was Maria who has forgotten to give it to me" (S-C, Tomić 1996: 819)

The idea that Wackernagel clitics all target a single syntactic position was in turn motivated by the observation that clitics form a cluster that cannot be interrupted by any lexical material, including adverbs, *wh*-words in multiple *wh*-questions, or any parenthetical elements. According to Progovac (2005: 132), these properties indicate that there cannot be any syntactic projection between the clitics that could function as a potential adjunction site.[36]

(97) a. *Dušan *mu* možda *ga* *je* prodao
Dušan him$_{ACC}$ maybe it$_{ACC}$ is$_{AUX}$ sell$_{PART.M.SG}$
b. *Ko *mi* koga *je* predstavio?
who me$_{DAT}$ whom is$_{AUX}$ introduce$_{PART.M.SG}$
c. *Ko *mi*, na primer, *je* koga predstavio?
who me$_{DAT}$ for example, is$_{AUX}$ whom introduce$_{PART.M.SG}$ (S-C, Progovac 2005: 132)

As has been stated earlier, most of the initial work on Serbo-Croatian cliticization (for instance, Franks and Progovac 1994; Progovac 1996) postulated C^0 as the landing site for all the clitics. This postulate was supported by the fact that in *yes-no* questions as well as in subordinate clauses, all the clitic must cluster right-adjacent to the complementizer.

(98) a. Da *li* *mi* *ga* daješ?
that Q me$_{DAT}$ it$_{ACC}$ give$_{PRES.2SG}$
"Are you giving it to me?"
b. Kaže da *mi* *ga* *je* Petar dao
says that me$_{DAT}$ it$_{ACC}$ is$_{AUX}$ Peter give$_{PART.M.SG}$
"He says that Peter has given it to me"
c. *Kaže da Petar *mi* *ga* *je* dao
says that Peter me$_{DAT}$ it$_{ACC}$ is$_{AUX}$ give$_{PART.M.SG}$ (S-C, Tomić 1996: 818–819)

The idea that the clitics land in C^0 raises a few technical issues related to the mechanism of derivation. Thus, Wilder and Ćavar (1994), Franks and Progovac (1994), Progovac (1996), and Tomić (1996) all suggest that clitics are right-adjoined to C^0. This suggestion is problematic if Kayne's (1994) antisymmetry is assumed, as it does not allow right adjunction. Potentially, right adjunction can be avoided if Rivero's (1997) analysis is adopted, in which second position clitics occupy the specifier of the Wackernagel Position phrase (Spec, WP). WP is a complement of C^0.

(99) [$_{CP}$ C [$_{WP}$ *CL* [$_{W'}$ W YP]]]

[36] The assumption about the non-separability of Serbo-Croatian clitics has been challenged in other analyses, such as Stjepanović (1998, 1999) and Bošković (2001).

Yet a problem with this analysis is the fact that it disregards the position of the auxiliary clitics, which can precede or follow the pronominal clitics depending on the person (the third person singular form *je* occurs as the last one in the clitic group, following the pronominal clitics). Moreover, it is not immediately clear how to account for the rigid clitic order if the whole group of clitics is located in a specifier.

Furthermore, the proponents of these analyses acknowledge that pronominal clitics cannot possibly raise directly to C^0. Since the clitics are heads that raise from within VP, they cross several other heads in their movement to C^0, including the ones occupied by the main verb and the auxiliary, exemplified in (100), which leads to a Head Movement Constraint violation.

(100) …da *ga*$_j$ Ivan nije udario t$_j$
that him$_{ACC}$ Ivan NEG+is$_{AUX}$ hit$_{PART.M.SG}$
"…that Ivan didn't hit him" (S-C, Wilder and Ćavar 1994: 54)

To circumvent this problem, Wilder and Ćavar (1994: 54) propose that pronominal clitics are D heads of DP arguments within VP, which do not leave their DPs when they are located in their base positions. It is the whole object DPs that raise out of VP and target a Specifier position above VP (for instance, for case checking reasons). Subsequently, the clitics get extracted from this Specifier position and adjoin to C^0 as heads. This mechanism is schematized in (101) for the accusative clitic *ga*, which adjoins to the complementizer *da* located in C^0.

(101) …da ga$_j$ [$_{DP}$ t$_j$]$_k$ nije udario t$_k$
that him$_{ACC}$ NEG+ is$_{AUX}$ hit$_{PART.M.SG}$ (S-C, Wilder and Ćavar 1994: 54)

Wilder and Ćavar argue that the idea that the clitic adjunction to C^0 is preceded by phrasal movement receives support from structures with the subjunctive complement selected by a causative verb (see also section 4.2.3 in Chapter 4 for a discussion of subjunctive forms in Serbo-Croatian). There is dialectal variation concerning the form of these structures. In the dialects that have infinitives, the causative verb is complemented by a complementizer-less infinitival constituent (such as the one with the infinitive *plivati* in 102), with the subject bearing accusative case, such as *ribu* in (102a), and the corresponding clitic form *ga* in (102b). This structure exemplifies an ECM construction.

(102) a. Ivan *je* pustio ribu plivati
Ivan is$_{AUX}$ let$_{PART.M.SG}$ fish$_{ACC}$ swim$_{INF}$
"Ivan let the fish swim"
b. Ivan *je* *ga* pustio plivati
Ivan is$_{AUX}$ it$_{ACC}$ let$_{PART.M.SG}$ swim$_{INF}$ (S-C, Wilder and Ćavar 1994: 55)

In the dialects that lack the infinitive, the embedded clause in causative constructions contains the complementizer *da* and a verb in the subjunctive form (see 103a).

If the accusative-marked DP object (such as *riba* in 103a) is replaced by a clitic (such as *ga* in 103b), the clitic encliticizes, but only to the complementizer in the main clause.

(103) a. Ivan *je* pustio ribu da pliva
Ivan is$_{AUX}$ let$_{PART.M.SG}$ fish$_{ACC}$ that swim$_{SUBJ.3SG}$
"Ivan let the fish swim"
b$_1$. da *je* *ga* Ivan pustio da pliva
that is$_{AUX}$ it$_{ACC}$ Ivan let$_{PART.M.SG}$ that swim$_{SUBJ.3SG}$
"that Ivan let it swim"
b$_2$. *da *je* Ivan pustio da *ga* pliva
that is$_{AUX}$ Ivan let$_{PART.M.SG}$ that it$_{ACC}$ swim$_{SUBJ.3SG}$
(S-C, Wilder and Ćavar 1994: 55)

Interestingly, this is the only case in which pronominal clitics may move across the complementizer *da*, as otherwise cliticization in Serbo-Croatian is strictly clause-bound. For instance, objects of the embedded clause may normally only encliticize to the embedded complementizer, rather than to the complementizer of the matrix clause, as shown in (104b–c) for the accusative clitic *ga*, which corresponds to the full DP object *Jozu*.

(104) a. da *je* Ivan pustio Mariju da poljubi Jozu
that is$_{AUX}$ Ivan pustio$_{PART.M.SG}$ Mary that kiss$_{SUBJ.3SG}$ Joseph$_{ACC}$
"that Ivan has let Mary kiss Joseph"
b. da *je* Ivan pustio Mariju da *ga* polubi
that is$_{AUX}$ Ivan pustio$_{PART.M.SG}$ Mary that him$_{ACC}$ kiss$_{SUBJ.3SG}$
"that Ivan has let Mary kiss him"
c. * da *je ga* Ivan pustio Mariju da polubi (S-C, Wilder and Ćavar 1994: 56)

As was mentioned above, in Wilder and Ćavar's view the pattern illustrated in (104) indicates that clitics do not undergo D^0-movement from within VP. Rather, first the DP moves to a functional projection (for instance, Spec, AgrOP), where it checks case. This phrasal movement (exemplified for *Mariju* in 105, which is a partial derivation of 104a) feeds subsequent clitic placement, which proceeds as D^0-movement to the matrix C^0.

(105) da *je* Ivan pustio Mariju$_j$ [$_{CP}$ da t$_j$ poljubi Jozu]

The data concerning exceptional clitic movement out of subjunctive clauses in Serbo-Croatian will be readdressed in section 4.2.3 in Chapter 4. Note though that the derivation of cliticization becomes simplified with Chomsky's (1995) introduction of the Bare Phrase Structure approach, which proposes that clitics are ambiguous X^0/XP elements, which move from phrasal positions within VP, but may adjoin to an X^0 (such as T^0 or C^0) as heads in the final step of the derivation. In this way the cliticization does not lead to a Head Movement Constraint violation.

3.5.2.2. No uniform position for Wackernagel clitics

The syntactic accounts that have been outlined here so far propose that all the clitics in Serbo-Croatian are located in C^0. The main motivation for this proposal comes from structures in which clitics are adjacent to the complementizer and the particle *li*, both of which are assumed to be in C^0. However, this assumption is problematic given the data in (106) due to Tomić (1996). Each of the elements preceding the sequence of the auxiliary and dative clitics is a syntactic constituent; however, these elements can be a full NP, an AP, or just a modifier of the AP. Given the variation among the pre-clitic elements, it is difficult to pinpoint a distinct cliticization site, as the clitics seem to be in a different projection in each of these clauses.

(106) a. Veoma lepu haljinu *si* *mi* kupio
very beautiful$_{ACC}$ dress$_{ACC}$ are$_{AUX}$ me$_{DAT}$ buy$_{PART.M.SG.}$
b. Veoma lepu *si* *mi* haljinu kupio
very beautiful$_{ACC}$ are$_{AUX}$ me$_{DAT}$ dress$_{ACC}$ buy$_{PART.M.SG.}$
c. Veoma *si* *mi* lepu haljinu kupio
very are$_{AUX}$ me$_{DAT}$ beautiful$_{ACC}$ dress$_{ACC}$ buy$_{PART.M.SG.}$
"You've bought me a very beautiful dress" (S-C, Tomić 1996: 817)

Bošković (1995, 1997, 2001) provides a strong argument against the idea of a uniform placement of Wackernagel clitics which follows from his observations concerning potential interpretations of adverbs in structures with clitics and the *l*-participle. Thus, the sentences in (107) contain the auxiliary clitic *je*, which can be preceded either by the subject (see 107a) or the *l*-participle (see 107b). At first sight it may seem that the auxiliary occupies the same position in both sentences. However, Bošković observes that when a clause contains the sentential adverb *nesumnjivo*, the *l*-participle cannot raise across the auxiliary (see 107c). Following Watanabe (1993), Bošković assumes that sentential adverbs are uniformly adjoined to TP. The contrast between (107a) and (107c) thus indicates, in his view, that the *l*-participle cannot raise higher than TP and that the auxiliary *je* is in a higher structural position in (107a) than in (107c).

(107) a. Jovan *je* nesumnjivo istukao Petra
Jovan is$_{AUX}$ undoubtedly beat$_{PART.M.SG}$ Peter
"Jovan undoubtedly beat Peter"
b. Istukao$_i$ *je* t$_i$ Petra
beat$_{PART.M.SG}$ is$_{AUX}$ Peter
"He beat Peter"
c. *Istukao$_i$ *je* nesumnjivo t$_i$ Petra
beat$_{PART.M.SG}$ is$_{AUX}$ undoubtedly Peter
"He undoubtedly beat Peter" (S-C, Bošković 1995: 248)

A similar conclusion can be drawn on the basis of the interaction between verb movement and the question particle *li*. As observed by Bošković (1995: 251), only

finite verbs can cross *li* located in C^0, whereas this movement is blocked for the *l*-participle. The ungrammaticality of (108b), which contains the auxiliary clitic, suggests that in this clause *je* cannot be in C^0.

(108) a. Ljubi *li* nju?
kisses Q her
"Does he kiss her?"
b. *Poljubio *li je* nju?
$kiss_{PART.M.SG}$ Q is_{AUX} her
"Did he kiss her?" (S-C, Bošković 1995: 251)

Tomić (2000: 309–310) revisits Bošković's data and shows that the same contrast with respect to verb movement across *li* is observed when pronominal clitics are present. As illustrated in (109), only the finite verb may move across *li* and the pronominal clitics. This fact indicates that neither pronominal nor auxiliary clitics target a uniform position in the clause and that C^0 is one of many potential clitic sites in Serbo-Croatian.[37]

[37] Regarding the data in (107), Tomić (2000: 309–310) points out that sentential adverbs block the movement of both *l*-participles and finite verbs.

(i) a. *Dao *mi ga je* nesumnjivo juče
$give_{PART.M.SG}$ me_{DAT} it_{ACC} is_{AUX} undoubtedly yesterday
b. *Dade *mi ga* nesumnjivo juče
$gave_{3SG}$ me_{DAT} it_{ACC} undoubtedly yesterday (S-C, Tomić 2000: 310)

The examples in (i) improve immediately once the sentential adverbs are left out.

(ii) a. Dao *mi ga je* juče
$give_{PART.M.SG}$ me_{DAT} it_{ACC} is_{AUX} yesterday
b. Dade *mi ga* juče
$gave_{3SG}$ me_{DAT} it_{ACC} yesterday
"He gave it to me yesterday" (S-C, Tomić 2000: 310)

This means that the reason why the *l*-participle cannot cross *li* in Serbo-Croatian is independent of the "blocking" effect of sentential adverbs, which are incompatible with both *l*-participle movement and finite verb movement. Similar facts have been recently addressed by Franks (2010), who observes that in a clause with an overt subject and a finite verb located in front of an ambiguous adverb, only the manner interpretation of this adverb is possible.

(iii) a. Jovan odgovara pravilno Mariji
Jovan answers correctly Maria
"Jovan answers Maria correctly"
"*It was correct of Jovan to answer Maria"
b. Jovan prodaje mudro svoju kuću
Jovan sells wisely REFL house
"Jovan sells his house in a wise manner"
"*It was wise of Jovan to sell his house" (S-C, Franks 2010)

(109) a. Dade *li mu ga* juče?
gave$_{3SG}$ Q him$_{DAT}$ it$_{ACC}$ yesterday
"Did he give it to him yesterday?"
b. *Dao *li mu ga je* juče?
give$_{PART.M.SG}$ Q him$_{DAT}$ it$_{ACC}$ is$_{AUX}$ yesterday (S-C, Tomić 2000: 310)

Additional support in favor of the idea that there is no designated syntactic position for the auxiliary and pronominal clitics comes from the interpretation of ambiguous adverbs. Bošković (1995) provides the data in (110), which contains the adverb *pravilno* 'correctly.' This adverb may have a sentential or a manner interpretation. Bošković observes that when a sentence contains only the auxiliary clitic *su* (as in 110a), both the manner and sentential readings of the adverb are available. However, when the auxiliary clitic is accompanied by the dative clitic *joj*, only the manner-oriented reading of the adverb is permitted. On the assumption that sentential adverbs are TP-adjoined, they are located higher in the structure than manner adverbs, which are assumed to be adjoined to VP. In this scenario, the contrast between the adverb interpretations in (110) indicates that the auxiliary clitic *su* moves higher when it appears on its own, as in (110a), than when it is accompanied by the pronominal clitic *joj*, as in (110b).

(110) a. Oni *su* pravilno odgovorili Mileni
they are$_{AUX}$ correctly answer$_{PART.M.PL}$ Milena$_{DAT}$
"They did the right thing in answering Milena"
"They gave Milena a correct answer"
b. Oni *su* *joj* pravilno odgovorili
they are$_{AUX}$ her$_{DAT}$ correctly answer$_{PART.M.PL}$
"*They did the right thing in answering her"
"They gave her a correct answer" (S-C, Bošković: 1995: 247)

Bošković's observations have led to a revision of the previous accounts that postulated clitic placement in a designated syntactic position (with the exception of a recent analysis due to Roberts 2010, which is reviewed in section 3.5.2.3). For instance, in contrast to Franks and Progovac (1994), who assume that clitics right-adjoin to C^0, Franks (1998) postulates that they target the highest functional head available, with PF acting as a filter that selects the phonologically felicitous copy of the clitics to be pronounced. This approach is discussed in detail in section 3.5.2.4. Likewise, Progovac (1999, 2005: 149ff.) also assumes that the clitics target the highest extended projection in the verbal domain, though she proposes that they move as affixes on a silent copy of the verb. Her reasoning is based on the idea that clitics must lean onto some phonological material located to their

In Franks's view, these facts may be explained in two ways. Either verb movement is prohibited across sentential adverbs for independent reasons, not related to *l*-participle fronting and the position of the clitics, or finite verbs and *l*-participles in general do not move higher than TP (where sentential adverbs are adjoined) in Serbo-Croatian.

left. The clitics are not selective about the category of these elements (in contrast to morphological affixes or verb-adjacent clitics); they can also be either heads or phrases, but they must be syntactic constituents.

An important question about Wackernagel cliticization when conceived of as a syntactic operation is the motivation for the clitic movement to the highest functional projection. Progovac (1996, 1999) proposes that the trigger is the same as in the case of verb raising in other languages (in particular, V2 in continental Germanic), and that the clitic movement is parasitic on verb movement. This means that both the verb and the clitics move overtly as a unit created via adjunction. The unit is created when the verb moves via the functional projections where the clitics are hosted, picks them up and drags them as free riders to the ultimate landing site.[38] The clitics are always spelt out in the head of the chain. The verb, however, usually does not need to reach the head of the chain, as it can be pronounced lower in the structure, in an intermediate head which contains a strong feature.[39] Still, the clitics may remain adjoined even to a silent copy of the verb and reach the highest head position in this way.

As an illustration of Progovac's proposal, the structure in (112) presents the derivation of the sentence in (111), which contains two pronominal clitics *ti* and *ga*. The boldfaced elements are the ones that are pronounced. Note that Progovac adopts a phrase structure with a Predication Phrase due to Bowers (1993) in order to account for the ordering of the pronominal clitics.

(111) Goran *ti* *ga* predstavlja
Goran you$_{DAT}$ him$_{ACC}$ introduces
"Goran is introducing him to you" (S-C, Progovac 1999: 41)

(112) [$_{TP}$ **Goran** [$_{T'}$ predstavlja-***ti-ga*** [$_{AgrIOP}$ [$_{AgrIO'}$ predstavlja-*ti-ga* [$_{AgrOP}$ [$_{AgrOP'}$ predstavlja -*ti*[$_{PredP}$ Goran [$_{Pred'}$ **predstavlja** [$_{VP}$ *ti* [$_{V'}$ predstavlja [$_{NP}$ *ga*]]]]]]]]]]

Correspondingly, the structure in (114) presents the derivation of the clause in (113), in which the verb is clause-initial. On Progovac's analysis, the position of the verb indicates that its highest copy is pronounced, together with the pronominal clitics that are adjoined to it.

[38] In contrast to her previous analyses (Progovac 1996, 1999) or Franks's (1998) account, Progovac (2005) no longer assumes that clitics originate as arguments within the VP but instead proposes that they are generated directly in functional projections. She states that although this approach does not explain why clitic doubling is not possible in Serbo-Croatian, it does capture morphosyntactic differences between clitics and non-clitic forms (which are generated as arguments within the VP; Progovac 2005: 152, fn. 17). This modification is immaterial for the purpose of the presentation of her analysis here.

[39] Following Richards (1997), Progovac assumes that movement from a strong position is possible. This enables her to propose that the clitics can move from the strong head that is targeted by the verb.

(113) Predstavljam *ti* *ga*
introduce$_{PRES.1SG}$ you$_{DAT}$ him$_{ACC}$
"I am introducing him to you"

(114) [$_{TP}$ [$_{T'}$ **predstavljam-*ti-ga*** [$_{AgrDOP}$ [$_{AgrDO'}$ predstavljam-*ti-ga* [$_{AgrIOP}$ [$_{AgrIO'}$ predstavljam *-ti* [$_{PredP}$ *pro* [$_{Pred'}$ predstavljam [$_{VP}$ *ti* [$_{V'}$ predstavljam [$_{NP}$ *ga*]]]]]]]]]]

A major advantage of Progovac's analysis is the straightforward link that she makes between V2 and second position cliticization. Moreover, by making the assumption that the clitic movement is parasitic on the verb movement to the highest projection she provides a trigger for this operation and restricts it to the familiar requirement of feature checking. It is difficult to find a trigger for the clitic movement otherwise, as clitics are members of various categories, including pronouns and auxiliaries. However, her analysis raises some other problematic issues. As she acknowledges herself (Progovac 2005: 155), the idea that the clitics can be pronounced on both overt and silent copies of the raised verb is a stipulation. Moreover, her account faces a problem when properties of second position cliticization are confronted with those of verb-adjacent cliticization in languages such as Bulgarian and Macedonian. On Progovac's analysis, the only difference between the two cliticization patterns is the requirement that in verb-adjacent clitic languages the clitics be pronounced on the necessarily overt copy of the verb. However, as I will show in detail in section 4.2 in Chapter 4, the two cliticization strategies involve entirely different syntactic mechanisms.

3.5.2.3. Roberts's (2010) analysis of Wackernagel cliticization in Slavic

This section overviews Roberts's recent analysis of second position cliticization in Slavic. His analysis is worth discussing, as he attempts to postulate a designated cliticization site, in line with the earliest syntactic approaches to Wackernagel cliticization (Franks and Progovac 1994; Wilder and Ćavar 1994; Ćavar and Wilder 1999), some of which have been discussed earlier in this section. Interestingly, Roberts is aware of and refers to many of the arguments that have been put forward in favor of a non-uniform clitic placement. He tries to approach them from a different angle, in support of his own analysis.

Thus, Roberts (2010: 65) alludes to a well-known division between "C-oriented" versus "V-/I-/T-oriented" clitics (as assumed, for instance, in Benacchio and Renzi 1987; Cardinaletti and Starke 1999: 196; Halpern 1995; Klavans 1982, 1985; and Rivero 1997). This division roughly corresponds to the one between Wackernagel and verb-adjacent clitics. He suggests though, somewhat cavalierly, that the "V-oriented" (that is, verb-adjacent) clitics in fact target v^0. This suggestion allows him to make a broad generalization that clitics target phase heads. On Roberts's analysis, the pronominal clitics in all Romance languages with a possible exception of Portuguese (see Costa 2001) are v-oriented. Conversely, the Slavic languages

with second position clitic are assumed by Roberts to feature C-oriented clitics, adjoined to C^0. To substantiate his proposal for Slavic, Roberts (2010: 66) refers to a number of examples from Serbo-Croatian in which the clitics are clearly located higher than TP, possibly in the CP area. Thus, in (115a) the pronominal clitic *im* is sandwiched between two *wh*-questions; in (115b) the clitic *ga* follows the interrogative complementizer *li* (itself also a clitic), while in the embedded clause in (115c) the auxiliary clitic *je* immediately follows the complementizer. Similar examples were provided earlier in this chapter, in section 3.5.2.1.[40]

(115) a. Koliko *im* ko daje?
how-much them$_{DAT}$ who gives
"Who gives them how much?"
b. Da *li* *ga* Ivan vidi?
that Q *him* Ivan see
"Does Ivan see him?" (S-C, Dimitrova-Vulchanova 1999: 109)
c. da *je* Ivan volio Mariju
that is$_{AUX}$ Ivan loved Mary
"that Ivan loved Mary" (S-C, Ćavar and Wilder 1999: 437)
d. Vidio *ga* *je*
see$_{PART.M.SG}$ him$_{ACC}$ is$_{AUX}$
"He has seen him" (S-C, Roberts 2010: 66)

A theoretical problem that has actually been noted earlier for structures of this type is that even though the clitics might be in C^0 in these examples, this fact does not necessarily imply that C^0 is the projection where they are found in all contexts. Moreover, Roberts's proposal faces a conceptual issue, which he actually acknowledges himself, related to the possibility of Wackernagel clitics first adjoining to v^0, the way verb-adjacent clitics do, and staying there without further raising to the CP area. Roberts suggests that the Wackernagel cliticization to v^0 is avoided because these clitics have a different categorial status. Whereas verb-adjacent clitics are $\varphi^{min/max}$ elements, second position clitics are $D^{min/max}$ elements. This means that, on a par with English and Scandinavian pronouns, Wackernagel clitics are distinct from v^0 and as such are unable to incorporate into it.

This proposal faces a number of theoretical challenges. First, it requires an additional stipulation of the CP layer having both φ- and D-features in Wackernagel clitic languages in order to secure the attraction of the pronominal clitics. Second, Roberts is aware that an additional mechanism needs to be applied in order to allow the $D^{min/max}$ elements to be evacuated from the vP phase, as on standard assumptions a single-step movement of the clitics from the argument positions within the VP to the CP area would be prevented by the PIC (see Chom-

[40] Recall from example (107) that, as pointed out by Bošković (1995), the *l*-participle may not cross sentential adverbs. This means that the clitics in example (115d) are most likely in a lower position than C^0.

sky 2001). As a potential solution Roberts suggests that vP is equipped with an Edge feature that permits movement of the $D^{min/max}$ elements through Spec, vP, though he admits that it is problematic to posit a feature that is exclusively specialized for clitic raising. Therefore he proposes that this feature is a "formal correlate of a generalized scrambling/'free-word-order' type of system" (Roberts 2010: 68). In this way Roberts attributes the existence of second position cliticization to a number of independent factors: the assumption that Wackernagel pronominal clitics are D-elements, the existence of a parametrically-conditioned attractor in the CP-domain, and the availability of an Edge Feature on v^0 that is associated with scrambling, which is understood as "free movement of internal arguments into the Mittelfeld" (Roberts 2010: 68).

Apart from the theoretical issues mentioned above, I would like to also point out a number of empirical problems with Roberts's proposal. First, second position clitics comprise not only pronominal forms but also auxiliary verbs in Slavic, and it seems rather problematic to posit that they are D-elements on a par with pronominals. Second, it is rather misguided to propose that second position clitics are D-elements, as a major contrast between the Slavic languages that have second position clitics versus those with verb-adjacent clitics lies with the availability of the prototypical D-element, the definite article. Languages with second position clitics uniformly lack it (see also Bošković 2016). In fact, there is a semantic contrast related to the interpretations of the clitics in the two groups of languages, with only verb-adjacent clitics required to be interpreted as definite (Runić 2013b; see section 4.2.6 in Chapter 4). What is more, second position clitics do not show any cliticization properties that are commonly related to definiteness, such as clitic doubling. For instance, Macedonian requires definite objects to be doubled by (verb-adjacent) clitics, which is never an option in a language with second position clitics, such as Serbo-Croatian (see 116).

(116) a. Ivo *go* napisa pismoto
Ivo it_{ACC} wrote letter-the
"Ivo wrote the letter" (Mac)

b. *Ivan (**ga*) napisa pismo
Ivan it_{ACC} wrote letter (S-C, Bošković 2012)

Third, while it is true that by and large languages with Wackernagel clitics exhibit more scrambling possibilities than Bulgarian and Macedonian, word order in the latter group of languages is considerably less restricted than in most Germanic or Romance languages. Fourth, another conceptual problem of Roberts's analysis has been pointed out by Matushansky (2011: 544). She observes that the suggestion that second position clitics are $D^{min/max}$ elements whereas verb-adjacent clitics are $\varphi^{min/max}$ elements may entail that the former are not nominal while the latter not definite, contrary to fact.

Recall from section 3.5.2.2 that some of the arguments against a uniform position of Wackernagel clitics are based on the (non-)availability of clitics (and the fronted *l*-participle) in structures with sentential adverbs, as well as potential interpretations of ambiguous adverbs such as *pravilno* 'correctly' in structures with clitics. These interactions are presented in the clauses given in (117b–c), which resemble Bošković's (1995) examples given in (107) earlier in this chapter. As these examples show, when the *l*-participle is located in front of the auxiliary clitic *je* (as in 117b) and when it is followed by the adverb (as in 117c), the sentential-oriented interpretation of *pravilno* is not available. The only reading that *pravilno* may then have is that of a manner adverb. Since manner adverbs are located lower in the structure than sentential adverbs, the adverb ambiguity in (117a) indicates that the auxiliary clitic can be higher than VP or TP, but when it is preceded by the *l*-participle as in (117b), it cannot be higher than sentential adverbs, thus it is hosted below TP. In consequence, these data suggest to Bošković (1995, 1997, 2001) that there is no fixed syntactic position for clitics in Serbo-Croatian.

(117) a. Jovan *je* pravilno odgovorio Mileni
Jovan is$_{AUX}$ correctly answer$_{PART.M.SG}$ Milena$_{DAT}$
"Jovan gave Milena a correct answer"
"Jovan did the right thing in answering Milena"
b. Odgovorio *je* pravilno Mileni
answer$_{PART.M.SG}$ is$_{AUX}$ correctly Milena$_{DAT}$
"He gave Milena a correct answer"
"*He did the right thing in answering Milena"
c. Jovan *je* odgovorio pravilno Mileni
Jovan is$_{AUX}$ answer$_{PART.M.SG}$ correctly Milena$_{DAT}$
"Jovan gave Milena a correct answer"
"*Jovan did the right thing in answering Milena" (S-C, Bošković 2001: 39)

Roberts (2010: 70), however, presents an alternative analysis of these data, in support of his claim that the clitics in Serbo-Croatian target C^0. To account for the restrictions on the adverb interpretations in (117b–c), he refers to the "thematic minimality" constraint, which he originally proposed in Roberts (1988). The constraint is reminiscent of Rizzi's (1990a) relativized minimality, and it states that a theta-assigning category cannot undergo A'-movement across another theta-assigning category. Furthermore, Roberts follows Zubizarreta (1982) in assuming the following distinction between manner and subject/agent-oriented adverbs: while the former are pure modifiers, the latter assign an "adjunct" theta role to the agent (subject). The workings of this constraint are exemplified by the data in (118).

(118) a. How cleverly did John pick the lock?
b. We consider them happy poor

c. *How happy do we consider them poor?
d. How happy do you consider them? (Roberts 2010: 70)

The adverb *cleverly* in (118a) loses the subject-oriented interpretation when it undergoes *wh*-movement. This is because the main predicate is an intervener for extraction of the theta-role-assigner, and as a result, only the non-theta-role-assigning, manner reading of the adverb is available. Moreover, the data in (118c–d) show that it is not possible to extract an AP over another AP and that two secondary predicates block each other's extraction.

Roberts attempts to account for the Serbo-Croatian examples in (117) in similar terms. In his view, the *l*-participle *odgovorio* raises via A'-movement to Spec, CP, and the adverb *pravilno* is then an intervener under its subject-oriented reading, but not under the manner reading. Moreover, Roberts posits that (117c) indicates that subject-oriented adverbs are located higher in the structure than manner adverbs, with the *l*-participle hosted in the TP-area.

I would like to point out that the Serbo-Croatian data discussed by Roberts are more complex. In the same work that Roberts refers to, Bošković (2001: 51) addresses cases which involve the auxiliary clitic *su* in combination with the pronominal dative clitic *joj*. As shown in (110), repeated below as (119) for convenience, both the manner and the sentential interpretations of *pravilno* are possible only when the auxiliary clitic occurs on its own. Once the auxiliary clitic is accompanied by the pronominal dative clitic *joj*, only the manner interpretation of the adverb is available. According to Bošković, this contrast indicates that the auxiliary clitic raises higher when it occurs on its own than when it appears together with the pronominal clitic. This means that the auxiliary clitic may not occur in the same structural position as the pronominal clitic. It is not clear how the contrast presented in (119) can be accounted for by appealing to Roberts's "thematic minimality" constraint in a straightforward way.

(119) a. Oni *su* pravilno odgovorili Mileni
they are$_{AUX}$ correctly answer$_{PART.M.PL}$ Milena$_{DAT}$
"They did the right thing in answering Milena"
"They gave Milena a correct answer"
b. Oni *su* *joj* pravilno odgovorili
they are$_{AUX}$ her$_{DAT}$ correctly answer$_{PART.M.PL}$
"*They did the right thing in answering her"
"They gave her a correct answer" (S-C, Bošković 1995: 247/2001: 51)

Furthermore, I would like to observe that Roberts's account faces more empirical problems, this time in relation to participle placement in the clause. Recall from example (108) above, repeated below in (120) for convenience, that the *l*-participle cannot reach the CP layer in Serbo-Croatian. This is what has been established by Bošković (1995) on the basis of a comparison between finite verb movement and

l-participle movement across the operator clitic *li*, which is commonly assumed to be located in C^0 in Slavic. According to Bošković, the contrast in (120) also indicates that the auxiliary clitic *je* is not always hosted in C^0.[41]

(120) a. Ljubi *li* nju?
kisses Q her
"Does he kiss her?"
b. *Poljubio *li je* nju?
$kiss_{PART.M.SG}$ Q is_{AUX} her
"Did he kiss her?" (S-C, Bošković 1995: 251)

Roberts (2010: 71) presents an alternative analysis to account for the distribution of the verbs in (120). He posits that these examples indicate that verb movement in *yes/no* questions involves T–to–C movement, which is restricted to finite verbs. Consequently, it cannot apply to the non-finite *l*-participle. In his view, the movement of the *l*-participle could be treated as "A'-movement of V to SpecCP, satisfying the general second-position requirement." It seems to me though that there are two theoretical issues with this idea. First, T–to–C movement in Romance and Germanic is restricted to finite verbs, but there is no explicit restriction against non-finite verbs moving to Spec, CP via phrasal (remnant) movement, which is apparently postulated by Roberts for these examples. This type of operation has in fact been argued for VP predicates in *yes-no* questions and *wh*-questions in languages such as Niuean (Massam and Starks 2008).[42] Second, the idea that the verb moves to the area in front of the clitic to satisfy the second position requirement is problematic, as it implies look-ahead in syntactic operations. Third, Roberts's proposal faces an empirical challenge. Even though participle fronting across *li* is excluded in Serbo-Croatian, it is permitted in Bulgarian, as shown in (121).

[41] I observe in Migdalski (2009a) that the restriction on participle movement across *li* in Serbo-Croatian is straightforwardly accounted for on the assumption that whereas finite verbs in Serbo-Croatian move via head movement, the *l*-participle undergoes XP-movement to the subject position (Spec, TP; see Migdalski 2006, ch.2 for details of the analysis and a general discussion of participle movement across Slavic). Thus, in (120b) the *l*-participle may not move to the specifier of the projection headed by *li* because *li* is in general unable to project a Specifier and host phrasal material. The only elements that can adjoin to *li* in Serbo-Croatian are heads (see section 3.4.3.1 earlier in this chapter). In Bulgarian, where *li* may be preceded by heads and phrases, both *l*-participles and finite verbs may move across *li* (see example 121).

[42] Niuean is a Polynesian language traditionally analyzed as a V1 language. In this language, tense appears separately from the verb and unlike in Germanic, verb movement does not seem to be related to finiteness. Even though there is no evidence for verb movement to the CP-layer in declarative clauses (in which the verb lands in a lower position), the verb does move to the CP-domain in *yes-no* questions and *wh*-questions even though it is non-finite. See Massam (2010) and the references cited therein. See also Broekhuis and Migdalski (2003) and Migdalski (2005, 2006) for an analysis of *l*-participle fronting in South Slavic (traditionally interpreted as a case of Long Head Movement from V^0 to C^0 in Lema and Rivero 1989 or as verb adjunction to Aux^0 in Bošković 1995, 1997), in which the *l*-participle is argued to target Spec, TP. In languages such as Bulgarian the *l*-participle is shown to be able to optionally raise higher and reach Spec, CP.

(121) Celunal *li ja e*?
kiss$_{\text{PART.M.SG}}$ Q her$_{\text{ACC}}$ is
"Did he kiss her? (Bg, Migdalski 2006: 82)

Consequently, it is difficult to maintain the idea that this operation is prohibited due to a general constraint on T–to–C movement that restricts this operation to finite verbs. Such a restriction is too powerful, as it excludes well-formed cases of non-finite *l*-participle movement in Bulgarian.

Finally, Roberts (2010: 74) postulates that the division between C-oriented clitics (interpreted as $D^{min/max}$ elements) and v-oriented clitics (analyzed as $\varphi^{min/max}$ elements) is supported by diachronic considerations. It is a common occurrence that diachronic changes are accompanied by an impoverishment of morpho-syntactic and/or semantic features (see, for example, Roberts and Roussou 2003). Therefore, it is expected that clitics may shift from D to φ elements. According to Roberts, this is what is observed diachronically in a number of languages, in which second position cliticization predates verb-adjacent cliticization (see, for example, De Dardel and De Kok 1996; Salvi 1994; and Ledgeway 2010 for Romance; Fontana 1993 for Spanish; and Horrocks 1997 for Greek). This change may be coupled with the loss of scrambling, which is sometimes described in the diachronic literature as the "rigidification of word order." However, as will be discussed in Chapter 4 in detail, Slavic languages exemplify the opposite scenario: in a subset of these languages verb-adjacent clitics were reanalyzed as second-position elements.

Summarizing, although Roberts's (2010) proposal is certainly interesting and offers a new analysis of the Slavic data, it faces serious conceptual and empirical challenges. Roberts's account of cliticization in Slavic is addressed again in section 4.2.3, in which I show that Wackernagel and verb-adjacent cliticizations involve entirely different syntactic operations.

3.5.2.4. Scattered deletion approach to Wackernagel cliticization

The preceding sections have overviewed a number of approaches that aim to capture the second position requirement on clitics. Some of them treat Wackernagel cliticization as a purely phonological phenomenon and appeal to the mechanism of prosodic inversion, as in Halpern (1992) and Radanović-Kocić (1988). Some others postulate that the process is a result of a syntactic operation, as in Franks and Progovac (1994), Wilder and Ćavar (1994), Progovac (1996, 1999, 2005), Tomić (1996, 2000), and Roberts (2010). This section discusses a seminal and influential analysis of Wackernagel cliticization along the lines of the "scattered deletion" approach, which was first proposed by Franks (1998) and adopted in different versions by Stjepanović (1999) and Bošković (2001).[43]

[43] Bošković (2001) makes use of the scattered deletion approach to explain the workings of cliticization patterns in Bulgarian and Macedonian.

Franks (1998, 2010) assumes that Wackernagel clitics in Slavic are functional categories that originate in different positions. The auxiliary clitics are generated in functional heads, such as $AgrS^0$ and T^0. Pronominal clitics are merged in argument positions as K(ase) heads, from which they raise to Agreement projections (the accusative clitic raises to AgrOP, while the dative clitic raises to AgrIOP) in order to check case features, and subsequently they "move as high in the tree as they can" (Franks 1998: 22), reaching the highest functional head that is available in a given structure. The basic template proposed by Franks (1998) for a clause with second position clitics in Serbo-Croatian is given in (122).

(122) $[_{CP}$ C $[_{AgrSP}$ AgrS $[_{TP}$ T $[_{AgrIOP}$ AgrIO $[_{AgrOP}$ AgrO $[_{vP}$ SUB v $[_{VP}$ IO $[_{V'}$ V OBJ]]]]]]]]
(Franks 1998)

This template does not imply that all these projections will be present in every sentence. Following Law (1991) and Bošković (1997: 37–39), Franks assumes the "Minimal Structure Principle," which states that only phrase structure that is independently required is projected, or in other words, only phrase structure that is motivated by the Numeration is projected. This means, for instance, that in a declarative clause there is no reason to project a CP. Furthermore, Franks adopts Kayne's (1994) suggestion that only one specifier per phrase is possible. This means that within every phrase there is just one XP-position preceding the head of this phrase. This assumption implies in turn that if the clitics are located in the highest functional head available, there is enough space for only one phrase in front of the clitics.

However, clitic placement is determined not only by syntax. Following the Minimalist ideas presented in Chomsky (1995), Franks assumes that movement consists of two operations, copy and delete. In the process of building a syntactic structure, there are two possibilities: elements that are merged at the root can be either taken from the Numeration or they can be merged as copies of the elements that have been merged lower in the structure. This means that during a syntactic derivation there is access to all copies of movement. At the end of the derivation, only the highest copy is pronounced, whereas all the remaining ones are deleted in the PF component.

Franks suggests, however, that even though by default the highest copy (the head of a chain) is pronounced at PF, this is not always the case. In case the highest copy ends up in a position that violates prosodic requirements for its pronunciation, PF may intervene and act as a filter, treating the highest copy as an illicit PF object and forcing pronunciation of a lower copy that follows PF requirements.

An example of an illicit PF element is a second position clitic that is not supported phonologically. Since clitics are not independent phonological words, they need to attach to an adjacent element bearing stress to be prosodically licensed at PF. Given that clitics in Serbo-Croatian are enclitic, they require phonologically overt

material that precedes them. Otherwise, they become stranded if instead there is an intonational phrase boundary to their left. Such a scenario is illustrated in (123), with (123a) presenting the final PF-output and (123b) showing the derivation (without labels) of a clause containing the sequence of two Wackernagel clitics *mi* and *je*.

(123) a. # Stalno *mi* *je* kupovao knjige
constantly me$_{DAT}$ is$_{AUX}$ buy$_{PART.M.SG}$ books
"(He) was constantly buying me books"
b. [# ~~*mi je*~~ [stalno *mi je* [kupovao [~~*mi je*~~ [kupovao knjige]]]]] (S-C, Franks 2010)

Franks observes that under usual circumstances only the highest copy is retained in PF, but since in the case at hand there is a prosodic boundary to the left of this copy, this would result in a PF crash. Consequently, the clitics in the second highest position are pronounced, which according to Franks is also the most economical solution.

Franks argues that his account correctly captures exceptional cases of second position clitics in which their placement is "delayed." This process is observed with appositives (as originally noted by Radanović-Kocić 1988, see also Bošković 2001: 64), such as *tvoja mama* 'your mother' in (124). The symbol # marks the prosodic boundaries in this sentence.

(124) a. *#Ja#, #tvoja mama#, #*sam* *ti* obećala sladoled#
I your mother am$_{AUX}$ you$_{DAT}$ promise$_{PART.F.SG}$ ice cream
"I, your mother, promised you ice cream"
b. #Ja#, #tvoja mama#, #obećala *sam ti* sladoled# (S-C, Franks 1998)

Although the subject *ja* is the initial element in (124a), the clitics *sam ti* cannot follow it because the subject is in turn followed by the appositive *tvoja mama*, which is separated by intonational phrase boundaries. Consequently, the clitics are pronounced lower in the structure, below the participle *obećala*, which is the highest stressed element to the right of the lowest intonational boundary, whereas the higher copies of the clitics become deleted.

Franks proposes that the same strategy is applied if there are a number of contrastively focused elements in a clause, all of which are set off prosodically. If need be, even the fourth lower copy can be selected for pronunciation in that case, as illustrated for the auxiliary clitic *je* located in the subordinate clause in (125a) and shown in the informal derivation given in (125b).

(125) a. #Javili *su* nam da# #prije nekoliko dana# # na toj liniji#
#announce$_{PART.M.PL}$ are$_{AUX.3PL}$ us$_{DAT}$ that #ago several days # on that line
#voz *je* kasnio tri sata#
#train is$_{AUX}$ be-late$_{PART.M.SG}$ three hours
"They announced that, several days ago, on that line, the train was three hours late"
b. da ~~*je*~~ #prije nekoliko dana# ~~*je*~~ na toj liniji# ~~*je*~~ voz *je* kasnio tri sata
(S-C, Franks 2010)

However, Franks (2010) admits that examples of this type also raise a potential complication, as some speakers choose to pronounce the highest copy of the clitic, located to the right of the complementizer *da* (see 126).

(126) … da *je* #prije nekoliko dana# ~~*je*~~ na toj liniji# ~~*je*~~ voz ~~*je*~~ kasnio tri sata

In order to account for this alternative strategy, Franks attributes it to the workings of an OT-type constraint in syntax (his assumption is in line with Pesetsky's 1998 tentative suggestion that although syntax is entirely generative, Optimality Theoretic principles may be operative in the PF component). He notes that the selection of the highest copy for pronunciation may be the most optimal choice with respect to a Faithfulness condition, as in this way the selection of the copy matches the underlying syntactic derivation.

3.5.2.4.1. Conceptual problems with the scattered deletion approach

This section discusses conceptual and empirical problems raised by the scattered deletion approach to cliticization, formulated by Franks (1998). Admittedly, Franks's proposal has some elegance and captures a number of properties of second position cliticization in Serbo-Croatian that the previous purely phonological or syntactic analyses fail to account for. For instance, in contrast to most previous syntactic accounts, he is able to derive the non-uniform syntactic placement of clitics in Serbo-Croatian by suggesting that they do not necessarily raise to C^0 but rather, they target the highest functional head that is projected in a given clause. Moreover, his proposal correctly renders the complex interactions between phonological and syntactic requirements concerning the position of clitics, in particular the fact that although the clitics may appear only after a stressed element, this element must also be a syntactic constituent. This interaction is captured by the assumption that the movement of the clitics is subject to the usual rules of syntax, but their actual realization in the structure is determined by their phonological requirements.

However, irrespective of its merits, Franks's account faces a number of theoretical and empirical shortcomings. On the theoretical side, there are some serious problems with a potential trigger of the cliticization. Franks's analysis presupposes that second position clitics all raise to the clause-initial position in syntax and adjoin to the single highest functional head available. It is not exactly clear what motivates this operation. In the Minimalist framework, movement is a last resort procedure. It may occur only if it results in checking of an uninterpretable feature. The problem is that second position clitics do not share any morphological or categorial features. What they have in common is just their prosodic deficiency. Therefore, it seems unlikely to be possible to identify a uniform feature that drives their movement, as it is unlikely that a number of categorially unrelated elements could all check the same feature.

Moreover, a related theoretical complication of Franks's analysis is pointed out by Bošković (2001: 63). Franks motivates the movement of the clitics by suggesting that they possess a strong feature that requires checking. However, given that the clitics do not target a fixed position in syntax (as is also explicitly observed and assumed by Franks 1998), it is difficult to determine in a principled way what feature could be checked via their movement, as they seem to raise to different syntactic projections in different sentences. It is unclear what kind of mechanism would allow the checking of a clitic feature against any potential head. Franks attempts to relate the V2 rule observed in Germanic to second position cliticization. He proposes that the existence of V2 in Germanic suggests that all languages are V2 at LF. (Recall that Progovac 1999 and 2005 also relates second position cliticization to V2, as discussed in section 3.5.2.1.) This in turn indicates that crosslinguistically all verbs raise as high as possible overtly and may complete the movement to second position in covert syntax. In Franks's view, clitic movement to second position parallels the verb movement. The clitics raise to the highest functional head, which is the position also targeted by the verb, though the verb may reach this position only at LF. Movement of the clitics to this position suffices for checking the strong features carried by the clitics.

An additional problem with this account that I would like to point out is the fact that it presupposes a look-ahead scenario. To use Franks's terminology, "the clitics 'know' that verbs must eventually raise to the highest functional head in the phrase structure, they just do not know when" and the clitics raise "because they are looking for their verbs" (Franks 2010: 47). It is not immediately clear how this type of mutual dependence between verb and clitic movement (and "awareness" on the part of the clitics that the verb is supposed to move) can be captured in the Minimalist terms. Another potential motivation for the clitic movement considered by Franks (2010: 48) is that both the clitics and the verb raise "for the same reason." It seems to me that this idea is also somewhat problematic. If there is a formal feature located on a functional head that triggers the movement of both the verb and the clitics, it is unclear why both of these elements need to check the same feature. Moreover, although it is possible to assume that this particular feature is located on both the verb and the clitics on the assumption that movement is triggered by the feature on the moving element (see Bošković 2007), it is unclear what kind of morphosyntactic features can be shared by verbs and pronominal clitics and how the uniform movement of both elements can be motivated.

Furthermore, it seems to me there is an issue related to the mechanism of the movement operation. Franks (2010: 48) assumes that Wackernagel clitics are generated in argument positions and subsequently raise as K-heads to their relevant Agreement positions, and then they continue the movement to the position occupied by the verb, which reaches it at LF. If the clitics undergo head movement, it is quite likely that this operation leads to a number of head movement constraint

violations in the derivation. This locality issue is, in fact, one of the reasons why Chomsky (1995: 249) postulates that clitics have mixed head and phrase-like properties: they raise from argument positions as XP-elements and adjoin to T^0 as heads in the final step of the derivation. By making this assumption Chomsky avoids the problem of the head movement constraint violation encountered by the clitics. It is not evident how this problem can be avoided in Franks's system.

Finally, it is worth observing that Franks suggests that second position cliticization and verb-adjacent cliticization proceed in a similar fashion. The only crucial difference, in his view, is that verb-adjacent clitics in Slavic (in Bulgarian and Macedonian) are generated higher, directly in Agr^0 projections and that they do not need to raise to the position eventually occupied by the verb the way Wackernagel clitics do, but rather it is the verb that raises to the position in which they are located.[44] In section 4.2 in Chapter 4 I point to a number of substantial empirical contrasts regarding the distribution of second position versus verb-adjacent clitics. These observations in turn lead me to postulate different derivations for the two cliticization patterns; namely, I suggest that whereas verb-adjacent clitics all adjoin to a unique head, each of Wackernagel pronominal clitics targets a separate specifier and forms an independent constituent (as in Stjepanović 1998). If the observed contrasts warrant the differences in the syntactic derivations of the two cliticization systems that I postulate in section 4.2 in Chapter 4, the virtually uniform syntactic derivations of Wackernagel and verb-adjacent clitics posited by Franks do not seem to be on the right track.

3.5.2.4.2. Empirical problems with the scattered deletion approach

On the empirical side, the scattered deletion approach is challenged by some properties of second position clitic placement in Serbo-Croatian and Czech. The first problem is concerned with data discussed in Franks (2011). Recall from section 3.2 that Wackernagel's original assumption was that second position cliticization has phonological motivations: clitics need to be preceded by a stressed element with which they can form a prosodic word. Section 3.5.1 has showed that in Serbo-Croatian this is not a sufficient condition. Elements that are not syntactic constituents cannot precede clitics in Serbo-Croatian even if they are stressed. The case in point can be illustrated by prepositions, which are not syntactic constituents to the exclusion of their NP complements, as they cannot undergo independent movement (see Progovac 1996 and Wilder and Ćavar 1994). On a par with other Slavic languages, most of the prepositions in Serbo-Croatian do not bear a lexical accent and most of them are proclitics, requiring a phonological host to their right. However, some prepositions, such as *prema* 'toward,' are accented. Still, in spite of

[44] Another property that is difficult to account for on the assumption that verb-adjacent clitics are directly merged in Agreement projections is the phenomenon of clitic doubling, which is robustly found in languages with verb-adjacent clitics, but excluded in Wackernagel clitic languages.

the fact that *prema* is a phonological word and should count as a legitimate host for clitics, the example in (127a) shows that the auxiliary clitic *su* (or any other clitic) may not follow this preposition. This is because *prema* is not a syntactic unit and cannot move independently of its NP complement (see 127b).

(127) a. *Prema *su* Mileni Milan i Jovan išli
toward are$_{AUX}$ Milena$_{DAT}$ Milan$_{NOM}$ and Jovan$_{NOM}$ walk$_{PART.M.PL}$
"Toward Milena Milan and Jovan walked"
b. *Prema Milan i Jovan idu Mileni
toward Milan$_{NOM}$ and Jovan$_{NOM}$ walk Milena$_{DAT}$
"Milan and Jovan are walking toward Milena"
c. Prema Mileni *su* Milan i Jovan išli
d. Milan i Jovan *su* išli prema Mileni (S-C, Bošković 2001: 13–14)

Interestingly, Franks (2011) observes that there is variation among prepositions and some of them can be followed by clitics, which then separate the prepositions from their NP complements (recall also a related discussion of complementizers and conjunctions, some of which can be clitic hosts, based on Schütze's 1994 observations, in section 3.5.1.1). The variation does not occur at random but it is determined by morphological syncretism. Namely, Franks shows that the prepositions that can be separated from their complements are those that also have homophonous variants that function as adverbials. Franks refers to them as intransitive prepositions. They include *ispred* 'in front of' and *pored* 'alongside.' The examples in (128) present the possible splits of the prepositions from their complements by clitics, whereas the data in (129) illustrate the same prepositions in their intransitive (adverbial) usage.

(128) a. Ispred *ga* *je* ulaza dočekala policija
in-front-of him$_{ACC}$ is$_{AUX}$ entrance$_{GEN}$ wait$_{PART.F.SG}$ police
"The police were waiting for him in front of the entrance"
b. Pored *je* tog čovjeka sjela
alongside be$_{AUX}$ that$_{GEN}$ man$_{GEN}$ sat$_{PART.F.SG}$
"She sat alongside that man" (S-C, Franks 2011)

(129) a. On *je* sjedio ispred/pored
he is$_{AUX}$ sit$_{PART.M.SG}$ in-front/alongside
"He was sitting in front/alongside"
b. Ispred/Pored *je* sjedio
in-front/alongside is$_{AUX}$ sit$_{PART.M.SG}$
"(He) was sitting in front/alongside" (S-C, Franks 2011)

The prepositions that do not have the corresponding intransitive counterparts disallow such splitting. This is illustrated for *prema* 'towards' (the preposition that is also found in example 127 above).

(130) a. *Išao *je* prema
go$_{\text{PART.M.SG}}$ is$_{\text{AUX}}$ towards
Intended: "He was going towards"
b. *Prema *je* tom čovjeku došao
towards is$_{\text{AUX}}$ that$_{\text{DAT}}$ man$_{\text{DAT}}$ come$_{\text{PART.M.SG}}$
Intended: "He was coming towards that person"
c. Prema tom čovjeku *je* došao
d. Prema tom *je* čovjeku došao (S-C, Franks 2011)

The prepositions that have homophonous intransitive counterparts (such as *pored*) are also those that assign genitive case to their complements (see 128). Naturally, they are not case assigners in their intransitive usage, as then there is no constituent to which they could assign case (and adverbs are not case assigners). According to Franks, there is a dependency relationship between the possibility of having an intransitive variant and the option of being split from a constituent. He proposes that the preposition *pored* can be split from its NP complement by clitics because of its lexical identity with the adverbial, which makes the two forms non-distinct from each other for PF purposes. Since PF cannot "determine" whether a particular instance of *pored* has a case assigning potential or not, it treats all its instantiations as if they were adverbials, allowing the splitting option. The workings of this PF operation are sketched in (131).

(131) a. [Pored ~~tog čovjeka~~] je [~~pored~~ tog čovjeka] …
b. *[Prema ~~tom čovjeku~~] je [~~prema~~ tom čovjeku] …

Franks suggests that both cases of scattered deletion illustrated in (131) are in principle valid operations and can be assigned an interpretation (in particular, when *pored* and *prema* are contrastively focused, for example), but the one involving *prema* (in 131b) is filtered out by PF as deviant. This is because there is no independent form *prema* functioning as an adverb, so it is not recognized by PF as a word that can potentially appear in intransitive contexts.

Although the distributional pattern observed by Franks is very interesting, it seems to me that his analysis of the facts that appeals to the workings of the PF component is somewhat problematic. Namely, it presumes that PF should have access to the lexicon and "remember" which particular forms of prepositions are transitive and which are not. It is certainly the case that this type of information may be encoded on lexical items (for example, through "c-selection" in the sense of Grimshaw 1981 or through some morphosyntactic features that enable case assignment), yet it is far from obvious how PF, which is responsible for the phonological make-up of overt lexical formations, could access or be able to distinguish morphosyntactic features. From a prosodic point of view, *pored* and *prema* are independent phonological words in exactly the same way, so it is unclear how PF could make a distinction between the two elements and interpret one of them as deviant when it is followed by a clitic.

Another empirical problem with the scattered deletion analysis of Wackernagel clitics that will be discussed in this section is related to the interaction between clitic placement and multiple *wh*-fronting. It is partly based on Lenertová's (2001a) observations concerning data from Czech.

Thus, as pointed out by Penn (1999) and Lenertová (2001a), the position of the auxiliary clitics in multiple *wh*-questions in Serbo-Croatian is related to the D-linking (discourse-linking) of the *wh*-elements (see also Rudin 1986, 1988; and Bošković 2002 for data from other Slavic languages and an analysis). Namely, as in the case of multiple *wh*-questions in other Slavic languages, it is sufficient to extract one non-D-linked *wh*-word to the clause-initial position in Serbo-Croatian. The other non-D-linked *wh*-words (such as *čemu* in 132) may move to the clause-initial position or they can stay in situ. However, the clitics, such as the auxiliary clitic *si* in (132), must follow the first *wh*-element.

(132) a. Šta *si* mislio da *je* čemu vodilo?
what are$_{AUX}$ think$_{PART.M.SG}$ that is$_{AUX}$ what lead$_{PART.N.SG}$
"What did you think led to what?"
b. Šta *si* čemu mislio da *je* vodilo?
c. *Šta čemu *si* mislio da *je* vodilo? (S-C, Penn 1999: 163)

By contrast, if D-linked *wh*-phrases are extracted in multiple *wh*-questions, they must all be adjacent to each other in the clause-initial position, whereas the clitics, such as *si* in (133), must appear to the right of the final *wh*-word.

(133) a. Ko koga *si* mislio da *je* voleo?
who whom are$_{AUX}$ think$_{PART.M.SG}$ that is$_{AUX}$ love$_{PART.M.SG}$
"Who did you think loved whom?"
b. *Ko *si* koga mislio da *je* voleo? (S-C, Penn 1999: 163)

If the placement of clitics is determined by a PF filter, the way it is on Franks's (1998) scattered deletion approach, it is unclear how this filter is able to determine the placement of the clitics with respect to the D-linked or non-D-linked status of the *wh*-elements. D-linking is related to the semantics of the *wh*-words in question, while a PF mechanism should have no access to semantic properties of syntactic units.[45]

Let us turn to Czech, which in general has Wackernagel enclitics, but there is speaker and register variation with respect to their placement. Namely, Wackernagel enclitics may sometimes procliticize on the element that follows them. This

[45] An anonymous reviewer of Migdalski (2010) points out that given that D-linked *wh*-phrases are frequently analyzed as topics (Hornstein 2001; Richards 2001), and there may exist multiple Topic projections (Rizzi 1997), it is plausible that there are substantial differences between the syntax of D-linked and non-D-linked multiple *wh*-phrases. If this is the case, these differences may surface also at the PF level. However, it is not entirely clear to me how the phonological component may have access to this type of syntactic information. See also section 3.5.2.4.3 for more discussion.

happens in some marked contexts and colloquial speech (see Toman 1996 and Lenertová 2001a). This pattern is illustrated in (134a) and (135a) for the conditional and past tense auxiliaries, respectively. The more formal, literary alternatives, with the auxiliary forms interpreted as second position enclitics, are given in (134b) and (135b). The direction of cliticization is marked with an arrow.

(134) a. *Bych* →nikdy neřekl
COND$_{1SG}$ never say$_{PART.M.SG}$
"I would never say that"
b. To←*bych* nikdy neřekl
it COND$_{1SG}$ never say$_{PART.M.SG}$
"I would never say that" (Cz, Franks 1998)

(135) a. *Sem* →tam nešel
am$_{AUX}$ there go$_{PART.M.SG}$
"I haven't gone there"
b. Já←*sem* tam nešel
I am$_{AUX}$ there go$_{PART.M.SG}$
"I haven't gone there" (Cz, Franks 2010)

Lenertová (2001a) addresses similar examples to the ones reported by Franks, focusing on the reflexive clitic *se*, which shows the same register-dependent distribution as the auxiliary verbs.

(136) a. *Se*→ uvidí
REFL see$_{PERF.3SG}$
"One will see"
b. To ←*se* uvidí
it REFL see$_{PERF.3SG}$
"One will see" (Cz, Toman 1996: 506)

To account for the acceptability of clauses in which second position clitics procliticize on the element that follows them, as in (134a), (135a), and (136a), Franks (1998) proposes that in such examples the first constituent (such as *to* 'it' or the subject) is interpreted as "understood" from the context and therefore becomes deleted at PF.

However, Lenertová (2001a) points out that there are cases in which there is no "understood" element that could have been erased at PF. For instance, in (137B) the clitics are located in the highest position in syntax, but they are not hosted by any element in front of them. The sentence has a neutral interpretation and can be used as an answer to the question "what happened?"

(137) A: Ty máš časy, kamaráde!
you have$_{2SG}$ times friend
"You seem to be having good times!"

B: *Se* *mi*→ včera narodil kluk, tak jsme trochu oslavovali
REFL me$_{DAT}$ yesterday bear$_{PART.M.SG}$ son so are$_{AUX}$ a bit celebrate$_{PART.M.PL}$
"My son was born yesterday, so we were celebrating a bit!"
(Cz, Lenertová 2001a: 296)

The scattered deletion approach assumed by Franks predicts that in standard Czech it is necessary to pronounce the lower copy of the clitics, as in (138), in which the clitics are preceded by the temporal adverb. It also predicts that (137B) and (138) have the same interpretation, because the outputs received by LF are exactly the same. However, this is contrary to fact, because in (138) the adverb *včera* 'yesterday' is understood as a topic.

(138) Včera ←*se* *mi* narodil kluk
yesterday REFL me$_{DAT}$ bear$_{PART.M.SG}$ son
"Yesterday my son was born" (Cz, Lenertová 2001a: 296)

Correspondingly to (137B), the sentence in (139) is topic-less and receives a neutral interpretation. Here the clitics are hosted by the participle, which has moved from a lower position across the adverb *včera*. Moreover, the clitics precede the adverb as in (138), but the sentence has a different interpretation, which indicates that they are in a different syntactic position. As far as I can tell, this contrast cannot be captured if a scattered deletion analysis of such clauses is assumed.

(139) Narodil ←*se* *mi* včera kluk, tak jsme trochu oslavovali
bear$_{PART.M.SG}$ REFL me$_{DAT}$ yesterday son so are$_{AUX}$ a bit celebrate$_{PART.M.PL}$
"My son was born yesterday, so we were celebrating a bit!" (Cz, Lenertová 2001a: 296)

Summarizing, the data from Serbo-Croatian and Czech discussed in this section indicate that the scattered deletion analysis of second position cliticization fails to predict the availability of certain data correctly. In the case of Serbo-Croatian, we observe variation concerning the possibility of some prepositions being split from their NP complements. This possibility is contingent on the transitivity of prepositions and is also related to the type of case they assign to their complements. Still, these phenomena are determined by categorial and selectional features which are not expected to be accessed by the PF component. Correspondingly, in a colloquial register of Czech, clitics may appear in first position, which does not result in a PF crash, because they procliticize on the element to their right. Hence, according to Lenertová (2001a), whenever they move to first position, they remain there. The sentences in which the clitics are located in second position clearly do not arise due to a PF filter that forces their lower copy to be pronounced. They are a result of syntactic movement of different elements to the pre-clitic position. Depending on the element that is moved to the position preceding the clitics, the sentences acquire different interpretations. It seems that the possibility of different interpretations of such clauses cannot be correctly predicted by the scattered deletion approach to cliticization.

The final empirical issue discussed in this section concerns the movement of pronouns and auxiliaries to the clause-initial position in Serbo-Croatian. The distribution and potential interpretations of these elements pose a problem for the scattered deletion approach, as was first pointed out in Migdalski (2009a). It seems that with the exception of auxiliary clitics, there is no strong empirical evidence in support of the assumption made in the scattered deletion approach that clitics ever move to first position in syntax. Thus, as was shown in section 3.3, all pronominal and auxiliary clitics in Serbo-Croatian have non-clitic, strong counterparts. For instance, pluperfect structures feature strong forms of the auxiliary "be." As shown in (140b), they are prosodically independent and may appear clause-initially. In fact, this is their preferred, default position: they may be preceded by the participle only when a "non-neutral" (focused or topicalized) interpretation of a sentence is required (see Lambova 2003 and Broekhuis and Migdalski 2003 for a discussion of similar facts in Bulgarian).

(140) a. Sreo *je* Petra
meet$_{\text{PART.M.SG}}$ is$_{\text{AUX}}$ Peter
"He (has) met Peter"
a'. **Je* sreo Petra
b. Sreo bejaše Petra
meet$_{\text{PART.M.SG}}$ was$_{\text{AUX}}$ Peter
"He had MET Peter"
b'. Bejaše sreo Petra
"He had met Peter" (S-C, Embick and Izvorski 1997)

Given that the strong auxiliaries move to the clause-initial position in (140b'), it may be empirically justified to assume that the clitic auxiliaries also raise to first position, but due to their phonological weakness, their lower copy is pronounced. However, it is problematic to make the same assumption for pronominal clitics. In contrast to the auxiliaries, there is no empirical evidence showing that non-subject NPs, be that pronominal elements or full NPs, ever need to move to the clause-initial position. In fact, recall from section 3.3.2, which contained example (107), repeated below as (141), that clause-initial objects are interpreted as contrastively focused.

(141) a. Mariju *je* Petar zagrlio
Marija$_{\text{ACC}}$ is$_{\text{AUX}}$ Petar hug$_{\text{PART.M.SG}}$
"It was Marija that Petar hugged"
b. Nju *je* Petar zagrlio
her$_{\text{ACC}}$ is$_{\text{AUX}}$ Petar hug$_{\text{PART.M.SG}}$
"It was her that Petar hugged" (S-C, Stjepanović 1999: 73)

On the assumption that pronominal clitics move to first position, but are pronounced in second position due to a PF filter, they should still be interpreted at LF as occurring clause-initially. Since objects in first position are interpreted as

contrastively focused, all pronominal clitics in Serbo-Croatian are in this scenario expected to have contrastive focus interpretation, contrary to fact. This means that the scattered deletion approach to second position cliticization does not give correct predictions about the interpretation of pronominal clitics.

3.5.2.4.3. A phonologist's view on the scattered deletion approach

The final section of this chapter presents an evaluation of the workings of scattered deletion, an approach that appeals to the phonological component of grammar, from the point of view of a phonologist. According to Scheer (2011, ch.5), a problematic aspect of this approach on conceptual grounds is that it shifts an explanation of the syntactic mechanism involved in second position cliticization to the phonological component without precisely explaining what phonological processes might be at work. Scheer observes that at first sight the reliance on PF follows the logic of the Minimalist framework: one of the aims of this program is to examine principles that are used to describe and explain the workings of language in order to determine whether these principles can be replaced by "bare output conditions" (related to interfaces, PF and LF) imposed by computational efficiency (concerned with, for example, limitations of active memory; see Chomsky 2004: 106). For instance, an underlying reason for postulating phases, which are syntactic structures (vPs and CPs) that can be smaller than clauses, is the limitation of computational efficiency, as larger structures might be too burdensome for computation. Thus, such an approach to the study of language implies that in general the innate faculty of language should be restricted to the properties that cannot be motivated by "bare output conditions" and computational efficiency (see also Hauser, Chomsky, and Fitch 2002). This implies in turn that the phenomenon of cliticization should in principle be explained in relation to the PF interface.

Scheer (2011, ch.5) observes serious conceptual problems with this approach. He points out that within the traditional T-model assumed in the generative framework since the 1960s, the PF component was largely equated with the computational system of phonology. Yet, with the advent of the Minimalist Program, PF became "pumped up with a whole lot of operations and items that have got nothing to do with what phonologists call phonology" (Scheer 2011: 614). As a result, according to Scheer, PF is taken to be a "dustbin" where syntacticians dispose of syntactic phenomena that they choose not to analyze in "narrow" syntax. Little attention is paid to the question of whether the phenomena relegated to PF are in fact suitable for PF or whether they can be handled by theories of phonology in the ways that are known to phonologists.

To exemplify this type of approach, Scheer refers to a number of analyses of ellipsis (in particular, sluicing), such as the ones by Merchant (2001) and Fox and Lasnik (2003). These accounts presume that words, phrases, or sometimes even entire CPs, may be deleted at PF. Significantly, in his critique Scheer also relates at length to Bošković's (2001) and Franks and Bošković's (2001) analysis of cliticiz-

ation in the terms of scattered deletion. The data and the analysis addressed in Scheer's critique concern Bulgarian and Macedonian cliticization, but the same type of criticism may apply to Franks's (1998) analysis of second position cliticization in languages such as Serbo-Croatian. The relevant contrast between Bulgarian and Macedonian clitics discussed in Franks and Bošković's (2001: 175) concerns the fact that in Bulgarian pronominal forms such as *mi* and *go* in (142) are enclitics and require overt lexical material to their left, whereas in Macedonian they are not enclitics. According to Franks and Bošković, this is a "phonological difference."

(142) a. *Mi* *go* dade Petko včera (Bg: */Mac: OK)
me$_{DAT}$ it$_{ACC}$ gave$_{3SG}$ Petko yesterday
"Petko gave it to me yesterday"
b. Dade *mi go* Petko včera (Bg: OK/Mac:*) (Franks and Bošković 2001: 175)

As was mentioned earlier in the discussion of the scattered deletion approach in section 3.5.2.4, the default situation is when the head position of a chain is pronounced, while lower copies are deleted in PF. However, if the pronunciation of the highest copy results in a "PF violation," the lower copy is pronounced rather than the head of a chain. This means in the case at hand that if there is no lexical element preceding the pronominal clitics in Bulgarian, the repair strategy of pronouncing the lower copy of the verb (or some other element than the verb in other clauses) is applied, as in (142b), to the left of the clitics. This strategy does not apply in Macedonian, which has pronominal and auxiliary proclitics in this context.

Scheer points out that the use of the term "phonological difference" in the description of the contrast between Bulgarian and Macedonian is problematic, as clitichood is not defined in phonology and it cannot be handled by phonological computation. Correspondingly, the "repair strategy" of deleting entire morphemes attributed to PF in the analyses of ellipsis referred to above cannot occur due to phonological computation either. Phonology may deal with deletion of features or segments, but there is no theory of phonology that can manipulate or delete words or entire phrases. In other words, although the term "phonology" is used to describe cliticization phenomena, "nothing that phonologists would call phonology is involved" (Scheer 2011: 616).

3.6. Summary

To summarize, this chapter has examined second position cliticization in Slavic. In the first part of the chapter, it introduced a new division within second position clitics, showing that it is necessary to distinguish between operator cliticization and generalized cliticization. Operator clitics form a natural class in semantic terms: they all specify the illocutionary force of a clause. They occur in second pos-

ition in all languages that have them, irrespective of whether the other clitics also target second position, are verb-adjacent, or there are no other clitics in a language at all. Operator clitics may impose special restrictions concerning the syntactic and categorial status of their hosts and in general they raise to a higher position in syntax than the other second position clitics. Furthermore, this chapter has also addressed phonological and syntactic theories of generalized cliticization. On a par with V2, second position cliticization instantiates a special syntactic mechanism, which involves placement of a particular lexical element (or a group of lexical elements) after the first clausal constituent, virtually irrespective of the category of this initial constituent. In the case of second position cliticization, the workings of the mechanism are more difficult to capture than in the case of V2 because the clitics comprise elements that are categorially unrelated and their only mutual property is their prosodic deficiency. In consequence, second position cliticization provides us with a dilemma: its mechanism has clear properties of a syntactically constrained operation, as the element that provides support to the clitics must be a syntactic constituent, but at the same time clitics show prosodic restrictions and do not target a syntactically uniform position in the structure. Thus, finding an appropriate analysis of the process that seems to combine syntactic and prosodic operations is far from simple.

It seems that a major issue with the theories of cliticization in Slavic that have been put forward so far is that they do not capture, in a principled way, the distinction between the two major cliticization types: verb-adjacent clitics found in Bulgarian and Macedonian versus second position cliticization attested in Serbo-Croatian, Slovenian, Czech, and Slovak. The way these two types of clitic placement are described in the literature may give the impression that second position cliticization and verb-adjacent cliticization are derived in a similar fashion. For instance, on Franks's (1998, 2010) analysis, the contrast between the two types of cliticization is captured through the assumption that whereas second position clitics raise from VP to the highest head available in the structure, verb-adjacent clitics are merged directly in the extended verbal projections and that the verb raises to the position in which they are hosted. What is missing in this type of analyses is a clear predictor that determines a parametric choice between these cliticization types crosslinguistically. This issue is far from trivial and deserves a principled account. In most contemporary Romance and Germanic languages clitics are verb-adjacent, whereas second position cliticization seems to be a less common option; diachronically we observe switches from one cliticization system to another, yet the motivation for this process is not clear. This issue is addressed in Chapter 4, in which I look at diachronic changes related to clitic placement in Slavic in order to determine a potential unique factor that decides about the parametric choice between verb-adjacent versus second position cliticization.

Chapter 4

Diachrony of second position cliticization in Slavic

4.1. Introduction

It has been pointed out in the previous chapters that Slavic languages display notable variation in their cliticization systems, with clear-cut divisions of languages with second position and verb-adjacent clitics as well as a group of languages that lack pronominal and auxiliary clitics. This variation has provoked considerable discussion in the literature, which was overviewed in Chapter 3 with respect to second position cliticization. However, so far little attention has been paid to the source of this variation and a major drawback of the previous analyses is that they offer no principled way of attributing the type of an attested clitic system to an independent, morphosyntactic condition. It seems that so far most of the approaches have stipulated that the type of cliticization pattern is a result of a PF requirement or ad hoc variation in clitic movement.

In order to determine the source of the variation in the distribution of the clitics, this chapter investigates diachronic changes in the cliticization patterns in Slavic. It shows that in Old Church Slavonic pronominal clitic were verb-adjacent, but they shifted to second position in some of the languages that subsequently evolved. It also observes that the shift was contingent on and contemporaneous with the loss of tense morphology, which is analyzed as the loss of the TP projection. As a result of this loss, pronominal clitics did not have access to an appropriate adjunction site and began to target second position. In some of the languages (such as Polish, Old Russian, and contemporary Macedonian in some contexts) the change proceeded further and has resulted in the reinterpretation of pronominal clitics as weak pronouns. Importantly, from a theoretical perspective the postulated link between second position cliticization and the availability of tense marking unifies cliticization with the V2 phenomenon, which as was shown in Chapter 1, is also defined in terms of tense dependency.

This chapter has the following organization. Section 4.2 compares verb-adjacent and second position cliticization with respect to their syntactic and semantic properties. It demonstrates that they involve different syntactic mechanisms and that only verb-adjacent clitics form clusters and adjoin to a designated head. Section 4.3 overviews diachronic changes in the position of pronominal clitics in Slavic and shows that they switched to second position placement in those languages that lost tense morphology. The loss is assumed to correspond to the decline of the TP projection. Section 4.4 examines the way the loss of TP influences the syntax of pronominal clitics. Section 4.5 addressed previous analyses of the diachrony of cliticization in Slavic and points out their shortcomings. Section 4.6 demonstrates that the decline of TP may have an alternative repercussion for pronominal clitics, which involves their degrammaticalization into weak pronouns. This section presents steps in the degrammaticalization of pronominal clitics in Old Polish and also shows the way this process is occurring in Slovenian and in some environments also in Macedonian.

4.2. Verb-adjacent and second position cliticization — syntactic and semantic contrasts

Although Slavic languages with second-position and verb-adjacent clitics display the same inventory of clitics occurring in roughly the same order, there are a number of crucial differences regarding the syntax of these two cliticization patterns. They are addressed in this section and in general they show that whereas verb-adjacent clitics in languages such as Bulgarian and Macedonian target a single head, each pronominal clitic in languages with second position cliticization lands in the specifier of a different head projection. Suitable evidence for this hypothesis comes from a number of syntactic patterns discussed in this section, which include ellipsis, clitic splits and clitic climbing, the interaction of clitics with negation, and the application of the Person Case Constraint.

4.2.1. Ellipsis

The first contrast between the two groups of languages is related to ellipsis. Stjepanović (1998: 529–530) observes that Serbo-Croatian permits VP ellipsis, as illustrated for two conjoined clauses in (1).

(1) Oni *su* kupili novine, a i vi *ste*
they are$_{AUX}$ buy$_{PART.M.PL}$ newspaper and also you$_{PL}$ are$_{AUX}$
~~kupili novine~~ (takodje)
buy$_{PART.M.PL}$ newspaper too
"They bought the newspaper, and you did, too" (S-C, Stjepanović 1998: 529)

Both clauses in (1) contain complex tense forms consisting of the auxiliary clitic and the *l*-participle. The elements affected by the ellipsis are the *l*-participle and the direct object. The fact that the auxiliary *ste* is not elided indicates, according to Stjepanović, that it is located in a higher position than the ellipsis site.

Stjepanović makes a number of interesting observations about ellipsis that involves pronominal clitics in the clauses exemplified in (2).

(2) a. Mi *smo* *mu* *ga* dali, a i
we are$_{AUX}$ him$_{DAT}$ it$_{ACC}$ give$_{PART.M.PL}$ and also
vi *ste* ~~*mu ga dali*~~, takodje
you are$_{AUX}$ him$_{DAT}$ it$_{ACC}$ give$_{PART.M.PL}$ too
"We gave it to him, and you did, too" (S-C, Stjepanović 1998: 530)

b. Mi *smo mu ga* dali, a i vi *ste mu* ~~*ga dali*~~, takodje

c. *Mi *smo mu ga* dali, a i vi *ste* ~~*mu ga dali*~~, takodje (S-C, Stjepanović 1998: 532)

The two conjoined clauses in example (2a) contain a complex tense formed with the auxiliary clitics *smo* and *ste* and the *l*-participle *dali*, which takes two pronominal object clitics as complements. In the second conjunct the *l*-participle is elided together with the pronominal clitics, whereas the auxiliary clitic *ste* remains intact. Stjepanović argues that the well-formedness of this example is problematic for the accounts of second position cliticization in Serbo-Croatian that propose that pronominal clitics are located high in the phrase structure, all adjoined to a single functional head (thus, as assumed in Franks 1998 and Progovac 2005), as they predict that the pronominal clitics should not be affected by the VP ellipsis. Moreover, the sentence in (2a) is instructive for another reason. Even if all the clitics were hosted within an ellipsis site, it should not be possible to delete some of the clitics and leave *ste* intact on the assumption that they are all adjoined to a single projection. It is standardly assumed (see, for example, Lasnik 1995) that ellipsis may only target constituents. This suggests that the auxiliary clitic *ste* is an independent constituent and cannot be adjoined to the same head as the pronominal clitics.

Example (2b) shows that it is also possible to delete the *l*-participle and the lower, accusative clitic without eliding the dative clitic. This fact indicates that each of the pronominal clitics is located in a different maximal projection and that they cannot be adjoined to a single head. Furthermore, the ungrammatical example in (2c) demonstrates that it is not possible to elide the dative clitic without deleting the accusative clitic. This fact shows, in turn, that at the point when the ellipsis occurs, the dative clitic must be positioned in a maximal projection that is located higher than the maximal projection hosting the accusative clitic. Although Stjepanović does not specify what projections these could be (suggesting that AgrIO^0 and AgrDO^0 could be a possibility), the important conclusion to be drawn from these data is that each of the pronominal clitics targets a separate specifier; they do not cluster by adjoining to a single head together with the auxiliary clitic, and that each of the clitics forms an independent syntactic constituent.

Bošković (2002) discusses related examples from Bulgarian, a language with verb-adjacent clitics. He observes that the deletion of this type is not permitted. Thus, example (3) indicates that it is not possible to delete one of the pronominal clitics or both pronominal clitics to the exclusion of the auxiliary clitic in Bulgarian.

(3) *Nie *sme* *mu* *go* dali, i vie
we are$_{AUX}$ him$_{DAT}$ it$_{ACC}$ give$_{PART.M.PL}$ and you
ste ~~*mu go dali*~~ (sŭšto)
are$_{AUX}$ him$_{DAT}$ it$_{ACC}$ give$_{PART.M.PL}$ too
"We gave it to him, and you did too" (Bg, Bošković 2002: 331)

4.2.2. Clitic splits

There are a number of other contexts in which second position clitics can be separated from each other, which clearly demonstrate that the clitics do not form a cluster and that they do not target a single syntactic projection. For example, Bošković (2001: 50) shows that clause-mate clitics in Serbo-Croatian, such as the auxiliary *si*, the dative clitic *me*, and the accusative clitic *ih* in (4a) may be split from each other by a parenthetical. However, the material that occurs between the split clitics must be a full intonational phrase so that each clitic is the second element in its own intonational phrase. Bošković (2001: 189) also observes that, conversely, the splitting is not possible in Bulgarian, as indicated in (4b).

(4) a. Ti *si* *me*, kao što *sam* već rekla, lišio
you are$_{AUX}$ me$_{DAT}$ as am$_{AUX}$ already say$_{PART.F.SG}$ deprive$_{PART.M.SG}$
ih juče
them$_{DAT}$ yesterday
"You, as I already said, deprived me of them" (S-C, Bošković 2001: 60)
b. *Te *sa*, kakto *ti* kazah, predstavili *gi* na Petŭr
they are$_{AUX}$, as you$_{DAT}$ told introduced them$_{ACC}$ to Peter
"They have, as I told you, introduced them to Peter" (Bg, Bošković 2001: 189)

Another type of environment in which clitics can be separated from each other in Serbo-Croatian involves VP-fronting, as observed by Ćavar (1999). This operation is exemplified in (5a), and it shows that the clause-mate pronominal clitic *ga* can be separated from the auxiliary clitic *su* located outside the fronted VP. Incidentally, Bošković (2001: 88) points out that the acceptability of (5a) is subject to speaker variation, possibly due to the fact that some speakers require a pause following the preposed VP, which results in *su* occurring in front of an intonational phrase and as such is prosodically deviant. For this reason, many speakers prefer the ordering given in (5b), in which the clitics are also separated and *su* appears clause-finally. Irrespective of individual speaker preferences, the important fact is that the corresponding clitic separation is never possible in Bulgarian, as shown in (5c).

(5) a. [Dali *ga* Mariji] *su* Ivan i Stipe
give$_{PART.M.PL}$ it$_{ACC}$ Marija$_{DAT}$ are$_{AUX}$ Ivan and Stipe
"Give it to Marija, Ivan and Stipe did" (S-C, Ćavar 1999)
b. [Dali *ga* Mariji] Ivan i Stipe *su* (S-C, Bošković 2001:88)
c. *[Celunala *go*] Maria *e*
kissed him$_{ACC}$ Maria is$_{AUX}$
"Kissed him, Maria has" (Bg, Bošković 2001: 189)

4.2.3. Clitic climbing

The next type of structure showing that second position pronominal clitics are likely to target XP-positions and that they are not hosted in a single head projection is exemplified by subjunctive constructions. The distribution of clitics in such constructions was briefly overviewed in section 3.5.2.1 in Chapter 3. Here I examine their placement in more detail, juxtaposing it with corresponding structures in Bulgarian.

Progovac (1993, 2005: 22ff.) observes that two classes of verbs can be distinguished in Serbo-Croatian: the so-called Indicative selecting verbs (I-verbs) and Subjunctive selecting verbs (S-verbs). I-verbs select opaque complements and include verbs of saying, ordering, and believing, such as *kazati* 'say,' *tvrditi* 'claim,' *verovati* 'believe,' and *narediti* 'order.' S-verbs select transparent complements and include verbs of requesting and wishing, such as *želeti* 'wish,' *hteti* 'want,' and *moći* 'be able to.' S-verbs do not show special subjunctive morphology in Serbo-Croatian, but as Progovac (2005: 23) points out, they display typical properties of subjunctive verbs found crosslinguistically, such as domain extension and Tense dependence (see, for instance, Anderson 1982; Picallo 1984; Ambar 2016; and Giannakidou 2016). For example, the clauses that are selected by S-verbs cannot host independent (uncontrolled) Tense, as indicated in (6), in which the complement clause may only contain a present tense structure, and structures with the past or the future tense are excluded.

(6) a. Ne želim [da ostane-m]
NEG wish$_{1SG}$ that stay$_{1SG}$
"I don't wish to stay"
b. *Ne želim [da sam ostao] /da ću ostati
NEG wish$_{1SG}$ that am$_{AUX}$ stay$_{PART.M.SG}$ that will stay$_{INF}$
"I don't wish that I have stayed"/"I don't wish to stay (in the future)"
(S-C, Progovac 2005: 23)

What is important about S-verbs for the discussion of cliticization in Serbo-Croatian is that clitic placement is sensitive to the S-verbs/I-verbs division. As was first observed by Progovac (1993), pronominal clitics may climb from an embedded clause selected by an S-verb to the matrix clause (see 7). The climbing is impossible

out of embedded clauses selected by I-verbs. As shown in (8), pronominal clitics are then strictly clause-bound and stay in the subordinate clause.

(7) a. Milan želi da *ga* vidi
Milan wishes that him$_{ACC}$ sees
"Milan wishes to see him"
b. ?Milan *ga* želi da vidi (S-C, Progovac 2005: 146)

(8) a. Milan kaže da *ga* vidi
Milan says that him$_{ACC}$ sees
"Milan says that he can see him"
b. *Milan *ga* kaže da vidi (S-C, Progovac 2005: 146)

Progovac (1993) points out that the same contrast is observed for other types of dependencies, such as topic-preposing and *wh*-movement across negation, which are only possible when they involve movement out of subordinate clauses selected by S-verbs, but precluded out of clauses selected by I-verbs. Since these operations are uncontroversially taken to be syntactic, Progovac makes use of this contrast to show that clitic placement in Serbo-Croatian is also sensitive to syntactic constraints, which in turn indicates that the distribution of clitics is governed by syntactic rules, rather than by PF.

However, the conclusion I would like to draw from Progovac's observation is that second position clitics target maximal projections. Additional evidence in support of this idea is provided by a more detailed investigation of clitic climbing out of clauses selected by S-verbs carried out by Stjepanović (1999) and Bošković (2001, 2016). Thus, Stjepanović (1999) points out that if the subordinate clause contains two pronominal clitics (see 9a), they can be both preposed to the main clause (see 9b). If only one of them is fronted, it must be the dative clitic; thus it is the higher pronominal clitic that is affected by movement (see 9c). Fronting of the lower (accusative) clitic across the dative is excluded (see 9d), and Stjepanović (1999) argues that this is due to a relativized minimality restriction.

(9) a. Marija želi da *mu* *ga* predstavi
Marija wishes that him$_{DAT}$ him$_{ACC}$ introduces
"Marija wants to introduce him to him"
b. ?Marija *mu ga* želi da predstavi
c. ?Marija *mu* želi da *ga* predstavi
d. *Marija *ga* želi da *mu* predstavi (S-C, Bošković 2001: 58)

Stjepanović (1999) and Bošković (2001) use these data mainly to show that clitics in Serbo-Croatian do not all target the same projection. In Migdalski (2006, 2013) I provide corresponding examples from Bulgarian, which indicate that clitic climbing is not possible in that language, irrespective of whether the subordinate clause is selected by an S-verb (see 10) or an I-verb (see 11).

(10) a. Manol iska da *go* vidi
Manol wishes that him$_{ACC}$ sees
"Manol wishes to see him"
b. *Manol *go* iska da vidi (Bg, Migdalski 2006: 217)

(11) a. Manol kazva če *go* vižda
Manol says that him$_{ACC}$ sees
"Manol says that he can see him"
b. *Manol *go* kazva če vižda (Bg, Migdalski 2006: 217)

The contrast with respect to clitic climbing suggests in my view that second position pronominal clitics display flexibility of movement that is typical of XP elements and target XP projections, whereas verb-adjacent clitics adjoin to a head projection, hence their movement is more restricted.

In his recent work, Roberts (2010: 72–73) readdresses the Serbo-Croatian data with clitic ellipsis and clitic splits and points out that there are parallel patterns found in the Romance languages, which might perhaps indicate that these properties are not unique to Wackernagel clitics. Roberts refers to Franco-Provençal Valdôtain data provided by Kayne (2000), in which the dative clitic is separated from the accusative clitic, as in (12).

(12) *T'* an- të deut-*lo*
you-have they-said-it
"Have they said it to you?" (Roberts 2010: 73)

Moreover, Roberts (2010: 73) implies that the clitic climbing facts in Serbo-Croatian are reminiscent of corresponding Italian facts. Namely, as originally observed by Rizzi (1982: 9), clitic climbing is prohibited in Italian if the complement clause is subject to a fronting operation. This is illustrated for the dative clitic *gli* in (13). It is not clear to me though how these examples resemble clitic climbing in Serbo-Croatian, as they do not show a similar restriction.

(13) a. E' proprio a riportar*gli* i soldi che sto andando…
it's just to return-him the money that I'm going
"I'm going just to return the money to him…"
b. *E' proprio a riportare i soldi che *gli* sto andando…
It's just to return the money that to-him I'm going (Roberts 2010: 73)

Given the facts from Franco-Provençal Valdôtain and Italian, which in Roberts's view parallel the cliticization patterns in Serbo-Croatian, he proposes that Wackernagel clitics also target a uniform head position, which in his view is C^0 (see section 3.5.2.3, Chapter 3, for details of his analysis). According to Roberts, since it is possible to split clitics in some languages with verb-adjacent clitics that target a designated head position together with the verb, the fact that pronominal clitics can be routinely split from each other in Serbo-Croatian is not exceptional or sur-

prising. It must be noted though that the Romance examples quoted by Roberts do not really correspond to the Serbo-Croatian ones (see example 2) as minimal pairs. In the Romance data, pronominal clitics are split from each other, whereas in the Serbo-Croatian examples Roberts refers to the split may also take place between the clitic form of the auxiliary "be" (which is not available in Romance) versus the pronominal (dative and accusative) clitics, which in such a context may remain adjacent to each other. See also Chapter 3, section 3.5.2.3 for a critique of other assumptions made by Roberts in his alternative analysis of Serbo-Croatian cliticization. Moreover, the contrasts between the two clitic patterns represented by Serbo-Croatian and Bulgarian, for instance with respect to the clitic splits in (4) and clitic climbing (in 7 and 8 versus 10 and 11) provided above, demand a principled explanation.

In the remainder of this section I refer to two additional syntactic contrasts between the two cliticization types that I have established in my previous work (Migdalski 2006, 2013). Both of these contrasts indicate that verb-adjacent clitics target a head position, whereas second position cliticization involves phrasal movement to a maximal projection.[46]

4.2.4. Interaction of clitics with negation

The first contrast is related to the way cliticization interacts with negation. In general the negative marker *n(i)e* acts as a proclitic across Slavic and incorporates into other elements. As an illustration, it is useful to first consider properties of negation in Polish, since the mechanism of lexical stress assignment in Polish makes it easy to find support for the idea of the incorporation of negation. In Polish the negative marker *nie* incorporates into verbs, which is evidenced by the fact that insertion of any intervening material between the negation and the verb is not tolerated, as illustrated in (14).

(14) a. Jan nie czyta gazet
Jan NEG reads newspapers
"Jan doesn't read newspapers"
b. *Jan nie gazet czyta (Pl, Willim 1990: 212)

Moreover, negation shows selectional restrictions in Polish, as it may incorporate only into verbs. This fact is confirmed by prosodic properties of the incorporated structures. Lexical stress is very regular in Polish and falls on the penultimate syllable. As was first observed and discussed in detail by Ozga (1976), when a sin-

[46] In Migdalski (2006) I refer to the divergent properties of verb-adjacent and second position clitics in order to explain the syntactic mechanism of *l*-participle movement in South Slavic, which is the main research question of that work. Still, the way the clitics interact with *l*-participle or verb movement in general is also relevant for the contrast between second position and verb-adjacent clitic placement.

gle-syllable verb is negated in Polish, stress is moved from the verb onto the negative particle *nie*. The stressed syllables are indicated in capitals in (15).

(15) a. WIEM
know$_{1SG}$
"I know"
b. NIE wiem
NEG know$_{1SG}$
"I don't know"
c. *Nie WIEM (Pl, Ozga 1976: 137)

However, negation forms a prosodic word in Polish only with verbs. When negation is placed in front of non-verbal elements, such as the pronoun *ja* in (16), the stress shift onto *nie* is not observed. This restriction shows that negation does not incorporate into elements other than verbs in Polish.

(16) a. Nie JA
NEG I
"Not me"
b. *NIE ja (Pl, Ozga 1976: 137)

Negation interacts with verbs in a similar way in Serbo-Croatian. Rivero (1991: 338) observes that, on a par with the Polish example in (14), negation cannot be separated from the verb by any lexical material, including pronominal clitics, as shown in (17). Here the pronominal clitic *ga* must follow the sequence of the negation and the verb. Since clitics always occur in second position in Serbo-Croatian, this means that the negative particle incorporates into the verb and forms a single prosodic word with it.

(17) Ne (**ga*) vidim *ga*
NEG him$_{ACC}$ see$_{PRES.1SG}$ him$_{ACC}$
"I don't see him" (S-C, Rivero 1991: 338)

In Migdalski (2006) I explore the incorporation requirement of negation in Slavic to determine the syntactic status of the elements with which negation forms a prosodic word. For example, in Bulgarian negation incorporates into pronominal clitics, as shown in (18). This mechanism is excluded in Serbo-Croatian, in which negation may only incorporate into verbs (see 19).

(18) a. Ne *mi* *se* struva, če…
NEG me$_{DAT}$ REFL seems that
"It doesn't seem to me that…"
b. *Ne struva *mi se*, če… (Bg, Migdalski 2006: 218)

(19) a. Ne čini *mi* *se* da…
NEG seems me$_{DAT}$ REFL that
"It doesn't seem to me that…"
b. *Ne *mi se* čini da… (S-C, Migdalski 2006: 218)

In Migdalski (2006: 218, 2013: 144) I account for the contrast between (18) and (19) by appealing to the Chain Uniformity Condition, which states that incorporation may take place between different lexical elements if they are of an equal syntactic status (that is, only between heads, but not between a phrase and a head). Since pronominal clitics are phrasal elements that target an XP projection in Serbo-Croatian, they may not incorporate into the negative head. The incorporation is possible in Bulgarian, in which pronominal clitics adjoin to a single head.

4.2.5. Person Case Constraint

Another contrast between the languages with verb-adjacent and Wackernagel clitics that I observe in Migdalski (2006, 2013) is related to the application of the Person Case Constraint (PCC). The PCC restricts the combination of pronominal clitics in ditransitive structures. If the PCC applies in a language, the accusative clitic must be specified for the 3rd person feature when it occurs in a cluster with a dative clitic. Since the constraint is attested only with weak elements, such as agreement affixes and clitics, the accusative clitic may co-occur with non-3rd person datives as long as they are instantiated by strong pronouns, rather than clitics. The mechanism of the PCC is illustrated in (20) for Bulgarian and in (21) for Macedonian. Examples (20/21a) are excluded by the PCC because the 3rd person dative co-occurs with the 2nd person accusative. By contrast, the sentences in (20/21b) are well-formed as here the strong dative forms (*niv*/*tjax*) are used, preceded by preposition *na*. Likewise, examples (20/21c) are grammatical because the accusative clitic is specified for the 3rd person feature.

(20) a. *Az *im* *te* preporŭčvam
I them$_{DAT}$ you$_{ACC}$ recommend$_{PRES.1SG}$
b. Az *im* preporŭčvam na tjax
I them$_{DAT}$ recommend$_{PRES.1SG}$ to them$_{DAT}$
"I am recommending you to them"
c. Az *im* *ja* preporŭčvam
I them$_{DAT}$ her$_{ACC}$ recommend$_{PRES.1SG}$
"I am recommending her to them" (Bg, Hauge 1999: 102)

(21) a. *Jas *im* *te* preporačuvam
I them$_{DAT}$ you$_{ACC}$ recommend$_{PRES.1SG}$
b. Jas *te* preporačuvam na niv
I you$_{ACC}$ recommend$_{1SG.PRES}$ to them$_{ACC}$
"I am recommending you to them"
c. Jas *im* *ja* preporačuvam
I them$_{DAT}$ her$_{ACC}$ recommend$_{PRES.1SG}$
"I am recommending her to them" (Mac, Migdalski 2006: 199)

The constraint has been attested crosslinguistically, but it is not universal. In Migdalski (2006) I observe that whereas the PCC is operative in languages with verb-adjacent clitics, such as Bulgarian and Macedonian, it does not apply in languages with second position clitics, such as Serbo-Croatian (see 22), Czech (see 23), Slovenian (see Rivero 2005, who states that the PCC does not hold in Slovenian, though she does not provide relevant language data) as well as in Polish, a language that has weak pronouns rather than clitics (see 24; Cetnarowska 2003). In all these languages non-3rd person accusative clitics may co-occur with dative clitics (or weak pronouns, in the case of Polish).

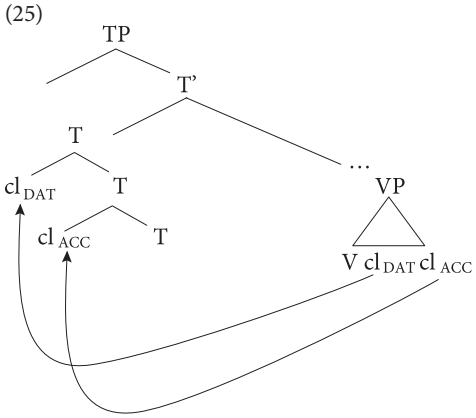
(22) Ja *im* *te* preporučujem
I them$_{DAT}$ you$_{ACC}$ recommend$_{PRES.1SG}$
"I am recommending you to them" (S-C, Migdalski 2006: 198)

(23) Jestliže *mu* *vás* předám živou a zdravou
if him$_{DAT}$ you$_{ACC.PL}$ bring$_{PERF.PRES.1SG}$ alive and healthy
"If I can bring you to him safe and sound" (Cz, Lenertová 2001b)

(24) Dał-bym *mu* *cię* za żonę bez wahania
give$_{PART.M.SG}$+COND$_{1SG}$ him$_{DAT}$ you$_{ACC}$ for wife without hesitation
"I would give you to him as a wife without hesitation" (Pl, Cetnarowska 2003)

In Migdalski (2006: 198) I explain the presence of the PCC effect in the languages with verb-adjacent clitics by adopting Anagnostopoulou's (2003) analysis of the PCC. In her account, the PCC effect is a result of the incompatibility of person and number feature checking in the syntactic configuration illustrated in (25). Note that I slightly modify Anagnostopoulou's original account by suggesting that the configuration involves the TP projection. Anagnostopoulou is neutral with respect to the type of functional head that is involved and uses the label FP rather than TP.

(25)



Assuming that T^0 contains person and number features that need to be checked, one way of fulfilling this requirement is via adjunction of pronominal clitics to T^0. The PCC configuration obtains when the dative clitic raises from within VP and becomes adjoined to T^0 to check the person feature. Subsequently, the accusative clitic raises and adjoins to the same head. Since the person feature on T^0 has already been checked by the dative clitic, the accusative clitic may only check the remaining number feature. Consequently, the derivation may converge only if the accusative pronominal clitic is specified just for a number feature and not for a person feature. Following the standard assumption, originally due to Benveniste (1966), that the 3rd person lacks person specification, the accusative clitic may only be marked for the 3rd person. Otherwise, the person feature on the accusative clitic will remain unchecked and the derivation will crash, leading to an instance of the PCC violation.

An important ingredient of Anagnostopoulou's (2003) account, which is adopted in Migdalski (2006)[47] and which is crucial for the assumptions made in this chapter is that her analysis implies that the PCC is only operative when pronominal clitics adjoin to the same head. The fact that the PCC is not at work in Serbo-Croatian, Czech, and Slovenian indicates that pronominal clitics do not cluster in these languages.

4.2.6. Clitic interpretation

The final contrast between Wackernagel and second position clitics is related to their semantics and as such does not strongly bear on the syntactic analysis assumed for the clitics. However, it shows that the two cliticization patterns cannot be successfully accounted for by merely assuming that the respective clitic types target a different projection in the syntactic structure.

Runić (2013b) observes that second position and verb-adjacent clitics may have different interpretations with respect to specificity. This is best exemplified by comparing their interpretations with the readings available for pronouns in English.

[47] Migdalski's (2006) examination of the PCC effects in Slavic has been addressed in a number of analyses, for example Runić (2013a), who proposes a morphological account of the PCC data, which in her view explains a number of fine-grained empirical details related to person and number combinations in Slavic more accurately; as well as Sturgeon et al. (2010), who present the results of an experimental study concerning the PCC effects in Czech, which in their view challenges the empirical findings made by Lenertová (2001b) and exemplified in (23), as well as Migdalski's (2006) generalization related to the lack of the PCC effect in languages with Wackernagel clitics or weak pronouns. An important empirical observation that in my opinion the other analyses pay little attention to is the fact that even though some speakers of second position clitic languages, such as Czech and Serbo-Croatian, may find some instances of the PCC degraded, speakers of languages with verb-adjacent clitics, such as Bulgarian and Macedonian, regarded such combinations as very strongly ungrammatical or even unpronounceable. While collecting native speaker judgments for the data presented in Migdalski (2006), I observed that the acceptability contrast becomes particularly clear when bilingual or multilingual users of languages with both verb-adjacent and second position clitics are confronted with PCC data coming from the respective two types of languages.

As indicated in the translations in (26b), pronouns in English may only occur in specific contexts; in non-specific environments the indefinite pronoun *one* is used (see 26c). By contrast, pronominal clitics in Serbo-Croatian may be used whether the reference is specific (as in 26b) or non-specific (as in 26c) (see Mihailović 1970). Runić (2013b) states that the same observation holds also for the other Slavic languages with Wackernagel clitics.

(26) a. Speaker A: Ona želi da *se* uda za Šveđanina
she wants to REFL marry for Swede
"She wants to marry a Swede"
b. Speaker B: Gdje *ga* *je* našla?
where him_{ACC} is_{AUX} $find_{PART.F.SG}$
"Where did she find him/*one"
c. Speaker B: Nije *ga* lako naći
not him_{ACC} easy $find_{INF}$
"It is not easy to find one/*him" (S-C, Runić 2013b)

Runić (2013b) shows that Bulgarian and Macedonian allow pronominal clitics only in specific contexts (see 27), on a par with pronouns in English. She suggests that the contrast obtains because second position clitics are NPs, so they do not need to be interpreted as definite, whereas verb-adjacent clitics are D-heads.

(27) a. Speaker A: Taa saka da *se* venča za Šveǵanin
she wants to REFL marry for Swede
"She wants to marry a Swede"
b. Speaker B: A kade *go* našla?
where him_{ACC} $find_{PART.F.SG}$
"Where did she find him?"
c. Speaker B: Ne e lesno da najde/**go* najde/(eden Šveǵanin)
not is easy to find him_{ACC} find (one Swede)
"It is not easy to find one/*him" (Mac, Runić 2013b)

In sum, the data discussed in this section indicate that the languages with second position and verb-adjacent clitics differ not only with respect to the linear position of their clitics. The two cliticization types represent different syntactic operations. Whereas pronominal clitics in Bulgarian and Macedonian adjoin to a single syntactic head such as T^0, second position pronominal clitics target specifiers and do not form a single syntactic constituent together.

4.3. Diachrony of cliticization in Slavic

The following section of this chapter investigates the position of pronominal clitics in Old Slavic and the way clitic placement changed diachronically. The purpose of this investigation is to determine the reason for the existence of the two cliticiza-

tion patterns in Modern Slavic. I mainly use data from Old Church Slavonic, Old Serbian, and Old Slovenian as an empirical basis for the examination, though I also look at descriptive statements concerning the position of clitics in other Slavic languages.

The study pursued in this section is based on Old Church Slavonic and Old Serbian samples collected and examined by Radanović-Kocić (1988) and Pancheva (2005). In addition, I have investigated data from the *University of Southern California Parsed Corpus of Old South Slavic*, compiled by Roumyana Pancheva and her colleagues, mainly *Codex Marianus* and *Codex Zographensis*, which are referred to in the text as Pancheva et al. (2007a) and Pancheva et al. (2007b), respectively. Both *Codex Marianus* and *Codex Zographensis* are Gospel Books dating back from the late 10th/early 11th century. The former text is presumed to represent the dialects spoken in today's Macedonia and Serbia, whereas the latter relic displays features typical of western Bulgarian dialects (Gardiner 1984). As is usually the case with the oldest diachronic texts, they are of religious nature and they are mostly translations whose syntax may have been influenced by the grammatical system of the language of the vorlage (in this case, Greek). Hence, a potential objection that may be raised is that Old Church Slavonic texts do not necessarily reflect the grammar of the spoken language used in the area. However, it is worth noting that, as has been established in the philological tradition, Old Church Slavonic translators were meticulous monks who did not just copy grammatical structures from the language of their source texts. In particular, it has been observed (see, for example, Słoński 1926: 8 and Hewson and Bubenik 1997: 91) that the translators were careful enough to reflect semantic differences triggered by the use of different tenses in the respective languages. For example, they were aware of the different meanings of the aorist in Greek and Old Slavic and consequently they would replace Greek aorist forms with present perfect structures in the corresponding Slavic translations. In the case of structures with clitics, it is even more likely that their translations reflect the cliticization patterns found in Old Slavic. As has been shown throughout this work, Slavic languages may have a relatively free word order, but the position of clitics is very strict and any changes to their default placement make a clause not only ungrammatical, but simply unpronounceable. Correspondingly, although tense modifications only alter the interpretation of a text, the translators have been known to pay attention to the semantic differences between the respective languages. Consequently, it seems quite likely that the Old Church Slavonic data that we have access to faithfully reflect the cliticization patterns in Old Slavic. This conclusion has also been reached by Sławski (1946: 5–22) in his study of the position of clitics in the history of Bulgarian, in which he also examines properties of cliticization in Old Church Slavonic. He shows that although in most cases the clitics follow the distribution observed in the Greek vorlage, it is quite clear that their placement occurs in accordance with the rules of Old Church Slavonic grammar, especially since some

of the clitics, such as the conditional auxiliaries *bi*/*by* and the reflexive clitic *sę*, do not have Greek counterparts. He also notices that in most cases clitics in Old Church Slavonic are post-verbal, regardless of the position of the corresponding clitics in the Greek texts. These observations lead him to question the postulates made by the majority of his contemporaneous linguists, such as Bernecker (1900: 60–94), who claimed that Old Church Slavonic relics copied the cliticization patterns of their vorlage and as such did not reflect the syntax of the spoken Slavic dialects of the era.

Independently of Sławski's (1946) observations, the thesis of the syntactic autonomy of Old Church Slavonic sentence structure has been confirmed in a recent study by Eckhoff (forthcoming), who compares the syntactic make-up of two structures in Greek with their translations into Old Church Slavonic, as found in *The Codex Marianus*. The two structures are verb-complement patterns, where Eckhoff examines the relative position of the object (including object clitics) to the verb, and adnominal possessive constructions, in the case of which Eckhoff investigates the order of the adnominal possessor with respect to the nominal head. She observes that in the former case, the Greek word order is replicated in the Old Church Slavonic examples almost completely, which at first sight may suggest a very strong influence of the Greek vorlage. However, her comparison of the adnominal possessive constructions indicates that their syntax was completely independent of the Greek sources and was more likely to be contingent on internal properties of the Old Church Slavonic grammar, in which the factors affecting the word order were, for instance, animacy, givenness status, and possessor discourse prominence. Thus, Eckhoff's study suggests to me that even if the distribution of pronominal clitics in Old Church Slavonic corresponds to the placement of clitics in Greek, this does not mean that the Old Church Slavonic translators "copied" the syntactic positions of the clitics. Rather, it implies that the syntax of clitics was similar in the two languages.

In relative contrast to the research on Romance or Germanic languages, there is rather little literature available on the diachrony of cliticization patterns in Slavic, in particular pursued within the generative tradition. By and large, it is possible to distinguish between two types of approaches to the history of Slavic cliticization. On the one hand, there are accounts postulating that second position cliticization is the underlying pattern in Proto- and Old Slavic, which presumably goes back to Proto-Indo-European word order rules, as described by Wackernagel (1892). On this approach, the Old Church Slavonic cliticization pattern may have influenced the syntax of old documents written in Serbian, Croatian, or Slovenian, all of which are now second position clitic languages. By contrast, contemporary Bulgarian and Macedonian have verb-adjacent clitics because they are members of the Balkan Sprachbund, which in general displays this type of clitic distribution, also in the non-Slavic languages such as Albanian, Romanian, and Modern Greek. An empirical problem with this type of approach to the diachrony of Slavic cliticization is

the fact that second position cliticization in Old Church Slavonic shows numerous exceptions (in fact, detailed corpus studies indicate that Old Church Slavonic has verb-adjacent pronominal clitics, as is demonstrated in section 4.3.1 below). These exceptions are attributed by some proponents of such analyses to the alleged heavy influence from Greek and the fact that the original translators originated in a bilingual milieu. The accounts that assume second position placement of clitics in Old Church Slavonic include some of the traditional, descriptive grammars such as Lunt (2001), as well as a few recent analyses, which go into various amounts of diachronic details, such as Gribble (1988), Tomić (2000, 2004a and b), Zaliznjak (2008), and Zimmerling (2008). Some of them are scrutinized in section 4.5.

Another type of approach, which is pursued in this chapter, is based on the observation that pronominal clitics in Old Church Slavonic were predominantly verb-adjacent, on a par with Romance languages, whereas second position cliticization was restricted to discourse particles.[48] As was noted above, a comparison of the syntactic properties of Old Church Slavonic texts with the respective Greek vorlage (as shown, for instance, in Eckhoff's work referred to above) indicates that Old Church Slavonic translators did not copy the structure of Greek, so the clitics in Proto-Slavic most likely had a similar distribution to the one observed in Old Church Slavonic. Therefore, second position cliticization of pronominal clitics must have developed later. Modern Bulgarian and Macedonian are continuing the verb-adjacent clitic placement found in Old Church Slavonic, though as observed by Pancheva (2005) for Bulgarian, there may have been a modification of the clitic system throughout history. The analyses assuming this type of approach include Pancheva (2005), Migdalski (2009a and b, 2013, 2015), and Jung and Migdalski (2015).

4.3.1. The distribution of clitics in Old Church Slavonic

As was pointed out in the preceding section, in traditional grammars Old Church Slavonic is described as a language with Wackernagel clitics, in which pronominal clitics "stand after the first full word of a clause" (Lunt 1974: 65, 2001: 77). More detailed descriptions of the clitic system in Old Slavic, such as the ones due to Sławski (1946) as well as Gribble (1988: 194), are somewhat less categorical, admitting that there was a "tension" between Wackernagel and verb-adjacent placement. It seems that such statements reflect a property of traditional approaches to the study of language, stemming from the 19th century tradition of historical linguistics research, in which languages were expected to follow linguistic laws, such as Wackernagel's Law, whereas patterns not conforming to these laws were treated as exceptions (see a related discussion in the Introduction). A closer inspection

[48] In this book I refer to them as operator clitics, which is a more general term.

of the position of clitics in Old Church Slavonic reveals though that Wackernagel placement was not a predominant pattern and that only a subclass of clitics occurred exclusively in second position. Radanović-Kocić (1988: 151) shows that in fact only three clitics uniformly target Wackernagel position in Old Church Slavonic and appear there without exception. These are the question/focus particle *li*, the complementizer clitic *bo* 'because,' and the focus particle *že* (see 28a–c). If there are more operator clitics present in a clause, they target second position in a cluster, adjacent to each other (see 28d–e).

(28) a. Približi *bo* sę crstvie nbskoe
approach$_{AOR.3SG}$ because REFL kingdom heaven
"For the kingdom of heaven is at hand"
(OCS, *Matthew* 3:2, Radanović-Kocić 1988: 152)

b. Mati *že* jego živěaše blizъ vratъ
mother FOC his live$_{IMP.3SG}$ near gates
"And his mother lived near the gates" (OCS, Radanović-Kocić 1988: 152)

c. Ašte *li* oko tvoě lōkavo bōdetъ
if Q eye your evil be$_{PRES.SG.N}$
"If your eye should be evil" (OCS, *Matthew* 6:23, Radanović-Kocić 1988: 151)

d. Ašte *li* *že* ni i novōjō razderetъ
if Q FOC not also new tear$_{FUT}$
"Or he will tear the new one" (OCS, *Luke* 5: 36, Pancheva et al. 2007a)

e. I*že* *bo* *sę* sъměritъ ěko otročę se
he+FOC because REFL humble$_{FUT}$ like child$_{NOM.N.SG}$ this$_{NOM.SG}$
"For he who humbles himself like this child"
(OCS, *Matthew* 18:4, Pancheva et al. 2007b)

In Migdalski (2009b) I point out that what apparently has not been noticed so far in Old Church Slavonic cliticization studies is that these clitics are not a random group, but they form a natural class of operator clitics that uniformly express illocutionary force (or the clause type, in the sense of Cheng 1997). Furthermore, in Chapter 3, section 3.4, I show that operator clitics occupy second position also in contemporary Slavic languages, irrespective of whether these languages have Wackernagel pronominal and auxiliary clitics.

Moreover, recall from Chapter 2, section 2.3.2, that Gothic displays the same distribution of operator clitics as Old Church Slavonic. The operator clitics include the conjunctive particle *uh* (*h*) and the interrogative particle *u* (*uh*), which occur in second position (see 29).

(29) a. Jah usstigun in skip, iddjedun-*uh* ufar marein
and they-entered in ship went-PRT over sea
"And they entered into a ship and crossed the sea"

b. [$_{PP}$ uz-*uh* þamma mela] managai galiþun siponje is
from-PRT that time many went of-disciples his
"And from that time many of his disciples went" (Gothic, Eythórsson 1996: 120)

This fact may suggest that second position placement of operator clitics exemplified in (28) and (29) reflects the cliticization pattern originally described by Wackernagel (1892), whose generalization concerned clitics specifying clause type, focus, and the main/embedded distinction in many Indo-European languages, including Old Germanic and Slavic. It seems that Wackernagel's generalization was later misinterpreted and assumed to apply to all types of clitics, including pronominal clitics. See also a related discussion of Hale's (2007) analysis of the diachrony and properties of Sanskrit cliticization in Chapter 3, section 3.4.4.

Moving back to Old Church Slavonic facts, the data investigated by Radanović-Kocić (1988) show that as far as pronominal clitics are concerned, in most cases they are verb-adjacent. This is particularly true of accusative clitics, which always occur next to a verb in the corpus examined by Radanović-Kocić.

(30) a. Oca moego vь těxъ dostoitъ *mi* byti
father$_{GEN}$ my$_{GEN}$ in these be-appropriate$_{INF}$ me$_{DAT}$ be$_{INF}$
"I had to be in my Father's house?" (OCS, *Luke* 2:49, Pancheva et al. 2007a)
b. Ašte desnaě tvoě rōka sъblažněetъ *tę*
if right your hand sin$_{PRES.3SG}$ you$_{ACC}$
"If your right hand causes you to sin"
(OCS, *Matthew* 5:30, Radanović-Kocić 1988: 154)

The position of dative clitics may seem to be somewhat less regular. Radanović-Kocić (1988) provides the data in (31a–b) and claims that dative clitics would target second position when they were accompanied by operator clitics. Importantly though in both of these examples the dative clitic occurs both in second position as well as adjacent to the verb.

(31) a. Ne běxъ *li* *ti* reklъ
NEG was$_{IMP.1SG}$ Q you$_{DAT}$ tell$_{PART.M.SG}$
"Did not I tell you?" (OCS, Radanović-Kocić 1988: 153)
b. Sōdii *tę* prědastъ sloudzě
judge you$_{DAT}$ hand-over$_{PRES.3SG}$ guard$_{DAT}$
"The judge hands you over to the guard"
(OCS, *Matthew* 5: 21, Radanović-Kocić 1988: 156)

Furthermore, it seems that at least some instances provided in the literature as cases of second position dative clitic placement in Old Church Slavonic in fact involve ethical datives (Željko Bošković, p.c.). They are exemplified in (32). Ethical datives are operator clitics that do not refer to real arguments but rather they have a pragmatic function of establishing closeness between the speaker and the hearer. In Chapter 3, section 3.4.3.3, I show, referring to Bošković's (2001: 60) observations, that in contemporary Serbo-Croatian they are located higher in the structure than argumental dative clitics, as they may move across sentential adverbs, whereas regular pronominal clitics may not. Moreover, in section 4.6.2.3

below I present Old Polish data in which ethical datives are the only second position clitics, whereas all other pronominal forms are weak pronouns. Thus, if the dative elements in (32) are non-argumental, it is not surprising that they appear in second position, on a par with other operator clitics.

(32) a. Ouže *ti* neprijaznъ ne oudobъjajetъ
no-longer you$_{DAT}$ disfavor not rules
"Disfavor is no longer over you"
(OCS, *Codex Suprasliensis* 8: 17.2, Pancheva 2005: 116)

b. Dobrěe *bo ti* estъ
better as you$_{DAT}$ is
"It is better for you" (OCS, *Matthew* 5: 30, Radanović-Kocić 1988: 153)

Another example provided by Radanović-Kocić as an instance of a dative clitic occurring in second position illustrates the use of the dative in a possessive structure. Thus, the clitic *mi* in (33) is part of the noun phrase that can be translated as "(under) my roof." Such structures are also found in contemporary South Slavic languages (see, for instance, Pancheva 2004).

(33) (dostoinъ) da *mi* podъ krovъ vьnideši
worth that me under roof$_{ACC}$ enter$_{PRES.2SG}$
"(deserving) that you enter my home"
(OCS, *Matthew* 10: 12, Radanović-Kocić 1988: 156)

Admittedly, a more detailed analysis of dative forms in Old Church Slavonic is required, but in the other cases reported by Radanović-Kocić (1988) as well as in the data I analyzed using Pancheva's (2007a and b) corpora, dative clitics do not need to appear in second position, but rather they are verb-adjacent.

(34) a. Vь těxъ dostoitъ *mi* byti
in these be-appropriate$_{PRES.3SG}$ me$_{DAT}$ be$_{INF}$
"In them it is suitable for me to be?" (OCS, *Luke* 2: 49, Pancheva et al. 2007a)

b. Ăko podobaetъ *ti* vsě slava
since fit$_{PRES.3SG}$ you$_{DAT}$ all glory
"Since you deserve all the glory"

c. Idi jako věrova da bõdetъ *ti*
go as believe that be$_{PERF.PRES.3SG}$ you$_{DAT}$
"Go be it done for you as you have believed"
(OCS, *Matthew* 8: 13, Radanović-Kocić 1988: 154)

Furthermore, although pronominal clitics may appear next to operator clitics in second position, the adjacency between these two clitic types is not necessarily required. As shown in (35a), pronominal clitics, such as the reflexive *sę* and the dative *ei*, may be separated from the operator clitic *že* (for semantic reasons related to the nature of the text, this clitic is translated as a conjunction in 35a). The same

type of distribution is found in (35b), in which the operator clitic *bo*, accompanied by the conditional auxiliary clitic *by*, is located in second position, whereas the reflexive pronominal clitic *sę* is right adjacent to the participle *molilъ*.

(35) a. Elisaveti *že* isplъni *sę* vrěmę roditi *ei*
Elizabeth CONJ fulfill$_{AOR.3SG}$ REFL time give-birth$_{INF}$ her$_{DAT}$
I rodi snъ
and give-birth$_{AOR.3SG}$ son$_{ACC}$
"And it was time for Elizabeth to have her baby, and she gave birth to a son"
(OCS, *Luke* 1: 57, Pancheva et al. 2007a)

b. a *by* *bo* ne molilъ *sę* ne *by*
if COND$_{3SG}$ because not pray$_{PART.M.SG}$ REFL not COND$_{3SG}$
vъstavilъ mrъtvaago
rise$_{PART.M.SG}$ dead$_{GEN}$
"For if he had not prayed, he would not have risen from the dead"
(OCS, *Codex Suprasliensis* 303–12–13, Willis 2000: 335)

In this way the distribution of clitics in Old Church Slavonic resembles the pattern found in Modern Bulgarian, where operator clitics (such as *li* in 36) occur in second position, whereas pronominal clitics are verb-adjacent and do not need to cluster with *li*. This type of data was examined in Chapter 3, section 3.4.3.3.

(36) Včera *li* Penka *ja* *e* dala knigata na Petko?
yesterday Q Penka her$_{ACC}$ is$_{AUX}$ give$_{PART.F.SG}$ book-the to Petko
"Was it yesterday that Penka gave the book to Petko?" (Bg, Tomić 1996: 833)

Summarizing, it seems that in the majority of cases pronominal clitics in Old Church Slavonic are adjacent to the verb. Second position clitic placement is obligatory only with operator clitics, which include the ethical dative. Furthermore, Old Church Slavonic displays properties that have been observed in contemporary Slavic languages with verb-adjacent clitics: in sentences with operator clitics, which uniformly target Wackernagel position, pronominal clitics do not need to cluster with them and remain verb-adjacent.

4.3.2. The distribution of clitics in Old Serbian

This section overviews historical changes in the position of pronominal clitics in Serbo-Croatian.[49] As in the case of Old Church Slavonic, detailed analyses of the cliticization patterns are rather scarce, and traditional descriptive sources usually

[49] As in the case of the synchronic analysis presented elsewhere in this work, I use the general term Serbo-Croatian rather than Serbian, Croatian, Bosnian, or Montenegrin when referring to the languages and dialects spoken in some parts of the former Yugoslavia. When the division between the dialects or languages matters for the analysis presented here, I specify the geographic origin of the example under discussion. The term "Adriatic Coast" refers to the origin of the texts written

provide very general statements about the placement of clitics in the diachrony of Serbo-Croatian. For instance, Dezső (1982: 322) states that unlike in contemporary Serbo-Croatian, in Old Serbian clitics could occur post-verbally or "after the first emphatic substantive member." A notable exception is the work by Radanović-Kocić (1988, ch.3), who offers a relatively thorough account of the cliticization patterns attested in the history of Serbo-Croatian, and I will refer to her findings in this section.

Radanović-Kocić (1988: 157ff.) observes that in the oldest Serbian texts from the 12th–15th centuries, the inventory of clitics is considerably richer than in Old Church Slavonic relics, as it includes all the clitic forms that are found in modern Serbo-Croatian. However, the cliticization pattern resembles the one found in Old Church Slavonic: operator clitics occur after the clause-initial word and thus target second position, whereas the pronominal clitics follow the verb. If operator clitics are present together with pronominal clitics, pronominal clitics obligatorily follow them and target second position, as exemplified in (37).

(37) a. Kto *li* *ga* ime taiti
who Q him$_{ACC}$ has hide$_{INF}$
"Who will be hiding him" (14th c. Serbian, Radanović-Kocić 1988: 158)
b. Ašte *li* *se* obrěte edno selo
if Q REFL finds one village
"If a village is found…" (14th c. Serbian, Radanović-Kocić 1988: 157)

Radanović-Kocić (1988: 158) states that in the structures without operator clitics, pronominal clitics in most cases appear in second position. The examples she gives in support of this statement include the auxiliary, dative, and reflexive clitics (see 38). In some of them (see 38a–b) the clitics seem to be able to break up syntactic constituency. Following the discussion in section 3.5.1.2, Chapter 3, I take this to be indicative of the fact that Left Branch Extraction was possible in Old Serbian.

(38) a. Sijazi *je* kniga pisana
this is$_{AUX}$ book written
"This book was written"
b. U koem *se* selu nagje tat
in which REFL village finds thief
"In which village a thief is found"
c. Takoge *ti* *se* i mi klьnemo
also you$_{DAT}$ REFL and we$_{NOM}$ swear$_{PRES.1PL}$
"We also swear to you" (OS, Radanović-Kocić 1988: 159)

However, sometimes it is difficult to determine the exact type of cliticization. For instance, Radanović-Kocić describes certain occurrences of pronominal clitics as of the Wackernagel type, yet at the same time these clitics could be interpreted as

by two Croatian writers, Marin Držić (born in Dubrovnik in 1508) and Petar Hektorović (born in Stari Grad, on the island of Hvar, in 1487).

verb-adjacent. Such cases are given in (39); in (39b) negation incorporates into the following verb, so the two elements form a single word.

(39) a. Ašte *li* *se* obrěte edno selo
if Q REFL finds one village
"If a village is found…" (OS, Radanović-Kocić 1988: 157)
b. Dokle *mu* *se* ne ispravi
until him_{DAT} REFL NEG corrects
"Until it is corrected (for him)" (OS, Radanović-Kocić 1988: 158)

Importantly, Radanović-Kocić observes that in a large number of Old Serbian examples clitics are verb-adjacent and then they may occur lower in the clause than in second position. This observation holds for both auxiliary and pronominal clitics, as shown in (40).

(40) a. Ězъ veli župan klъnu *se*
I great prince $swear_{PRES.1SG}$ $REFL_{ACC}$
"I, great prince, swear…"
b. I sie učiniv *imь*
and this do $them_{DAT}$
"And having done that to them"
c. Da vi *ni* *ste* rekli
that you_{PL} us_{DAT} are_{AUX} $tell_{PART.M.PL}$
"That you told us" (OS, Radanović-Kocić 1988: 160)

Notably, clitics are always verb-adjacent in verb-initial structures, which according to Radanović-Kocić (1988: 161) are very frequent in the corpus she examined. They are exemplified in (41) and include both operator and other clitics, with operator clitics always occurring in front of the other clitics. In such an environment, the position of the clitics is in fact ambiguous between being verb-adjacent and second position. Given that in the data collected by Radanović-Kocić there are no accusative clitics located in second position unless they are located next to a verb, it seems possible to conclude that at least accusative clitics were still strictly verb-adjacent in Old Serbian. If this conclusion is correct, this means that the distribution of accusative clitics in Old Serbian is parallel to the one attested in Old Church Slavonic (see example 30 in section 4.3.1).

(41) a. Obrete *li* *se* kto
finds Q $REFL_{ACC}$ who
"If someone is found" (OS, Radanović-Kocić 1988: 161)
b. Verovati *li* *ga* *ću*
$trust_{INF}$ Q him_{ACC} $will_{1SG}$
"Should I trust him?" (OS, Radanović-Kocić 1988: 162)
c. Dalь *mi* *e* carь
$give_{PART.M.SG}$ me_{DAT} is_{AUX} tzar
"The tzar gave it to me" (OS, Radanović-Kocić 1988: 162)

Turning to the cliticization patterns from the 16th century onwards, since I have observed that in some cases clitic placement in this period is related to the geographic origin of a source text, I provide the location in these examples. In general, it seems that pronominal clitics start to gradually gravitate towards second position during that period, though Radanović-Kocić (1988: 164) points out that there is variation in their position depending on the presence of operator clitics. If operator clitics are present in a clause, all clitics must be located strictly after the first word, with the operator clitics being the initial ones in the cluster, as illustrated in (42). Recall from section 3.4.3.1 in Chapter 3 that in contemporary Serbo-Croatian *li* imposes the same word-initial (rather than phrase-initial) placement restriction. Interestingly, the operator clitic *bo* occurs only in a single example among the ones provided by Radanović-Kocić (1988: 163), and it is also one of the oldest examples. In Modern Serbo-Croatian this clitic does not exist any more. This fact will be important for my evaluation of Radanović-Kocić's (1988) analysis of the observed changes in the position of clitics.

(42) a. On *bo* *je* tako htil
he because is$_{AUX}$ so want$_{PART.M.SG}$
"Because he wanted so" (Adriatic Coast, 16th c., Radanović-Kocić 1988: 163)
b. Nu *li* *se* *je* na ńe povratila
or Q REFL is$_{AUX}$ to it return$_{PART.F.SG}$
"Or she returned to it" (Bosnia, 17th c., Radanović-Kocić 1988: 163)
c. Ti *li* *si* udo tila onoga
you Q are part body that
"You are a part of that body" (Croatia, 17th–18th c., Radanović-Kocić 1988: 163)
d. Sad *li* *će* *mi* doći radost
now Q will$_{1SG}$ me come$_{INF}$ happiness
"Is happiness really coming to me now?"
(Croatia, 19th c., Radanović-Kocić 1988: 164)

If there are no operator clitics present, pronominal clitics (including the accusative form, see 43b) and auxiliary clitics most commonly appear after the first word, and then they may also cause an apparent constituency split (see 43b and c). However, they may also occur after complex initial constituents (see 44) or even lower in the clause structure, adjacent to a verb (see 45).

(43) a. Tada *je* glas onaj zagrmio
then is$_{AUX}$ voice that sound$_{PART.M.SG}$
"Then that voice sounded" (Croatia, 18th–19th c., Radanović-Kocić 1988: 164)
b. Brižljiva *ga* crkva ne pušta
caring him$_{ACC}$ church NEG lets
"The caring church doesn't let him" (Croatia, 19th c., Radanović-Kocić 1988: 165)
c. Ova *se* čeljad ruga
this REFL people mocks
"These people are mocking" (Adriatic Coast, 16th c., Radanović-Kocić 1988: 165)

(44) a. Taj čas *će* *se* junaci razbjegnuti
that moment will$_{3PL}$ REFL heroes run-away$_{INF}$
"At that moment heroes will run away"
(Adriatic Coast, 16th c., Radanović-Kocić 1988: 167)

b. Onjezijem slatkijem riječmi *me* veže
those sweet words me$_{ACC}$ binds
"She binds me with those sweet words"
(Adriatic Coast, 16th c., Radanović-Kocić 1988: 168)

(45) a. Ona starež ktio *mi* *je* učinit
that old-man want$_{PART.M.SG}$ me$_{DAT}$ is$_{AUX}$ do$_{INF}$
"That old man wanted to do me"
(Adriatic Coast, 16th c., Radanović-Kocić 1988: 166)

b. U kom gradu najdoh *se* vesel ne malo
in which town find$_{AOR.1SG}$ REFL happy NEG little
"In which town I was very happy"
(Adriatic Coast, 16th c., Radanović-Kocić 1988: 166)

Irrespective of the variation presented in the examples above, what is evident is that there is a gradual shift from verb-adjacency to second position pronominal cliticization. In Migdalski (2013, 2015) I observe that the shift is contemporaneous with the loss of tense morphology. Note, for instance, that example (45b) with a verb-adjacent clitic also contains a verb marked for the aorist. Furthermore, in Migdalski (2013: 150) I point out that there seems to be a dialectal division concerning the timing of the shift of the clitics and that the change occurred later in those dialects that preserved tense morphology the longest. Thus, I observe in section 4.3.3.2 later in this chapter that the aorist is still attested in the contemporary dialects of the Montenegrin area, where it is used by a number of contemporary fiction writers as a narrative tense (Lindstedt 1994: 39). As may be expected, in most of the examples coming from Montenegro provided by Radanović-Kocić (1988) clitics are verb-adjacent (she states that the clitics in 46a occur in second position, but they are also adjacent to the *l*-participle *predali*). Significantly, these data are relatively recent, coming from the turn of the 19th century.

(46) a. Este *li* *se* predali
are$_{2PL}$ Q REFL give-in$_{PART.M.SG}$
"Did you give in?" (Montenegro, 18/19th c., Radanović-Kocić 1988: 164)

b. Ako iguman sakrivi *mi*
if prior does-wrong me$_{DAT}$
"If the prior does me wrong" (Montenegro, 18/19th c., Radanović-Kocić 1988: 166)

c. Na stepen arhimandritski *se* uzvisio
on rank archimandrite REFL rise$_{PART.M.SG}$
"He rose to the rank of archimandrite"
(Montenegro, 18/19th c., Radanović-Kocić 1988: 168)

In the other dialects, which lost tense morphology earlier, the timing of the change was different. For instance, Radanović-Kocić presents a number of 16th-century examples from a (Croatian) dialect spoken in the area of the Adriatic coast in which clitics already target second position, as illustrated in (45) above and in (47a) below. Correspondingly, Wackernagel clitics are also attested in the Bosnian example given in (47b).

(47) a. Verom *ti* *se* mojom obetuju
faith you$_{DAT}$ REFL my swear$_{PRES.1SG}$
"I swear to you by my faith" (Adriatic Coast, 16th c., Radanović-Kocić 1988: 165)
b. Bog *nam* na pomoći budi
God us$_{DAT}$ on help are$_{PERF.2SG}$
"May God help us" (Bosnia, 17th c., Radanović-Kocić 1988: 164)

It is also plausible, though, that for some time there was grammar competition between the two analyses of cliticization, as evidenced by the Croatian data given in (48): the one in (48a) dates back to the turn of the 19th century, originates from the Croatian region of Slavonia and exemplifies verb-adjacent clitics, with possibly an inherently reflexive form, whereas the one in (48b) is somewhat more recent and contains the auxiliary clitic occurring in second position, immediately after the complementizer.

(48) a. One na kojih smrti žalostimo *se*
those at whose death mourn$_{1PL}$ REFL
"Those whose deaths we mourn" (Croatia, 18th/19th c., Radanović-Kocić 1988: 166)
b. Da *su* u ono doba molili *se*
that are$_{AUX.3PL}$ at that time pray$_{PART.M.PL}$ REFL
"That at that time they prayed" (Croatia, 19th c., Radanović-Kocić 1988: 167)

On a side note, observe that in (48b) the auxiliary clitic targets a conspicuously different position than in the related Old Serbian example given in (40c), repeated as (49) below for convenience, where it is verb-adjacent and separated from the complementizer by the subject.

(49) Da vi *ni* *ste* rekli
that you$_{PL}$ us$_{DAT}$ are$_{AUX}$ tell$_{PART.M.PL}$
"That you told us" (OS, Radanović-Kocić 1988: 160)

Although a more thorough study of the diachrony of cliticization patterns in Serbo-Croatian is required, I take the observations outlined here to be significant. They indicate that there is a strict correspondence between the availability of verb-adjacent pronominal cliticization and the presence of morphological tense. The details of the analysis that relates changes in the cliticization patterns to the decline of tense marking in Slavic are given in the next section.

Notably, Radanović-Kocić (1988: 171–178) presents a different explanation of the observed changes. Following Kaisse's (1982: 12) generalization, which states that operator clitics always occur in second position and that non-operator clitics may target second position only if there are operator clitics available in a given language, Radanović-Kocić suggests that it is the availability of operator clitics in Serbo-Croatian that triggered the shift of all the other clitics to Wackernagel position. In particular, she assumes that the strongest triggering context involved verb-initial structures (illustrated in 41 above), as they were very frequent and included all kinds of pronominal clitics, which followed the operator clitics. This type of placement, in her view, resulted in a reinterpretation of the operator and non-operator clitics as a uniform prosodic unit and a subsequent reanalysis of pronominal clitics as second position forms.

To my knowledge, Radanović-Kocić's (1988, ch.3) study was the first and only account of the diachronic placement of clitics in Serbo-Croatian carried out in the generative framework, which examined a considerable amount of historical data. Still, there are a few issues with Radanović-Kocić's proposal. First, it seems problematic to attribute the shift of pronominal clitics entirely to the availability of the strictly Wackernagel operator clitics. In comparison to Old Church Slavonic and Old Serbian the inventory of operator clitics in Serbo-Croatian went into decline, as it lost both the complementizer clitic *bo* and the focus particle *že*, and the only operator clitic left is *li*. In this scenario, it is somewhat puzzling that second position placement was uniformly established only around the 19th century, when the majority of operator clitics had disappeared. Second, Radanović-Kocić (1988: 173) observes that the accusative clitic began to surface in second position later than the dative clitic (see example 43b, which comes from the 19th-century Croatian). Though she does not distinguish between argumental and ethical datives (the latter being operator clitics and uniformly occurring in second position in Old Church Slavonic; located higher than argumental datives also in Modern Serbian, see Bošković 2001: 60 and the discussion in section 3.4.3.3 in Chapter 3), it is not clear how she can capture the delayed switch to second position observed in the case of accusative clitics. In Migdalski (2009b) I attribute the timing contrast to the fact that the dative clitic may be marked for inherent case, which does not need checking, and that many of second position dative clitics could instantiate ethical datives. Third, Radanović-Kocić's proposal is challenged by empirical facts from other Slavic languages that do have operator clitics but whose pronominal clitics are still verb-adjacent (Bulgarian and Macedonian) or that have lost pronominal clitics entirely (Old Russian, see Jung and Migdalski 2015). If Radanović-Kocić's account is adopted as a potential explanation of these facts, it is not immediately obvious why the operator clitics did not attract the other clitics to second position in the history of Bulgarian, Macedonian, or Russian.

4.3.3. Towards an analysis

The overview of the cliticization data presented in the preceding sections indicates that different groups of clitics, including operator and pronominal clitics, have undergone divergent syntactic developments in their history. The inventory of some clitics has changed, too. For example, operator clitics, which in Old Church Slavonic included the focus marker *že* and the complementizer *bo*, have declined in most languages. The focus particle *že* continues to be used in the West Slavic languages, whereas in some syntactic contexts in Czech and Polish it has been reanalyzed as a complementizer and as a result it may now function both as a complementizer and a focalizer (see Chapter 3, section 3.4.2, and Decaux 1955 for a description of the diachronic change). Likewise, the complementizer *bo* has been preserved in some North Slavic languages but it has lost its clitic status. The operator clitic attested in Old Church Slavonic that is still preserved in most contemporary Slavic languages is *li*, though its exact function is subject to variation in particular languages, and it is either only a marker of interrogation or also of focus. Irrespective of the decline of some forms, the syntactic position of the operator clitics is still the same in Modern Slavic and they all occupy second position. Since they all constitute a natural class by encoding the illocutionary force of a clause, I postulated in Chapter 3, section 3.4.3.5 that they uniformly target a Force-related projection in the CP later, such as the head of ΣP.

In contrast to the operator clitics, the position of pronominal clitics has changed in the history of some languages. As has been demonstrated on the basis of Old Church Slavonic and diachronic Serbo-Croatian data in the preceding sections, pronominal clitics shifted from verb-adjacency to second position. This change did not occur in all Slavic languages though. The clitics are still verb-adjacent in Bulgarian and Macedonian, although in Bulgarian they also occupied second position for some time, as reported in section 4.5.3 later in this chapter, on the basis of Pancheva's (2005) study.

In Migdalski (2013, 2015) I observe a correspondence between verb-adjacent cliticization and the richness of morphological tense specification: verb-adjacent clitics exist only in those languages that mark tense via designated tense morphology and still have the past tenses, the aorist and the imperfect. I further point out that the process of losing morphological tense that occurred in some Slavic languages was contemporaneous with the loss of verb-adjacent cliticization. I present more support for the hypothesis concerning the dependence of cliticization patterns on the availability of morphological tense specification in the subsequent sections. They have the following organization. Section 4.3.3.1 overviews the ways tense distinctions were encoded in Old Church Slavonic, while section 4.3.3.2 shows how the morphology expressing these distinctions was simplified in the

languages that evolved. Section 4.3.3.3 demonstrates how temporal distinctions can be rendered in the absence of tense morphology.

4.3.3.1. Tense marking in Old Slavic

The marking of temporal distinctions in language via designated tense morphology is not a universal property. Some languages dispense with tense morphology completely and instead make use of aspect or modal forms to render temporality. It is a common hypothesis pursued in diachronic studies (see, for instance, Lehmann 1974) that in early Proto-Indo-European tense did not exist as an independent category and that verbs were only specified for aspect. Thus, initially the distinction was made only between perfective and imperfective variants of verbs. Such a distinction was also made in Old Church Slavonic. In Modern Slavic, virtually all verbs in all their forms (whether they are finite or non-finite) are obligatorily marked for aspect and in this way they form so-called aspectual pairs, exemplified in (50) for contemporary Polish.

(50) czytać /przeczytać
read$_{\text{IMPRF.INF}}$ read$_{\text{PERF.INF}}$

As shown in (50), one member of the pair is specified for perfective aspect; the other one for imperfective aspect, and the contrast is rendered via a fairly regular prefixation. In Proto-Indo-European, aspectual pairs of this type may have existed as well, but they were not formed through regular affixation.

Apart from the aspectual pairs, Old Church Slavonic featured two simple past tenses: the aorist, which was the default past tense but usually characterized bounded eventualities, and the imperfect, which denoted non-completed actions that occurred in the past. In addition, like all other verbs, verbs in the aorist and imperfect forms were specified for aspect, usually for the perfective and imperfective variant respectively, though imperfective aorists and perfective imperfects were also attested (the imperfective aorist was particularly common, as it constitutes 40% of the aorist forms in the corpus of Old Church Slavonic relics investigated by Dostál 1954: 599–600). Since the inherent aspectual meanings of the aorist and the imperfect combined with the obligatory aspectual marking, the aspectual information was expressed "twice" on each verb occurring in the past tense.

In addition, Old Church Slavonic had three regular compound tenses: Future II,[50] present perfect, and pluperfect. All of them used different aspectual variants of the auxiliary verb "be" (the perfective form of "be" in Future II; the

[50] Future II (also termed *Futurum Exactum* or Future Perfect) was used to refer to a future event that is a condition for the occurrence of another event that will take place in more distant future. For instance, in example (i) the *l*-participle in the imperfective form *podražali* 'imitate' describes an ongoing process that conditions the occurrence of another event that will take place in more distant future.

present tense imperfective form of "be" in the present perfect, and the imperfective aorist or imperfect form of "be" in the pluperfect), which was accompanied by the main verb, the so-called *l*-participle, which is a designated participial form used exclusively in compound tenses in Slavic (thus, it is morphologically different from the passive participle, unlike the past participle in Germanic and Romance). The *l*-participle could occur in the perfective or imperfective variant. The system of Old Church Slavonic tenses is illustrated in chart (51), which features forms of all the tenses used in Old Church Slavonic for the verb *nesti* 'to carry' in both perfective and imperfective aspect. It should be noted though that, as pointed out by an anonymous reviewer of Migdalski (2013), not all Old Church Slavonic verbs were attested in all the aspectual forms listed in this chart. In particular, non-motion verbs are not found in all the variants presented here.

(51) Tense and aspect forms in OCS

TENSE/ASPECT	IMPERFECTIVE	PERFECTIVE
3SG PRESENT	nesetъ	ponesetъ
3SG AORIST	nese	ponese
3SG IMPERFECT	nesěaše	ponesěaše
3SG FUTURE II	bǫdetъ neslъ	bǫdetъ ponesl ъ
3SG PERFECT	neslъ jestъ	ponesl ъ jestъ
3SG PLUPERFECT	bě neslъ	bě ponesl ъ

(OCS, partly based on Van Schooneveld 1951: 97)

4.3.3.2. Tense marking in Modern Slavic

The tense system of Old Church Slavonic was modified in the Slavic languages that subsequently evolved, with an exception of Bulgarian and (to a lesser degree) Macedonian, whose tense marking largely reflects the Old Slavic pattern. Thus, Bulgarian still uses the aspectual tenses, aorist and imperfect, and they can be combined with both perfective and imperfective aspect forms (see Lindstedt 1985). They are exemplified in the chart in (52) for the verbs *četa* 'read' and *polučava* 'receive,' taken from Rivero and Slavkov (2014: 235). Some examples contain more than one acceptable variant because of dialectal variation and the availability of extra prefixation and secondary imperfectivization.

(i) Ašte na to sъtvorimъ vladyky podražali bǫdem
if for it accomplish$_{PRES.1PL}$ Lord imitate$_{PART.IMPF.PL}$ be$_{PRF.1PL}$
"We will accomplish that if we [will] have been$_{PRF}$ imitating$_{IMPF}$ the Lord"
(OCS, *Suprasliensis* 379.10, Huntley 2002: 152)

(52) Tense and aspect forms in Bulgarian

TENSE/ASPECT	IMPERFECTIVE	PERFECTIVE
3SG AORIST	čete	pročete
	polučava	poluči
3SG IMPERFECT	četeše/pročitaše	pročeteše
	polučavaše	polučeše
3SG PRESENT PERFECT	e čel/e četjal/e pročital	e pročel
	e polučaval/e polučel	e polučil

(Bg, based on Rivero and Slavkov 2014: 235)

A unique property of Bulgarian in comparison with the other contemporary Slavic languages is the fact that, on a par with Old Church Slavonic, it still permits combinations of apparently contradictory tense and aspect values, such as the perfective imperfect and the imperfective aorist. These combinations give rise to special meanings. For example, a verb marked for the perfective imperfect expresses repeated actions of single, momentary events that could be interpreted as habitual, whereas a verb that is morphologically specified for the imperfective aorist characterizes events that took place in the past but no commitment is made as to whether this event was completed or not (see Migdalski 2006: 38). The examples in (53) and (54) provide tense and aspect combinations of the aorist and imperfect tenses in Bulgarian and their approximate meanings in the English translations (see also Todorović 2015b).

(53) a. Včera četjax knigata
yesterday read$_{\text{IMP.1SG.IMPRF}}$ book-the
"I was reading the book yesterday" (Bg, imperfect tense, imperfective aspect)
b. Vseki dan, pročetjax edna kniga
every day read$_{\text{IMP.1SG.PERF}}$ one book
"I used to read a whole book every day" (Bg, imperfect tense, perfective aspect)

(54) a. Včera pročetox knigata
yesterday read$_{\text{AOR.1SG.PERF}}$ book-the
"I read the book yesterday and finished it" (Bg, aorist, perfective aspect)
b. Včera četox knigata
yesterday read$_{\text{AOR.1SG.IMPRF}}$ book-the
"I was reading the book yesterday" (Bg, aorist, imperfective aspect)

The tense system of Macedonian is somewhat less complex. Macedonian still uses the aorist and the imperfect, yet in modern Macedonian the aorist is by default restricted to verbs marked for perfective aspect, whereas the imperfect is the default past tense for imperfective verbs, with the exception of future-in-the-past constructions, which are formed with the invariant future particle *ќе* and the

main verbs in the imperfect tense and the perfective aspect. These constructions characterize future events that are relative to a past moment.[51]

(55) Nie *ḱe* stignevme utredenta
we FUT arrive$_{\text{PAST.SUBJ.3PL}}$ tomorrow day-the$_{\text{F.SG}}$
"We would have arrived the next day" (Mac, Tomić 2004b: 525)

The simplification of the tense system in Macedonian is a very recent innovation. According to Friedman (2002: 267), until as recently as the middle of the 20th century, it was possible for aorist variants of verbs to be marked for imperfective aspect. This is not the case any more, which I interpret to mean that tense and aspect are no longer completely independent systems in Macedonian. This gradual reduction of the tense system in Macedonian seems to coincide with the modification of its verb-adjacent cliticization patterns that are examined in section 4.6.2.1.

Apart from the aorist and the imperfect, Bulgarian and Macedonian use a complex present perfect tense formed with the auxiliary "be" and the non-tensed, non-finite *l*-participle functioning as the main verb. In both of these languages, but in Macedonian in particular, this structure may render an additional meaning of the so-called renarrated mood, which describes events not witnessed directly by the speaker. This type of meaning is expressed in the English translation of (56) with the statement "they say."

(56) Marlon *e* pročel knigata
Marlon is$_{\text{AUX}}$ read$_{\text{PART.M.SG}}$ book-the
"Marlon has read the book (they say)" (Bg)

Except for Bulgarian and Macedonian, the remaining Slavic languages have virtually lost the aorist and the imperfect, and the structures corresponding to the one in (56) are used as the default past tense.

By means of example, the chart in (57) lists tense forms found in Serbo-Croatian for the imperfective verb *praviti* 'to make' and its perfective variant *popraviti* 'to fix.' Although the chart contains aorist and imperfect variants, they are not used to describe past events on a par with the corresponding forms in Bulgarian and Macedonian. As will be shown below, their usage is highly restricted and their meanings are not necessarily related to past temporality. The default past tense is the compound structure formed with the clitic form of the auxiliary "be" and the *l*-participle, exemplified in (58). See footnote 50 earlier in this chapter for the meaning of Future II.

[51] It seems that there is some descriptive inconsistency concerning the terminology used to characterize the form of the main verb in Macedonian. As pointed out by Tomić (2004b: 525), the main verb is constructed by adding suffixes of the former imperfect to aorist bases. Some grammars of Macedonian refer to theses structures as "perfective aorist forms," whereas she uses the term "subjunctive past" tense forms as they are only used in subjunctive contexts.

(57) Tense and aspect forms in Serbo-Croatian

TENSE/ASPECT	IMPERFECTIVE	PERFECTIVE
3SG PRESENT	pravi "he/she makes"	(on) popravi "he/she fixes"
3SG AORIST	—	popravi "he/she fixed it"
3SG IMPERFECT	pravljaše "he/she was doing"	—
3SG FUTURE II	bude pravio	bude popravio
3SG PERFECT	pravio je "he has done"	popravio je "he has fixed it"
3SG PLUPERFECT	bio je pravio "he had been making"	bio je popravljao "he had fixed it"

(S-C, partly based on Friedman 1977: 124; Neda Todorović, p.c.)

(58) Marlon *je* čitao knjigu
Marlon is_{AUX} $read_{PART.M.SG}$ book
"Marlon has read the book" (S-C)

The first restriction concerning the distribution of the past tenses in Serbo-Croatian is the fact that the aorist form may be marked only for perfective aspect, while the imperfect form only for imperfective aspect. This restriction is illustrated in the chart in (57), which lacks imperfective aorist and perfective imperfect combinations, and in the examples in (59).

(59) a. Oni pecijahu/*ispecijahu hleb
they $bake_{IMP.IMPRF}$/$bake_{IMP.PERF}$ bread
"They used to bake bread"/*"They used to finish baking bread"
b. Stiže/*stiza Jovan!
$arrive_{AOR.PERF}$/$arrive_{AOR.IMPRF}$ Jovan
"Jovan arrived!"/*"Jovan was arriving" (S-C, Todorović 2015b)

I propose that the emergence of the restriction exemplified in (59) is the factor that triggers language change and the loss of temporal marking through tense morphology in languages such as Serbo-Croatian. Recall from the Introduction that, as argued by Lightfoot (1979, 1991), language change is assumed to occur during the process of language acquisition, when the language learner is exposed to a structure or a category that is ambiguous. If the language learner analyzes such a structure in a different way than it was interpreted before, s/he may construct a new grammar that is different from the grammar of the other speakers, leading to an instance of language change. I suggest that this type of ambiguity arose once imperfective forms of the aorist and perfective forms of the imperfect ceased to be available in a language, with the examples such as the acceptable

ones in (59) left as the only possible combinations. This process led to the loss of the semantic independence of tense from aspect, with the aorist and imperfect tense forms being indistinguishable from aspectual variants, and in consequence, potentially interpreted as purely aspectual forms by the child acquiring the language.

The second restriction, which is actually the result of the language change described here, is related to the fact that, as pointed out by Lindstedt (1994), the usage of the simple past tenses in Serbo-Croatian is possible only in certain dialects and in specific contexts. Thus, the aorist and imperfect forms are found in the Torlakian dialect, which is also spoken in Bulgaria and Macedonia, and which in fact exhibits many properties of the Bulgarian and the Macedonian languages, such as the absence of case morphology and infinitival forms. For this reason, Torlakian is also considered to be a Bulgarian or a Macedonian dialect by some linguists from the respective countries. Furthermore, these two tenses are also attested in some Montenegrin dialects. For instance, Lindstedt's (1994: 39) analysis of texts written by Saša Božović (1912–1995), a Montenegrin writer from the village of Piperi near the Adriatic coast, shows a high frequency of aorist structures, which is comparable to the distribution of the aorist in Bulgarian or Macedonian. I consider these observations to be important for the analysis developed later in this section, given that verb-adjacent cliticization was preserved the longest in Montenegro (see section 4.3.2). Conversely, the aorist and the imperfect are completely extinct in the northwest Štokavian dialects and in the dialect of Dubrovnik in Croatia (see Ivić 1958, quoted in Lindstedt 1994: 36).

Otherwise, in standard Croatian and Serbian the complex tense constructed with the auxiliary "be" and the *l*-participle (see 58) is the main narrative past tense, while the imperfect is at best recognized as part of the language of belles-lettres (for instance, in Težak and Babić's 1992: 265 grammar of Croatian, quoted in Lindstedt 1994: 36), and in general it is perceived as an obsolete form that adds an archaic flavour which "calls forth a feeling of participation in rich literary tradition" (Katičić 1991: 56; translated in Lindstedt 1994: 37). Correspondingly, the aorist is treated as an optional past tense variant that can perform some stylistic functions that are not necessarily related to past temporality. For instance, Lindstedt (1994: 37) observes that due to its archaic feel, the aorist serves to vary the narrative in literary texts and, for example, it is found in the description of momentous episodes in the protagonist's life or in parts of narration where the plot intensively advances and where it is necessary to highlight the culmination of a story.

Furthermore, in Serbo-Croatian the aorist may also have a stylistic function of expressing "surprisingly perceived events" (Browne 2002: 330). This type of usage correlates with the so-called "perfect of recent past" or "hot news perfect" in English, which characterizes completed events that occurred immediately before the moment of speaking (Lindstedt 1994: 36). Note that as pointed out by Portner (2003) for English, "hot news perfect" expresses a non-temporal relation, as

it mainly characterizes an event that is regarded as noteworthy. It is exemplified for Serbo-Croatian in (60).

(60) a. Stiže ti napokon. Dugo sam te čekao
arrive$_{AOR.2SG}$ you at last long am$_{AUX}$ you wait$_{PART.M.SG}$
"You have arrived at last! I have been waiting for you for a long time"
b. Majko, evo dođe otac
mother$_{VOC}$ there come$_{AOR.3SG}$ father$_{NOM}$
"Look Mother, Father has just arrived" (S-C, Lindstedt 1994: 37)

Todorović (2015b) observes a number of other non-past-related occurrences of the aorist in Serbo-Croatian, which have habitual (see 61) or even future interpretations (illustrated in 62; see also Arsenijević 2013).

(61) Ne diraj mi kompjuter — ti pokvari sve što dotakneš
not touch me$_{DAT}$ computer you break$_{AOR.2SG}$ all that touch$_{PRES.2SG}$
"Don't touch my computer, you break everything you handle!"
(S-C, Riđanović 2012: 316)

(62) a. Ako ne budemo odlučni, propadoše nam svi planovi
if not are$_{PERF}$ decisive fall-through$_{AOR.3PL}$ us$_{DAT}$ all plans
"If we are not decisive, all our plans will fall through"
b. Nema nam spasa, pomrijesmo od gladi!
not+has us$_{DAT}$ salvation die$_{AOR.1PL}$ from hunger
"We can't be saved — we will starve to death" (S-C, Riđanović 2012: 317)

Furthermore, Todorović (2015b) shows that the aorist in fact highlights certain aspectual properties rather than temporal ones. For instance, on a par with perfective aspect it underlines completeness of an event (as in 63a) or its punctuality (as in 63b).

(63) a. (Konačno) napisah domaći!
finally write$_{AOR.1SG}$ homework
"I finally finished my homework!"
b. U tom trenu ga odalami tako jako…
in that moment him$_{ACC}$ slam$_{AOR.3SG}$ that strong
"And then (s)he slammed him with such a force…" (S-C, Todorović 2015b)

In view of the aspectual meanings rendered by the aorist, as well as the fact that it is compatible with future or habitual interpretations rather than with just a past tense interpretation as in Bulgarian and Macedonian, Arsenijević (2013) and Todorović (2015b) conclude that the aorist is a type of aspect, rather than tense in Serbo-Croatian.

Irrespective of the specific contextual restrictions and aspectual meanings associated with the aorist found in literary texts, it is quite clear that usage of the past tenses is on decline in Serbo-Croatian. Thus, a recent study of the compre-

hension of the aorist and the imperfect carried out by Pušić (2013) demonstrates the inability to use the imperfect in general and the aorist in its default reading among the inhabitants of Belgrade.

In the other Slavic languages, the simple past tenses are completely extinct and their remnants are at most limited to a few words that are not normally recognized as describing past referentiality, such as the (former) aorist variant of the verb *být* "to be" in Czech, *bych*, which is used as the so-called conditional auxiliary and occurs with the *l*-participle in conditional clauses, exemplified in (64).

(64) Nesl bych
carry be$_{\text{COND.1SG}}$
"I would carry" (Cz)

In Modern Polish, the only surviving aorist verb is the invariant form *rzecze* 's/he said,' which clearly has a bookish flavor and is not associated with past temporality. The tense and aspect forms found in Modern Polish are listed in the chart given in (65). In contrast to the forms presented above for the other languages, the list contains verbs marked for the 1st person singular because the 3rd person auxiliary in the present perfect form is null.

(65) Tense and aspect forms in Polish

TENSE/ASPECT	IMPERFECTIVE	PERFECTIVE
1SG PRESENT	czytam "I read"	przeczytam "I will read"
1SG AORIST	—	—
1SG IMPERFECT	—	—
1SG FUTURE II	będę czytał$_{\text{PART.M.SG}}$ / czytać$_{\text{INF}}$	—
1SG PERFECT	czytałem	przeczytałem
1SG PLUPERFECT	czytałem był	przeczytałem był

(Pl)

As shown in the chart, the only structure that functions as the past tense in Polish is composed of the non-finite *l*-participle, which is not tensed, as it can also refer to the future when it is used with the auxiliary *będę* (a perfective form of the verb "to be").

As far as reference to future events is concerned, there are two types of "future tense" structures in Slavic. South Slavic languages except for Slovenian use a modal verb as the future auxiliary. The auxiliary is a descendant of the verb "want," rendered as *šte* in Bulgarian, *ќе* in Macedonian, and *će* in Serbo-Croatian, which is accompanied by a subjunctive form or an infinitive functioning as the main verb. This type of structure is exemplified for Bulgarian in (66).

(66) Ivan šte dojda
Ivan FUT come
"Ivan will come" (Bg, Hauge 1999: 105–106)

In North Slavic and Slovenian the future is expressed through a compound tense structure constructed with the perfective variant of the auxiliary "be" and the main verb that takes the form of the infinitive or the *l*-participle (obligatorily in Slovenian but optionally in Polish as well as some dialects of Ukrainian and Russian; in the other Slavic languages the *l*-participle cannot be used as the main verb in the compound future construction). This strategy is exemplified in (67a) for Slovenian, in (67b) for Polish, and in (67c) for Czech. Interestingly, North Slavic languages permit only the imperfective form of the main verb in this structure. This restriction does not hold in Slovenian, and the main verb in (67a) is in fact marked for perfective aspect.

(67) a. Vsi bodo dosegli svoj cilj
everyone is_{PERF} $reach_{PART.PL}$ self's goal
"Everyone will reach his/her goal" (Slo, Franks and King 2000: 33)
b. Będę czytać/czytał książkę
$am_{PERF.1SG}$ $read_{INF}$/$read_{PART.M.SG}$ book
"I will be reading a book" (Pl)
c. Zítra budu chodit do kina
tomorrow $be_{PERF.1SG}$ go_{INF} to cinema
"Tomorrow I will be going to the cinema" (Cz)

In addition, North Slavic languages use a perfective form of the verb in the present tense, which is interpreted as referring to the future, as shown in (68) for Polish and Czech.

(68) a. Przeczytam książkę
$read_{PERF.1SG}$ book
"I will read a book" (Pl)
b. Zítra půjdu do kina
tomorrow $go_{PERF.1SG}$ to cinema
"Tomorrow I will go to the cinema" (Cz)

The data presented in this section indicate that all the Slavic languages except Bulgarian and Macedonian express temporality through aspect and modality, rather than via designated tense morphology. With the loss of the aorist and the imperfect, they do not have any morphological exponents of tense distinctions any more. Instead, they have adopted the complex tense constructed with the *l*-participle used as the main verb and the imperfective form of "be" functioning as the auxiliary verb. The *l*-participle may occur in perfective or imperfective aspect, and it agrees with the subject in gender and number, but since it carries adjectival morphology, it is not specified for any tense value. The auxiliary does not have

a temporal interpretation, either. It is morphologically the same as the copular verb in the present tense.

4.3.3.3. The derivation of temporal interpretation in Slavic

Given the lack of overt tense specification on the auxiliary or the main verb, a question that arises is how temporality is calculated in the tense structures in Slavic. It is a complex issue that has recently been addressed in Todorović (2015b) as well as Rivero and Slavkov (2014), though the latter source concentrates on the derivation of temporal distinctions in Bulgarian, with a focus on the interplay of the rich tense and aspect systems found in this language. Below I outline a recent proposal concerning the interpretation of future forms in Polish (such as the one exemplified in 67) due to Błaszczak, Jabłońska, Klimek-Jankowska, and Migdalski (2014), from now onwards referred to as BJKM.

BJKM assume that complex future structures are monoclausal, which means that their temporal interpretation should be derived from a single tense (or aspect)-related projection. The main verb, which can be either the infinitive or the *l*-participle, is a tenseless form. This is quite evident in the case of the *l*-participle, which is found in both future and "past" tense structures as well as a variety of constructions with null tense specifications, such as conditional and subjunctive clauses. In contrast to the main verb, the auxiliary carries the present tense morphology and is marked for perfective aspect.[52] Given the tense-less specification of the main verb, BJKM assume that this verb is temporally deficient and cannot form a temporal relationship with speech time. Therefore, it needs the auxiliary *będę*, which is argued to perform this function.

BJKM propose that the future auxiliary introduces a Kimian state, in the sense of Maienborn (2001, 2005). Kimian states are denoted by stative verbs such as *know* or *understand* and by combinations of a copula verb and a predicate. They differ from Davidsonian states (such as *sit, stand,* and *sleep*), which have an eventuality argument, by introducing "a referential argument for a temporally bound property exemplification" (Maienborn 2005: 276), rather than introducing a typical eventuality argument. BJKM postulate that this fact explains why the future auxiliary *będę* does not denote the inception of a state even though it carries perfective morphology. Namely, perfective aspect is unable to operate on the future auxiliary,

[52] The auxiliary *będę* is a descendant of the Old Church Slavonic form *bǫdetъ*, which is a member of the perfective paradigm of the verb 'be' in the present tense, whereas *jest* (a present tense copula in Modern Polish) is a descendant of the Old Church Slavonic form *jestъ*, a member of the imperfective paradigm of the verb 'be' (see Dostál 1954: 146; Van Schooneveld 1951: 103; Migdalski 2006: 34). According to Whaley (2000: 21–22), the source of perfectivity in *bǫdetъ* is the nasal vowel *ǫ*, which is an infix inherited from Proto-Indo-European. The nasal vowel *ǫ* is also attested in a small group of verbs expressing ingressivity or inchoativity in Old Church Slavonic, such as *sędǫ* 'sit (down)' and *lęgǫ* 'lie (down).' Correspondingly, perfectivity is marked via a nasal vowel in some verbs in Modern Polish, such as *siąść* 'sit down$_{\text{PERF}}$.'

as *będę* does not have an eventuality argument. Consequently, the semantic effect of perfectivity in *będę* is restricted to the forward-shifting of the reference time (see Condoravdi 2002). This is also the case in other complex constructions, such as those composed of the main verb in the infinitive marked for perfective aspect and a modal verb, exemplified in (69). Here, the structure in (69b) also has future time reference due to the presence of perfective aspect.

(69) a. Muszę sprzątać w piwnicy
must$_{1SG}$ tidy$_{IMPRF.INF}$ in cellar
"I have to tidy up the cellar" (= I tidy up the cellar)
b. Muszę posprzątać w piwnicy
must$_{1SG}$ tidy$_{PERF.INF}$ in cellar
"I have to tidy up the cellar" (= I will have to tidy up the cellar) (Pl)

Another question addressed in BJKM's (2014) analysis concerns the restriction imposed by the future auxiliary *będę* on the main verb occurring in this construction. This restriction is presented in examples (67b–c), which show that only imperfective variants of the main verb are permitted with the future auxiliary in North Slavic. One way of accounting for this restriction is to appeal to diachronic changes, as in Whaley (2000). Recall from section 4.3.3.1 that Old Church Slavonic had a related structure used for describing future events, termed Future II. Although this tense was constructed with the perfective form of the auxiliary verb "to be" (*bõdõ*), the way it also is in contemporary North Slavic languages, it did not show a restriction on the aspectual variant of the main verb (in the form of the *l*-participle), which could occur either in perfective or, more commonly, in imperfective aspect. The imperfectivity restriction on the main verb arose as an innovation in North Slavic. According to Whaley's (2000) proposal, which is adopted by BJKM, the descendant of the Old Church Slavonic verb *bõdõ* in North Slavic shifted its meaning from a 'change of state' verb, which expressed the meaning 'become,' into an inceptive verb, which denotes the meaning 'begin.' As a result, it assumed the restrictions typical of phase verbs such as *begin*, which permit only imperfective verbs as complements. Since the auxiliary *będę* is an onset of a state, it requires that its VP complement describes [+durative] eventualities, which are expressed through imperfective aspect.[53]

A final question in relation to the temporal interpretation of the future structure containing the auxiliary *będę* addressed by BJKM (2014) concerns the reason why this structure is interpreted as imperfective even though it consists of

[53] Ewa Willim (p.c.) points out that the acceptability of structures in which a phase verb such as 'begin' may co-occur with the verb 'to be,' as illustrated in (i) for Polish, is problematic for Whaley's proposal.

(i) Zaczął być niemiły
begin$_{PART.M.SG}$ be$_{INF}$ nasty
"He started to be nasty" (Pl)

the auxiliary in the perfective form and it is only the main verb that is required to be imperfective. BJKM's explanation rests on the assumption that since *będę* is a Kimian state, it does not have any eventuality argument on its own that could be accessed by the perfective aspect. The only eventuality argument is provided by the main verb marked for imperfective aspect, which results in the imperfective interpretation of the whole structure. However, the perfective aspect on the auxiliary gives rise to the future interpretation of the construction. This is because the perfective aspect forward-shifts the reference time. Moreover, since the main verb is morphologically marked for the present tense, the reference time that is forward-shifted by perfectivity is located after the speech time and results in the future meaning. This mechanism applies to both the auxiliary *będę* marked for perfective aspect in the complex tense form (see 67b) as well as the simple future form, which only consists of a verb occurring in the present tense marked for perfective aspect, as exemplified in (68).

Summarizing, the section has overviewed the system of tense and aspect marking in Slavic. It has been shown that although Old Church Slavonic had a very rich system of tenses that interacted with aspectual distinctions, this system declined in most of the Slavic languages that subsequently evolved. The two exceptions to this decline are Bulgarian and Macedonian, which have retained the two simple past tenses, aorist and imperfect. Since the other Slavic languages do not have overt morphological exponents of tense, in these languages temporality is computed only on the basis of modality or aspect specification. The next section provides an analysis of the demise of tense marking in terms of the loss of the TP projection, while section 4.4 presents the repercussions of this loss for the syntax of clitics.

4.3.4. Loss of tense morphology reflected through the loss of TP

The preceding section has pointed out a division between two groups of Slavic languages with respect to the presence versus absence of tense morphology. I suggest that this division corresponds to the presence or absence of the TP projection, and that TP is available only in the languages with overt morphological marking of tense distinctions. In the case of Slavic this means that TP is present only in Bulgarian and Macedonian, the only languages that still productively use the aorist and the imperfect.[54] This proposal implies that TP is not a universal projection and that its occurrence is subject to parametric variation. Admittedly, TP is a core syntactic projection, so it might be somewhat controversial or radical to propose that it is available only in some languages. Still, given that TP is associated with a number of undisputed syntactic properties, such a proposal seems promising,

[54] Note that although these two tenses are attested in some dialects of Serbo-Croatian in specific stylistic contexts, their usage does not necessarily express a temporal interpretation, which indicates that TP is missing in Serbo-Croatian as well.

as it makes it easier to test its predictions by examining whether these TP-related properties are attested in TP-less languages. Furthermore, analyses that assume a TP-less clausal structure are not uncommon. Several studies have postulated the lack of TP in a number of unrelated languages, particularly in those that do not feature designated tense morphology. For instance, it is a matter of debate whether TP is projected in Mandarin Chinese. Although Sybesma (2007) argues for a TP-account of Mandarin Chinese, Lin (2010) states that a TP-less analysis is more explanatory, as it accounts for a number of empirical observations more straightforwardly, including the absence of a distinction between finite and non-finite clauses, the ability of a nominal predicate to serve as the main predicate, and the unavailability of case-triggered movement in Mandarin Chinese. Correspondingly, Fukui (1988) and Shon, Hong, and Hong (1996) provide arguments for the lack of TP in Japanese and Korean, respectively. The clausal structure of Korean has been recently readdressed by Kang (2014), who postulates the absence of TP on the basis of her observation of contrasts between Korean and English with respect to A'-movement out of CP, Numeral Quantifier Floating, and successive-cyclic movement with binding ambiguities. Kang suggests that they can be accounted for if CP and vP are not phases in Korean. She deduces the lack of CP phasehood from the absence of TP, taking into account Chomsky's (2008) C^0–T^0 association and Takahashi's (2011) case-valuation analysis of phase heads.

A TP-less analysis has also been proposed for some of the languages that are traditionally assumed to have overt tense morphology. For example, Haider (1993, 2010) argues that there is no substantial evidence for the existence of TP (his IP) in German. His argumentation is based on the observation that with the exception of V2 structures, the verb remains in its base position within VP. It raises to C^0 in V2 contexts, and CP is the only functional projection for which he sees evidence in the German clause structure. In his view, there is in fact considerable counterevidence for an IP/TP projection in German, such as the lack of V–to–I verb movement, the unavailability of expletives in the middle field in subjectless clauses, and the possibility of extraction out of a subject (as shown in 70a), which is prohibited in languages such as English, in which the subject is located in Spec, TP (see 70b).

(70) a. Mit wem$_i$ hätte denn [t$_i$ speisen zu dürfen] dich mehr gefreut?
with whom had PRT dine to be-allowed you$_{ACC}$ more pleased

b. *Whom$_i$ would [to have dinner with t$_i$] please you?
b'. Who$_i$ would it please you [to have dinner with t$_i$]?

(German, Haider 2010: 208, 1993: 159)

Another language that may lack the TP projection is Turkish, although traditionally it has been assumed to have tense morphology given that the verb can be marked for the aorist. This is a somewhat controversial issue. For instance, Yavaş (1981, 1982) and Giorgi and Pianesi (1997) have argued that the aorist morphemes are in fact aspect and modal markers. Bošković (2012) points out that even if the

aorist forms were taken to represent temporal morphology, Turkish may still not project the TP layer. Namely, on the assumption that tense can be represented in two different structural positions, T^0 and V^0, it might be the case that the tense feature is only interpretable on V^0 and the temporal specification comes from the verb in V^0 (see Bošković 2012 for details of this analysis). In such a scenario, there might be no semantic requirement or need for the presence of TP in a language like Turkish. A TP-less analysis actually receives empirical support from observations by Zanon (2014), who shows that it is better suited to explain potential combinations of affix stacking, the distribution of question particles, and the ways that the verb interacts with negation.

There have also been accounts questioning the availability of TP in some Slavic languages; see, for example, Paunović's (2001) analysis of verbal morphology in Serbo-Croatian. Although she does not take a stance about the presence of TP, she shows that temporal interpretation in Serbo-Croatian is derived only from aspect and mood and that tense is not grammaticalized in this language. More recently, Todorović (2015a) has provided arguments against the existence of TP in Serbo-Croatian on the basis of the availability of VP-ellipsis. Namely, she observes a contrast between Serbo-Croatian and European Portuguese with respect to sensitivity of VP-ellipsis to finiteness. As shown in (71), ellipsis of a non-finite VP (as in the case of the VP containing the *l*-participle *pobedio* or the infinitive *pobediti*) is possible in Serbo-Croatian even when the antecedent is finite (as in the case of the VP with the verb *pobedi*). Thus, finiteness mismatches do not prevent VP-ellipsis in Serbo-Croatian.

(71) ?Ivan povremeno pobedi Mariju, a Petar je samo jedanput
Ivan occasionally $\text{wins}_{\text{PERF}}$ Marija and Petar is_{AUX} only once
~~pobedio Mariju~~/će samo jedanput ~~pobediti Mariju~~
$\text{win}_{\text{PART.PERF.M.SG}}$ Marija/will only once $\text{win}_{\text{INF.PERF}}$ Marija
"Ivan defeats Marija from time to time, while Petar has defeated Marija/will defeat Marija only once" (S-C, Todorović 2015a)

By contrast, as indicated in (72a), although European Portuguese is a verb-raising language and permits VP-ellipsis in general, VP-ellipsis is precluded if there is a finiteness mismatch between the antecedent and the target, as in (72b–c), in which the finite verb is antecedent for the infinitival form. The examples given in (72) are quoted in Todorović (2015a).

(72) a. O João já tinha lido este livro, mas a Maria não tinha ~~lido este livro~~
the João already had read this book but the Maria not had read this book
"João had already read this book, but Maria hadn't"
(European Portuguese, Nunes and Zocca 2009)

b. *O João trabalha e a Ana também há-de ~~trabalhar~~
the João works and the Ana also has-to work
"João works and Ana also has to work"

c. *A Maria estudou muito, mas o João não vai ~~estudar muito~~
the Maria studied very hard, but the João not goes study much
"Maria studied very hard, but João will not"
(European Portuguese, Cyrino and Matos 2005)

Todorović (2015a) proposes to derive the impossibility of finiteness mismatches by following Nunes and Zocca (2009), who assume that finite verbs move to T^0 in Portuguese, where they enter into a checking relation with T^0. She suggests that since non-finite verbs do not have a Tense (T) feature, they do not satisfy the feature identity requirement for ellipsis (see, for example, Merchant 2008). Thus, in her view finiteness mismatches are not tolerated in VP-ellipsis if there is a T feature on finite forms of verbs.

Conversely, finiteness mismatches are tolerated in Serbo-Croatian because this language does not have TP, so there are no T features available to begin with. Since there are no T features that could bring about the mismatch between finite and non-finite forms, structures with VP-ellipsis such as the one in (71) are well-formed in Serbo-Croatian.

As in the other accounts postulating the lack of TP in some languages presented in this section, Todorović's (2015b) analysis derives a crosslinguistic contrast attributed to the presence or absence of the TP layer which on the surface does not seem to be directly related to the presence or absence of tense morphology. This fact implies that the availability of TP is an implicational parameter, whose particular setting may have far-reaching consequences for different syntactic properties in respective languages.

4.3.4.1. Diachronic studies questioning the universality of TP

The idea that TP is not a universal projection has also been assumed in a number of diachronic studies. Thus, according to some analyses, the presence of TP is a matter of parametric variation and TP may emerge (or decline, as assumed in this chapter) in some languages as a result of a diachronic change. For instance, Van Gelderen (1993) posits that the category T^0 evolves at the end of the Middle English period (ca. 1380) and coincides with the rise of *do*-support. Kiparsky (1996), who adopts Van Gelderen's analysis, suggests that the rise of T^0 (his I^0) is responsible for the OV to VO shift in Germanic. A TP-less approach has also been postulated for Old English by Osawa (1999). She refers to a common assumption pursued in Indo-Europeanist studies (see section 4.3.3.1 above) that aspectual morphology predates the emergence of morphological tense, though she argues that tense and aspect are conceptually different and developed independently. The separation of tense and aspect is in her view also supported by the findings of research on first language acquisition. Namely, crosslinguistic acquisition data from languages such as Modern Greek, German, French, Irish, Spanish, and English investigated by Tsimpli (1996) indicate that children rec-

ognize aspectual distinctions at the prefunctional stage. By contrast, early child utterances (around 20 months) do not show past or present tense inflection (see Radford 1990 and Tsimpli 1996), which suggests that functional categories, including Tense, emerge much later.

Osawa (1999) captures the diachronic separation of tense and aspect by suggesting that in spite of the presence of aspectual distinctions in early Indo-European languages, aspect did not project as a functional temporal category in the structure, and that the functional category T^0 arose only at a later stage. This suggestion indicates in turn that early languages such as Ancient Greek did not have the TP layer and expressed temporal distinctions via alternative devices, such as particles or adverbs. Her proposal correlates with Kiparsky's (1968: 44) conjecture that tenses historically derive from adverbs in Indo-European. Kiparsky's hypothesis is based on the observation that some tense morphemes in Indo-European languages can be traced back to adverbs or particles. In his view, this observation receives support from a syntactic parallelism between adverbs and tense morphemes: it is not possible to stack more than one temporal adverbial per clause (see 73), the way only one tense morpheme can occur on a verb.

(73) a. *He came formerly earlier
b. *He came some time ago previously (Kiparsky 1968: 47)

Osawa (1999) provides empirical evidence suggesting that TP was missing in Old English in spite of the presence of past tense morphemes. Her evidence includes the absence of *do*-support, modal auxiliaries, the auxiliary *have*, and the lack of the subject requirement. For instance, *do*-support[55] is not attested in Old English: sentential negation was formed by placing the negative particle in front of or after the verb, while questions were formed via inversion of the lexical verb across the subject, as shown in (74) and (75).

(74) He ne held it noght
he not held it not
"He did not hold it" (OE, *Minor Poems* 36, Osawa 1999: 534)
(75) Canst þu temian hig
know you tame them
"Do you know how to tame them?" (OE, Ælfric's Colloquy 31/129, Osawa 1999: 534)

Do-support is evidently a T^0-related phenomenon, as it occurs so that Tense (and agreement) features could be discharged onto the verb. It does not affect verbs that are merged under T^0, such as modal verbs. *Do*-support is not attested in Old English, as in Osawa's view TP was not available then. Interestingly, Osawa observes

[55] See Osawa's (1999) work for details about the emergence of the other phenomena. The way modal verbs arose as a separate class of verbs in English is described in the Introduction. See also Migdalski (2007) for a discussion of the rise of the "have"-perfect in Kashubian and Macedonian, the only Slavic languages that use the verb "have" as an auxiliary.

a similarity between the structure of Old English and the properties of early child English grammar, which also lacks modals, *do*-support, and the auxiliary *have*. This similarity indicates that TP is not available in child grammar (see also the discussion above), the way it was not present in Old English, and that it emerges only at a later stage.

4.3.4.2. Bošković's (2012) postulate of the non-universality of TP

Many of the recent analyses outlined in this section, as well as the one presented in this work, have been influenced by Bošković's (2012) recent proposal about the non-universality of TP. In line with some previous accounts, Bošković posits that there is parametric variation between languages with respect to the presence or absence of the TP layer. However, he argues further that TP is projected only in those languages that also have the DP layer in the nominal domain, which, on the assumption that DP is projected only in languages with articles, implies that languages without articles are also the ones without TP. A number of observations have been made in the literature in support of the link between the TP and DP projections. For example, in their overview of the literature on the structure of noun phrases, Alexiadou, Haegeman, and Stavrou (2007, ch.1) as well as Giusti (2012: 205) point out that on the assumption that possessors perform the grammatical function of "subjects" in noun phrases, DPs could be argued to be counterparts of TPs (rather than CPs) in view of the fact that in many languages determiners are in complementary distribution with possessors (including both genitive DPs and possessive pronouns).

On his own part, Bošković (2012) bases the TP/DP parallelism on Chomsky's (1986) idea that Spec, DP is the landing site of the counterpart of movement to Spec, TP in nominalizations such as *John's destruction of the city*. In his earlier work (Bošković 2008) he refers to a number of syntactic and semantic contrasts observed between languages with articles and those that lack the definite article. These contrasts include the possibility of Left Branch Extraction, superiority violations in multiple *wh*-movement, the unavailability of clitic doubling or more than one genitive per noun phrase in languages without articles (following Willim 1999, 2000). He derives these generalizations by assuming that there is a fundamental difference in the syntax of noun phrases in languages with and without articles, as DP is projected only in the former group of languages. He also states that in fact it would be quite difficult to capture all these regularities without postulating additional stipulations if both types of languages were assumed to be equipped with the DP layer.

Correspondingly, Bošković observes that TP-less languages share many properties which can be accounted for most straightforwardly with the proviso that the TP layer is not universally present. For instance, languages without TP lack expletives. Since the role of expletives is to satisfy the EPP, which

is a requirement of the TP projection, these elements cannot be present in languages that lack TP.

Another contrast that, according to Bošković (2012), is related to the presence of TP concerns certain subject-object asymmetries (see also the discussion of English and German data in 70). In English extraction is possible out of objects, but not out of subjects (see 76). Likewise, English allows extraction of an object, but not of a subject across a clause-mate *that*. The latter constraint is referred to as the *that*-trace effect (see 77).

(76) a. *Who did friends of see you?
b. Who did you see a friend of?

(77) a. Who$_i$ do you think that John saw t$_i$?
b. *Who$_i$ do you think that t$_i$ saw John?

Interestingly, it seems that these restrictions crosslinguistically apply only if the subject is located in Spec, TP. Gallego and Uriagereka (2007) observe that in Spanish, a language without the *that*-trace effect, extraction of the type exemplified in (76) is not allowed, but the restriction applies only to preverbal subjects, that is those that are hosted in Spec, TP. Extraction out of postverbal subjects is permitted. Bošković notes that his examination of a large sample of languages demonstrates that DP-less languages do not display the subject-object asymmetries presented in (76) and (77). This observation provides support for his hypothesis that article-less languages lack the TP layer and that the subjects in these languages land in a different projection than Spec, TP.

Another well-established TP-related property is nominative Case assignment. Hence, a legitimate question that arises on the assumption that some languages lack TP concerns the way this case is licensed in such languages. Bošković (2012) suggests a number of potential solutions. First, nominative case may be assigned by another functional projection, such as AgrsP if IP is split into TP and AgrsP. This type of case assignment has in fact been postulated for Turkish (see Kornfilt 1984, 2005, 2006), which lacks articles and TP (see the discussion in section 4.3.4 above). Another possibility is that nominative case is not a structural case in (some of the) TP-less languages. This type of argument has been put forward for Japanese by Saito (1985), and it is based on the observation that *-ga* in Japanese does not exhibit typical properties of a structural case. For instance, Fukui and Sakai (2003) point out that *-ga* may occur on elements that do not have to be syntactic constituents and that are not necessarily NPs. Thus, *-ga* is also found on PPs and clauses that are headed by the quantifier *-ka* 'Q.' A third option for nominative case assignment in TP-less languages may be valid for those languages in which, in contrast to Japanese, nominative case does not display exceptional behavior. In such languages nominative case could be the default case, which is the one that is used in an out of the blue context. Bošković points out that nominative case is in

fact the default case in all the DP/TP-less languages he has investigated, including article-less Slavic languages as well as Turkish, Hindi, and Korean. Conversely, in TP/DP-languages such as English and French, default case is accusative, as shown for the pronoun in (78).

(78) Me/*I intelligent?!

The final contrast between TP and TP-less languages observed by Bošković that is discussed here is the phenomenon of the sequence of tense, which is not found in languages without the TP layer. It is illustrated in (79) and (80) for English. Example (79) shows ambiguity between the anteriority reading and the non-past/simultaneous reading. In example (80), by contrast, the time of the sickness must contain both the time of Jim's believing as well as the utterance time (see Sharvit 2003).

(79) Jim believed that Alice was sick
Non-past/simultaneous reading: Jim's belief: Alice is sick (time of the alleged illness overlaps Jim's now)
Anteriority reading: Jim's belief: Alice was sick (the time of the alleged sickness precedes Jim's now)

(80) Jim believed that Alice is sick
The time of the alleged sickness contains the time of Jim's believing state and the utterance time (Bošković 2012)

The interpretations that obtain in languages that do not have the sequence of tenses are illustrated in (81) and (82) for Serbo-Croatian and Polish. Thus, the embedded clauses in (81) contain a verb marked for the present tense and these clauses have the non-past, or more generally, the simultaneous interpretation that corresponds to the one found in the English example in (79). However, the examples in (82), where the verb in the embedded clause is interpreted as marked for the past tense, may only have the anteriority reading.

(81) a. Jovan je vjerovao da je Marija bolesna
Jovan is$_{AUX}$ believe$_{PART.M.SG}$ that is Marija sick
"Jovan believed that Mary is sick" (S-C, nonpast/simultaneous)

b. Jan myślał że Maria jest chora
Jan think$_{PART.M.SG}$ that Maria is sick
"John thought that Mary is sick" (Pl, nonpast/simultaneous)

(82) a. Jovan je vjerovao da je Marija bila bolesna
Jovan is$_{AUX}$ believe$_{PART.M.SG}$ that is$_{AUX}$ Marija be$_{PART.F.SG}$ sick
"Jovan believed that Mary was sick" (S-C, only anteriority)

b. Jan myślał że Maria była chora
Jan think$_{PART.M.SG}$ that Maria be$_{PART.F.SG}$ sick
"John thought that Mary was sick" (Pl, only anteriority)

Bošković observes that languages without articles or tense morphology do not exhibit the sequence of tense. This is to be expected: since this phenomenon is clearly related to the TP layer, it is anticipated that it does not occur in languages that lack this projection.

On the theoretical side, Bošković proposes a licensing mechanism that holds for functional categories such as D^0 and T^0, which requires that an (unvalued) interpretable feature of a functional category be morphologically realized. In the case of D^0, the relevant feature is Number. Following Longobardi's (1994) insight, Bošković postulates that there exists a feature checking relation between D^0 and N^0, which includes Agree (understood in Longobardi 1994 as a spec-head relation) for the number feature. This requirement may be satisfied in three ways, which are related to the locus of the morphological realization: on D^0, as in French (see 83a) and colloquial Brazilian Portuguese, on N^0, as in English (see 83b), or on both N^0 and D^0, as in Bulgarian (see 83c).

(83) a. [lə livr] [le livr] (French)
the$_{SG}$ book the$_{PL}$ book
b. the book the books (English)
c. grad-ət gradove-te (Bg, Bošković 2012)
city-the city$_{PL}$-the$_{PL}$

Importantly, all the languages exemplified in (83) project the DP layer, which forces an overt realization of number morphology. As for DP-less languages, Bošković suggests that the licensing condition on number realization is irrelevant in such languages, given that they do not have the DP layer. In other words, the existence or the way number morphology is expressed in such languages is determined by their individual morphological properties.

Bošković (2012) extends the licensing mechanism that holds for D^0 to other functional categories and features, including the verbal domain. Following Pesetsky and Torrego (2007), he assumes that there is an Agree relationship between T^0 and V^0, in which T^0 has an unvalued interpretable tense feature, while V^0 has a valued uninterpretable tense feature.

(84) T (unvalued *i*Tense) V (valued *u*Tense)

Since the tense feature of T^0 is interpretable and unvalued, it must be morphologically expressed. This is what happens in English, where the opposition between the *-ed* morpheme versus *Ø* renders the contrast between the past and the present tense. The exception is the present tense in English, which is not morphologically expressed, except for the third person singular morpheme *-s*, though this morpheme most likely only expresses a *φ*-feature specification, rather than a tense feature (see Enç 1991).

As in the case of the DP projection, the implication of the licensing condition is that if the TP projection is missing, this condition is irrelevant and tense does not need to be morphologically expressed in a language. Thus, the requirement for overt morphological tense realization holds only if TP is present. Importantly, this is a one-way correlation. There is a potential scenario of verbs carrying morphology that is traditionally assumed to represent tense, as in the case of Turkish and the aorist forms in modern Serbo-Croatian (see section above). Bošković posits that tense morphology does not require postulating the TP projection for such languages. He points out that in (84) tense is represented in two different projections (T^0 and V^0), but it is interpreted only in T^0. It is equally possible that in some languages the tense feature is on V^0. In these languages the temporal interpretation may come from the verb and there is no semantic need for postulating T^0 to make temporal interpretation possible.

In the next section I adopt the hypothesis of the non-universality of TP in order to account for the diachronic changes in the cliticization patterns in Slavic that were overviewed in section 4.3. I show that verb-adjacent cliticization is contingent on the availability of T^0. I also present the implication of Bošković's licensing condition for intermediate stages of language change, such as the ones instantiated by Serbo-Croatian presented in section 4.3.3.2 and Slovenian, which are discussed later in this chapter, in sections 4.4.2 and 4.6.2.2.

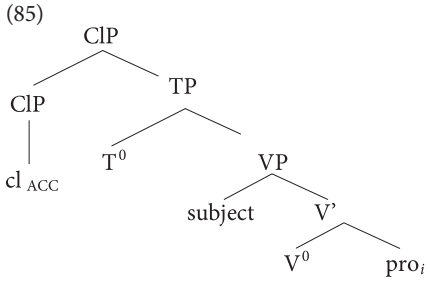
4.4. Tense marking and cliticization

This section presents an analysis of the diachronic changes in the cliticization patterns described in section 4.3 in relation to the theoretical background concerning the non-universality of the TP layer assumed in section 4.3.4.2. The general idea pursued here is that pronominal clitics shift from verb-adjacency to second position when TP is lost in a language.

4.4.1. Background assumptions about cliticization

Most of the theoretical accounts of cliticization that have been put forward in the literature are based on the properties of Romance cliticization, in which pronominal clitics are verb-adjacent. By and large, there exist two major analyses of verb-adjacent cliticization. Jaeggli (1982), Borer (1983), and Sportiche (1983) postulate that clitics are functional heads (Cl^0) of Clitic Phrases (ClP) in the extended projections of VP and that they bind the *pro* in the argument VP positions. This analysis is presented in the phrase structure in (85).

(85)



Matushansky (2006: 84) points out a number of problematic issues with this proposal. She observes that from a theoretical point of view, it is problematic to propose heads in the extended VP projection that do not have verbal semantics but which rather suspiciously resemble DPs in most Romance languages (for instance, the 3rd person accusative clitics are homophonous with articles in French, see Zribi-Hertz 2008). Furthermore, Matushansky remarks that the assumption of the required binding relation between the clitic and the *pro* involves formation of a head–XP chain, which is theoretically questionable.

According to the other analysis, which dates back to Kayne (1975) and Sportiche (1989), and which will also be followed in this work, clitics are ambiguous categories that have both XP and X^0 properties. This assumption is also adopted by Chomsky (1995: 249) in support of his Bare Phrase Structure approach, which makes this type of ambiguity possible. In this analysis, clitics raise from their phrasal theta-positions within VP and move as maximal elements with respect to locality so that the Head Movement Constraint is not violated. However, they adjoin to an inflectional/tense head as heads rather than maximal projections without violating the Chain Uniformity Condition. The issue that has sometimes been left open in the literature is the timing of this operation; that is, whether the clitics are adjoined to T^0 or whether they adjoin to the verb when it is in a lower position and then move and adjoin together with the verb to T^0 (see Matushansky 2006 for a discussion). I assume that the exact procedure of the cliticization may depend on whether the verb reaches T^0 in a particular language, and in that scenario, the clitics may target T^0 together with the verb. What matters for the current analysis is that verb-adjacent cliticization is contingent on the presence of T^0, so clitics may not cliticize on the verb if T^0 is absent.

Even though there is a general agreement in the literature that verb-adjacent pronominal clitics target T^0, the exact motivation for this process is a matter of debate. According to some analyses, the adjunction of clitics onto (the verb) in T^0 is driven by PF requirements. For example, Belletti (1999: 550) proposes that pronominal clitics reside in agreement projections before raising to T^0. She assumes that agreement projections are not strong heads, which means that they may not contain any lexical material that still has semantic import at PF. Therefore, she

suggests that they must be emptied before Spell-Out, which results in clitic adjunction to T^0. A problematic aspect of this account is that it presupposes look-ahead in the derivation of cliticization.

Correspondingly, two recent analyses proposed by Bošković (2016) also relate clitic adjunction to T^0 to a PF dependency. In the first analysis he assumes that clitics are D-heads. A general property of functional heads is that they cannot be stranded. Consequently, they either require a specifier or a complement in their projection or they need to assume a head-adjunction configuration. One way in which clitics may circumvent being stranded is via incorporation into the V/T complex. In this way they are also able to check case through incorporation.

Bošković's (2016) second, alternative account, referred to by him as the *pro*-identification account, does not adopt Chomsky's (1995) assumption that clitics are non-branching elements sharing XP and X^0 properties but rather it rests on Jaeggli's (1986) and Sportiche's (1996) analyses discussed above, which assume the existence of a null *pro* in structures with verb-adjacent clitics. Bošković modifies these traditional analyses and proposes that verb-adjacent clitics are D+*pro* complexes, with D^0 being a clitic itself that takes a *pro* as its complement. *Pro* needs to be licensed, and this can be done through verbal morphology, similarly to the way subject *pro* is licensed in null-subject languages with rich verbal agreement such as Spanish. Hence, D-clitics in the form of the D+*pro* complex must move to V+T for *pro* licensing. Alternatively, the clitics may also be base-generated as adjoined to T^0 and thus be provided with the verbal morphology required for *pro*-licensing in the base position. A potential objection that may be raised against Bošković's analysis is related to properties of the so-called radical *pro*-drop phenomenon, which occurs in the absence of rich verbal agreement. Bošković points out, however, that this objection is not relevant because radical *pro*-drop is attested only in languages without articles (such as Chinese, Japanese, Hindi, Mongolian, and Turkish), whose pronouns are NPs rather than DPs. This means in consequence that pronominal clitics are not D+*pro* complexes in the radical *pro*-drop languages.

Without appealing to PF-requirements, Nash and Rouveret (2002: 177) attribute the cliticization on T^0 to a requirement that forces clitics to become adjoined to a "substantive" category specified for active φ-features. This is an interesting proposal in the sense that it allows capturing the correlation between verb-adjacent cliticization and the PCC effect, which is related to the φ-feature specification on pronominal clitics. Recall that as I observe in section 4.2.5, the PCC holds in languages with verb-adjacent clitics, whereas in languages with second position clitics or weak pronouns, no strong PCC violations are attested. Assuming Anagnostopoulou's (2003) account of the PCC, I use the presence of the PCC effect as a test for the T^0-adjunction of pronominal clitics. I suggest that verb-adjacent cliticization proceeds in the following way: the auxiliary forms are merged in T^0 (except for the 3rd person auxiliary, which occurs lower than the pronominal clitics (see section 3.3 in Chapter 3) and is generated in Aux^0), while the pronom-

inal clitics originate within VP, from which they climb up the structure. The dative clitic moves out first; subsequently it lands in T^0 by adjoining to the auxiliary or the finite verb if it is present there and checks the person feature of T^0. Next, the accusative clitic raises from VP and checks the remaining number feature on T^0, tucking in beneath the dative clitic. The derivation may converge only if the accusative clitic carries just a number feature, and not a person feature, since the latter has already been checked by the dative. Assuming, as is standard, that 3rd person pronouns contain only a number feature, they are the only eligible candidates for the operation. If a non-3rd person pronominal clitic raises, the derivation crashes, as the person feature on the accusative remains unchecked. The derivation is presented in (86).

(86) $[_{TP}\ [_{T}\ <cl_{DAT}>_i + <cl_{ACC}>_j + T] \ldots [_{Aux}\ (e)\ [_{VP}\ V\ t_i\ t_j]]]$

I assume that the derivation may only take place if T^0 is present or else there is no suitable head for the clitics to adjoin to. In the absence of T^0, each pronominal clitic will raise to specifiers of a different functional head in the extended VP projections ending up in second position, the way it happens in languages such as Serbo-Croatian. Thus, I propose a generalization which says that verb-adjacent cliticization is possible only in the presence of T^0. On the assumption that T^0 is present only in languages with tense morphology, verb-adjacent clitics are contingent on the availability of overt tense marking.

4.4.2. The relation between the richness of tense and the cliticization pattern

The generalization developed in the previous section is supported by synchronic considerations, as the only two modern Slavic languages with verb-adjacent clitics, Bulgarian and Macedonian, are also the only ones that make explicit tense distinctions,[56] as well as by the diachronic data overviewed in sections 4.3 on clitics and in section 4.3.3 on tense marking. These data show (as I also observe in Migdalski 2013 and 2015) that the emergence of second position cliticization is contemporaneous with the loss of tense morphology in Slavic. Thus, as has been noted in section 4.3.2, among the Serbian/Croatian dialects verb-adjacent pronominal clitics were attested the longest in Montenegro, where they were still found in the 19th century.[57] Correspondingly, Montenegro is also the area where the aorist is

[56] Outside Slavic, this generalization may be supported by Philippine languages, which have second position clitics and express temporality by aspectual distinctions.

[57] An anonymous reviewer of Migdalski (2013) points out that the Montenegrin national epic *Gorski vijenac* by Petar II Petrović-Njegoš (published in 1847) contains aorist and imperfect tenses, but its clitics are located in second position. I suggest that it might be possible that the tense morphology does not necessarily correspond to temporal interpretations in this text, as in

still found in contemporary fiction writing in the function of a narrative tense (Lindstedt 1994: 39) and where it is more commonly used than in Croatia or Serbia.

Although the diachrony of pronominal cliticization in Slovenian has not yet been addressed in this chapter, an anonymous reviewer of Migdalski (2009a) points out that in Old Slovenian pronominal clitics shifted to second position very early, as they are found already in *The Freising Manuscripts*, the oldest Slovenian manuscript from the 10th–11th century. Three sentences exemplifying second position cliticization in *The Freising Manuscripts* are given in (87).[58]

(87) a. I′ vueruiú da *mi* *ie* na ʒem zuete bĕvši
and believe$_{1SG}$ that me$_{DAT}$ is$_{AUX}$ on this world was$_{PAST.ACT.PART}$
"And I believe that, having been in this world…"
b. I da *bim* na zem zuete tacoga grecha pocazen vzel
and that be$_{COND.1SG}$ on this world such sin penance take$_{PART.M.SG}$
"And that I may in this world accept penance for such sin"
c. paki *se* uztati na zodni den. Imeti *mi* *ie* sivuot
again REFL rise$_{INF}$ on judgment day have$_{INF}$ me$_{DAT}$ is life
"And to rise again on the day of judgement. I am to have life"
(10th–11th c. Slo, *Glagolite po naz redka zloueza*, *The Freising Manuscripts*)

The availability of second position cliticization in *The Freising Manuscripts* coincides with Vaillant's (1966: 60) observation that the aspectual tenses were lost early in Old Slovenian, and in the earliest texts the aorist is limited to certain verb forms. In his overview of various analyses of tense marking in the history of Slovenian, Lindstedt (1994: 35–36) shows that the situation is somewhat more complex. Although some scholars (such as Dejanova 1986: 289) posit that the aorist in *The Freising Manuscripts* occurs only as a relic and that the complex tense formed with the *l*-participle took over its temporal function, Lindstedt (1994: 35) observes that although the aorist is virtually not found in its primary, narrative function in *The Freising Manuscripts*, it is attested in a few "short narrative-like passages" along with the imperfect, and that the aorist and imperfect morphology entirely disappeared from Slovenian only toward the end of the Middle Ages (Lencek 1982: 115). I interpret these facts by assuming that they resemble the current situation concerning the presence of the aorist in Serbian, discussed in section 4.3.3.2: the morphological exponents of the aorist may have sporadically been found in Old Slovenian but presumably they did not perform their primary function of marking temporality.

the Serbo-Croatian examples discussed earlier in section 4.3.3.2. Furthermore, noting that texts of this type are frequently archaic in nature, I propose that such examples may instantiate grammar competition in the sense of Kroch (1989), with two competing analyses of the same linguistic phenomenon in the native speakers' individual grammars during the process of language change.

[58] Interestingly, these examples also contain the auxiliary verb "to be" and the tenseless *l*-participle, a structure that was very rare in Old Church Slavonic and Old Serbian.

As far as Czech is concerned, Stieber (1973: 53) reports that both aorist and imperfect were lost in Czech in the 14th century. The decline may have correlated with the shift of pronominal clitics to second position. Still, although pronominal forms were verb-adjacent in Old Czech, the data are not entirely conclusive because it is not clear whether they were clitic or tonic elements (Pavel Kosek, p.c., see also Kosek 2011).

The empirical facts presented in this section indicate that the availability of tense morphology is a necessary condition for verb-adjacent cliticization. This generalization is supported by the observations concerning the timing of the decline of simple tenses in different Slavic languages, which coincides with the switch of pronominal clitics from verb-adjacency to second-position placement. I have proposed that the richness of tense marking corresponds to the presence of the TP layer in the clausal structure. Once T^0 is lost, pronominal clitics do not have a suitable host for cliticization with active φ-features and become reinterpreted as second position clitics, each of them targeting a separate specifier in the extended functional projection of the verb (as in Stjepanović's 1998, 1999 analyses of cliticization in Serbo-Croatian; see section 4.2.1) or, as will be shown in section 4.6, they may be reanalyzed as weak pronouns.

Interestingly, a reversal of this process has been argued for by Condoravdi and Kiparsky (2002) for Ancient Greek. Homeric Greek was a TP-less (IP-less for Condoravdi and Kiparsky, as well as an article-less) language, in which according to Condoravdi and Kiparsky, pronominal clitics adjoined to CP via Prosodic Inversion, surfacing in second position. Condoravdi and Kiparsky postulate that with the emergence of TP in later Classical Greek, pronominal clitics adjoin to T^0, whereas finite verbs may move to C^0. Thus, their study indicates that the reversal of the process examined in this section is also possible and that the emergence of the TP layer may result in a shift of second position clitics to verb adjacency.

It is still necessary to address two theoretical issues. First, a question that arises is why Wackernagel clitics, which are merged in argument positions within VP, raise to second position in spite of the absence of T^0, which is a licensing head for verb-adjacent cliticization. This movement certainly cannot occur due to a prosodic requirement given that the clitics are suitably supported in their base positions. I assume that this process reflects a general tendency of prosodically light elements to surface in a position towards the left periphery of a clause. It may be also triggered by the semantic requirement that all pronominal elements, which are by default referential, must be evacuated out of VP in view of Diesing's (1990b, 1992) Mapping Hypothesis (see also Uriagereka 1995 for details of a similar proposal in relation to verb-adjacent cliticization in Romance). A different hypothesis explaining the obligatoriness of overt movement of Wackernagel clitics has been recently put forward by Bošković (2016), who, referring to his earlier argumentation in Bošković (2001), suggests that pronominal clitics raise to the specifiers of separate, case-licensing projections for case checking. This procedure is not avail-

able for verb-adjacent clitics, since in Bošković's (2016) view they are D-heads, whereas a general property of functional heads is that they may not be stranded (which is a scenario that would arise if verb-adjacent clitics were to move to separate, case-licensing projections). Consequently, verb-adjacent clitics license case in a different way, via incorporation to the V/T complex (see the discussion above in relation to Bošković's 2016 proposal). Still, I observe that Bošković's (2016) analysis does not readily account for the incorporation of the auxiliary clitics, which do not need case licensing but they still adjoin to T^0 or to the V/T complex. In Bošković's (2016) view, their adjunction is due to "a preference to treat them like pronominal clitics for uniformity." The problem of the non-uniform motivation for the movement of pronominal and auxiliary clitics faced by Bošković's (2016) account does not arise in the analysis pursued in this chapter. Thus, I propose instead that both auxiliary and pronominal clitics adjoin to T^0, which results in φ-feature checking. This idea is also independently supported by the PCC effects discussed in section 4.2.5.

The second theoretical issue to be addressed concerns the availability of the two cliticization patterns in language. The diachronic change that is examined in this section concerns a switch from verb-adjacent to second position cliticization, which becomes possible only when T^0 is lost and there is no suitable host for clitic adjunction. A question that may arise is why second position cliticization is not a valid option when T^0 is available as well as why clitic adjunction to T^0 is preferred over second position cliticization. In Migdalski (2013, 2015), I suggest that the preference for the T^0-adjacent cliticization is due to a principle of prosody-syntax mapping, which says that a syntactic constituent should ideally correspond to a prosodic word. This preference is observed in languages with verb-adjacent clitics, in which pronominal clitics are adjoined to a single head and at the same time they are parsed as a single prosodic constituent together with the verb, but not in languages with second position clitics, such as Serbo-Croatian, in which each pronominal clitic targets the specifier of a separate functional head. This preference, discussed in Migdalski (2013, 2015), is also addressed in Bošković (2016), who observes that it is not an inviolable requirement. Thus, in spite of the fact that clitics are verb-adjacent in Bulgarian and are syntactically proclitic, prosodically they are parsed as enclitics that are hosted by the element to their left. This means that clitics in Bulgarian must meet two conflicting requirements, illustrated by the data in (88). In (88a) the pronominal clitics are preverbal, in accordance with their syntactic requirement for proclisis, whereas their prosodic need for enclisis is satisfied by the clause-initial subject *Vera*. In (88b) the clitics are separated from the verb by the adverb *včera*, which violates the requirement for their verb-adjacency. In (88c) the prosodic condition of enclisis is not satisfied, whereas in (88d) the syntactic condition of proclisis is violated. Example (88e) indicates that the requirement of syntactic proclisis is suspended if the verb is located in the clause-initial position and the proclitic placement of clitics leads to a violation of the prosodic requirement.

(88) a. Vera *mi* *go* dade včera
Vera me$_{DAT}$ it$_{ACC}$ gave$_{3SG}$ yesterday
"Vera gave it to me yesterday"
b. *Vera *mi go* včera dade
c. **Mi go* dade Vera včera
d. *Vera dade *mi go* včera
e. Dade *mi go* Vera včera (Bg, Franks and King 2000: 63)

Bošković (2016) points out that the situation in which clitics have divergent prosodic and syntactic requirements is crosslinguistically rare and is in fact also unstable, given that Bulgarian clitics seem to be undergoing a reanalysis, switching into proclitics on the following verb, on a par with Macedonian (see Bošković 2001, ch.4 for details).

Summarizing, this section has proposed a generalization which states that verb-adjacent cliticization may be available only in those languages that have tense morphology. Only such languages may project TP, whose head is a suitable landing site for verb-adjacent clitics. The generalization has been developed on the basis of diachronic properties of pronominal cliticization in Slavic, in which the shift from verb-adjacency to second position was contemporaneous with the loss of morphological tense marking.

4.5. Alternative analyses of the diachrony of cliticization in Slavic

This section overviews three alternative analyses of the changes in the position of clitics in Slavic which have been recently put forward by Zaliznjak (2008), Tomić (2000), and Pancheva (2005, 2008). Zaliznjak's account, which is overviewed in section 4.5.1, focuses on Old East Slavic (mainly Old Russian), whereas Tomić's contribution, presented in section 4.5.2, develops a hypothesis that links changes in the cliticization patterns to the weakening of case morphology, though it does not explicitly discuss diachronic data. Pancheva's analysis, which is scrutinized in section 4.5.3, is a detailed diachronic study of the position of clitics in the history of Bulgarian and Old Church Slavonic that attributes the modification of the cliticization system to a parametric switch in the directionality of the T-head.

4.5.1. Zaliznjak's (2008) analysis of cliticization in Old Russian

Zaliznjak (2008) develops an analysis of cliticization patterns found in Old Russian and other Old East Slavic dialects. He bases his study on the language of Novgorod birchbark *gramoty*, which are chronicles coming from the 11th century. In contrast to the Old Church Slavonic relics, they are claimed to have been written by common people who happened to be literate rather than by educated churchmen,

so presumably they are more likely to represent the everyday language used by the speakers. Zaliznjak observes that the clitics in the language of the *gramoty* strictly occur in second position. Furthermore, he notices that other East Slavonic relics, written outside Novgorod areas, also display a relatively strict second position placement of clitics. The second position placement is particularly prominent in the documents that do not contain passages influenced by Old Church Slavonic quotations. Correspondingly, second position placement of clitics is also attested in some Ukrainian dialects and the dialects that later developed into the Rusyn language.

Zaliznjak's empirical observations are certainly interesting, but there are a few problems with his analysis and the theoretical assumptions that he makes. Thus, Zaliznjak (2008: 51) proposes a (non-standard) distinction between strong clitics and weak clitics. The distinction is non-standard because it does not refer to phonological "strength" or "weakness" of these elements. In Zaliznjak's analysis, strong clitics comprise the focus markers *že* and *li*, the complementizer *bo,* and the ethical dative *ti*, which means that they constitute the same class as the elements that are referred to as operator clitics in this work. Weak clitics include dative pronouns *mi, si, ti,* accusative pronouns *mę, sę, tę*, and the copula. These two types of clitics display different distribution in the clause. Whereas the strong clitics appear in second position without exception, weak clitics may occur lower in the clause. Furthermore, Zaliznjak (2008: 54) suggests that clitic placement is governed by "rhythmic-syntactic barriers," which he classifies into obligatory, semi-obligatory, and optional ones. Obligatory barriers hold for all clitics, while the semi-obligatory barrier applies only to weak clitics. A barrier may be clause-initial, but it may also occur somewhere lower in the clause. For example, it may be placed right in front of a non-clause-initial constituent that precedes a clitic. In such a scenario, even if weak clitics appear below the clause-initial constituent, for Zaliznjak they will still occur in second position and will still count as Wackernagel clitics due to the application of the barrier.

The application of barriers is exemplified in (89), in which *že* is a strong clitic obligatorily occurring in second position. Although the clitic *sja* (89a) and the sequence of two clitics *mi* and *sę* in (89b) are lower in the structure, they are still analyzed as second position clitics in Zaliznjak's system because, on his stipulation, a rhythmic-syntactic barrier precedes *mnogo* and *vorogъ*, respectively. Note that the pronominal clitics in (89) display a similar distribution to the one found in languages such as Bulgarian and Macedonian, so in actuality they may be verb-adjacent (a fact possibly disregarded by Zaliznjak).

(89) a. Toi *že* oseni mnogo *sja* zla sotvori
one$_{GEN}$ FOC autumn many REFL bad$_{GEN}$ made$_{AOR}$
"Many bad things happened this autumn" (OR, Zaliznjak 2008: 49)

b. On *že* nynĕ vorogъ *mi* *sę* oučinilъ
he FOC today enemy me$_{DAT}$ REFL make$_{PART.M.SG}$
"Today he has made me the enemy" (OR, Zaliznjak 2008: 51–52)

There are a number of problems with Zaliznjak's account. First, on the theoretical side the introduction of the "barriers" seems to be an ad hoc stipulation whose purpose is to capture the distribution of pronominal clitics lower in the clause, frequently adjacent to the verb. Second, in contemporary Slavic languages with second position clitics the clitic placement rule is in principle never violated and "barriers" of this type never seem to apply. This fact may indicate that in Old Russian pronominal clitics were not subject to Wackernagel's Law or that pronominal forms were weak pronouns. The latter assumption has been developed in Jung (2013) and Jung and Migdalski (2015) on the basis of extensive diachronic data and is also referred to in section 4.6 later in this chapter.

Since it is assumed that the Novgorod birchbark texts were written by the common people rather than by well-educated churchmen, a potential claim that might be made is that these relics are more likely to give the true insight into the syntax of Old Slavic than the Old Church Slavonic texts, as they were not influenced by the Greek vorlage. However, it has been pointed out in section 4.3 that Old Church Slavonic monks were careful enough to pay attention to semantic differences triggered by different tense forms that existed in the two respective languages. Moreover, a comparison of cliticization patterns in Old Greek and Old Church Slavonic carried out by Eckhoff (forthcoming; see section 4.3) shows that although the distribution of clitics was strikingly similar in both languages, the similarity is most likely due to their syntactic relatedness rather than "copying."

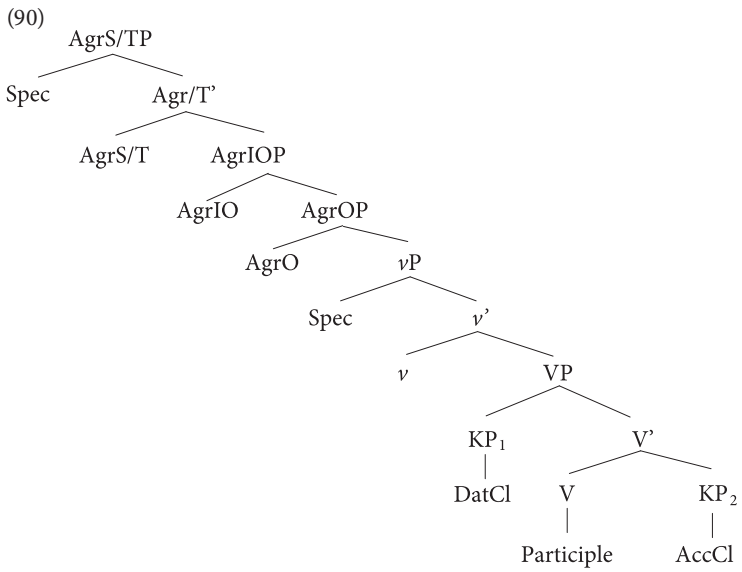
Zaliznjak's analysis is certainly interesting not only due to his empirical observations, but also because of the fact that he brings into focus the distribution of clitics in Old East Slavic. The only clitics found in contemporary East Slavic languages are the operator particles *li* and *že* and the conditional auxiliary *by*. These languages do not display any other auxiliary or pronominal clitics any more, thus their (diachronic) cliticization patterns had not received much attention. As has been mentioned above, recently Jung (2013) and Jung and Migdalski (2015) have developed an alternative account of the Old Russian clitic system. They show that the pronominal clitics in East Slavic were verb-adjacent before they were codified in Novgorod birchbark *gramoty* and other Old East Slavic relics, and switched to second position, only to be later reanalyzed as weak pronouns. As in the other Slavic languages, the switch was contemporaneous with the loss of tense morphology.

4.5.2. Tomić's (2000, 2004a) analysis of Old Slavic cliticization

This subsection presents Tomić's (2000: 294, 2004a) insight into the diachrony of cliticization in Slavic. Tomić does not quote any references on the topic or provide actual data; she follows the assumption that has been sometimes made in the traditional descriptions of cliticization (such as by Lunt 1974: 65 for Old Church Slavonic), which states that in old Indo-European languages clitics were initially enclitics occurring in second position. Subsequently, they became increasingly

proclitic and oriented towards T^0. Tomić captures this putative diachronic development by assuming that in Old Church Slavonic the pronominal dative and accusative clitics were generated in argument positions within VP. They raised from VP and moved to respective Agreement projections $AgrIO^0$ and $AgrO^0$ in order to check their agreement and case features. The structure before the movement of the clitics that is assumed by Tomić (2004a) is given in (90).

(90)



Tomić proposes that with the weakening of overt case morphology, which coupled with the weakening of case features in Bulgarian and Macedonian, the clitics started to be generated directly in $AgrO^0$ and $AgrIO^0$, that is the positions in which they had previously checked their case features. Meanwhile, this process was accompanied by a gradual reduction in the number of potential landing sites in the functional projections above VP. As a result of this change, the clitics started to be located closer to the verb and eventually they became verb-adjacent.

Admittedly, Tomić's (2000) analysis is not fully developed and, importantly, not supported by language data, which, as has been shown in the previous sections, indicate that in fact the modification of the cliticization pattern proceeded in the opposite direction, from verb-adjacent to second position clitics. Moreover, if this approach is adopted, Serbo-Croatian and other Wackernagel clitic languages might be assumed to have directly inherited their cliticization systems from Old Church Slavonic, whereas Bulgarian and Macedonian clitics became verb-adjacent. This is also contrary to fact because, as has been demonstrated in section 4.3.2, diachronic facts from Serbian indicate that its cliticization patterns were subject to major historical modifications; correspondingly, section 4.5.3 below shows, following Pancheva (2005), that clitic placement was modified in the history

of Bulgarian as well. Still, Tomić uses this putative analysis only as a theoretical background for her own account of a current change in the distribution of clitics in Macedonian, where in her view the clitics display the dual (Wackernagel and verb-adjacent) behavior in some syntactic environments.

4.5.3. Pancheva's (2005, 2008) analysis of the diachrony of cliticization in Bulgarian

Pancheva (2005) examines a diachronic change that is very similar to the one investigated in this chapter. Namely, she overviews the position of clitics in the history of Bulgarian and observes that there was a period during which they temporarily shifted from verb-adjacency to second position, only to become re-analyzed as verb-adjacent again in a later period. Hence, the first part of the diachronic modification of the cliticization pattern she investigates in Bulgarian seems to be the same as the one attested in Serbo-Croatian as well as other contemporary second position Slavic languages. Yet, her interpretation of the change and the analysis are different than what I have assumed for the related process in this chapter.

4.5.3.1. General assumptions and description of the data

Pancheva (2005) observes that in Old and early Middle Bulgarian (that is in the period from the 9th till the 13th century) two types of clitics were available. The first type involved post-verbal clitics, which occurred after the main verb irrespective of its position in the clause. Since the verb was not required to be clause-initial, it is evident that these were not second position clitics. Notably, the post-verbal pattern of this type is not grammatical in contemporary Bulgarian. The other type of cliticization featured second position clitics, which followed the first prosodic word and could be separated from the verb.

Initially, between the 9th and the 10th century, the post-verbal pattern was the dominant one, but it declined by the 13th century, when Wackernagel cliticization prevailed and remained the default pattern until the 17th century. The post-verbal placement is exemplified in (91), while Wackernagel cliticization is illustrated in (92). These two examples span different stages of the language history.

(91) vo svoę domy s pochvaloju vъzvratiša *sę* **(post-verbal clitics)**
in REFL homes with praise returned$_{3PL}$ REFL
"They returned to their homes with praise" (16th c. Bg, Pancheva 2005: 120)

(92) a. kto *vy* pismena stvorilъ jestъ (**second position clitics**)
who you$_{DAT}$ letters make$_{PART.M.SG}$ is$_{AUX}$
"Who made the letters for you?" (9th c., Bg, Pancheva 2005: 120)

b. a tïa *gy* zlě mõčaše
and she them$_{ACC}$ badly tortured
"And she tortured them badly" (17th c. Bg, Pancheva 2005: 123)

As far as Wackernagel cliticization is concerned, Pancheva observes a restriction related to the placement of second position clitics in the historical variants of Bulgarian she investigates: in all cases the clitics appear after the first prosodic word and there are no instances of clitics occurring after a branching phrase (that is, after unambiguously phrasal material). Moreover, at times clitics seem to be able to split syntactic constituents, as in (93).

(93) a. i mnogo *si* zlo storiha meždu sebě
and much REFL evil did between REFL
"And they did a lot of bad things to each other" (17th c. Bg, Pancheva 2005: 125)
b. i na druga *go* věra prědade
and to another him$_{ACC}$ faith gave
"And turned him over to another faith" (17th c. Bg, Pancheva 2005: 125)

Similar cases of apparent constituent splits are attested in Serbo-Croatian, and they can be straightforwardly accounted for by, for example, appealing to the mechanism of Left Branch Extraction, which is widely available in Serbo-Croatian and applies irrespective of a clitic or a non-clitic status of the element causing the apparent discontinuous constituency. Yet, an important difference between Wackernagel cliticization in modern Slavic and the diachronic patterns studied by Pancheva is that the restriction on the single word placement in front of second position clitics is a peculiarity of the older stages of Bulgarian that is not attested in Serbo-Croatian or other contemporary Slavic languages with Wackernagel clitics.[59] Interestingly, Old Serbian data collected by Radanović-Kocić (1988) and presented in section 4.3.2 indicate that in the oldest texts with second position cliticization the clitics could also occur exclusively after the first single word, rather than a phrase. I propose that this fact may suggest that the Old Bulgarian data examined by Pancheva (2005) illustrate the initial stage of the switch into second position cliticization, which was not completed. Pancheva reports that a similar constraint has been observed in a number of languages with Wackernagel clitics (for instance in Alsea and Shuswap, see Halpern 1995: 17), so if a related restriction can be confirmed for the Bulgarian language from the period investigated by Pancheva, this fact may imply that the mechanism of second position cliticization observed here is different than what has been established for Serbo-Croatian.

Around the 17th century a new type of cliticization emerged, which this time consisted in the pre-verbal placement of clitics. The clitics could be located low in the clause structure and were not required to occur in second position, as illus-

[59] As has been pointed out in Chapter 3, section 3.4.3.1, the focus operator clitic *li* is an exception, as it can only be preceded by a single word in Serbo-Croatian.

trated in (94) for the reflexive clitic *sa*, which precedes the verb *javi*. Eventually, by the 19th century this pattern prevailed and has been preserved as the default cliticization type in Modern Bulgarian.

(94) i archangel Michailь pak *sa* javi Agari **(preverbal, non-2P clitics)**
and archangel Michael again REFL appeared Agara
"And Archangel Michael appeared to Agara again" (18th c. Bg, Pancheva 2005: 120)

4.5.3.2. The mechanism of cliticization

To account for the change illustrated in the examples above, Pancheva (2005) proposes the following analysis. She assumes, as is standard for languages with verb-adjacent cliticization (see Kayne 1991; see also the general overview in section 4.4.1), that pronominal clitics are generated as arguments within VP and, being attracted by T^0, they raise and left-adjoin to T^0 as heads. In spite of the fact that the clitics move from XP-positions in VP, they may undergo head-adjunction to T^0. As has also been discussed in section 4.4.1, this is possible due to the fact that they are category-ambiguous elements. The crucial assumption made by Pancheva in her analysis is that Old Bulgarian was a T^0-final language, but all the other heads were initial.[60] The data that lead her to this assumption are given in (95), with the accusative pronominal clitic preceding the auxiliary verb. I return to such examples in section 4.5.3.3.

(95) svętъ *bo* mǒš stvorilъ *ja* estь
holy because man $create_{PART.M.SG}$ $them_{ACC}$ is_{AUX}
"Because a holy man has created them" (9^{th} c. Bg, Pancheva 2005: 139)

The additional assumptions that Pancheva makes about the structure of Old Bulgarian are that the main verb moved out of vP but did not reach T^0 (as in her view there is no conclusive evidence showing that verbs undergo movement to a high position in Bulgarian); all the specifiers were initial (so they occurred to the left of the heads) and that adverbs were located in specifiers of dedicated functional projections (as in Cinque 1999). By making these assumptions, she is able to capture the fact that no intervening material could occur between the clitic and the main verb in the syntactic structure that was fed to PF. This property allowed the clitics, which showed a leftward phonological dependency, to form a prosodic word

[60] In a similar vein, Dimitrova-Vulchanova and Vulchanov (2008) posit that Old Church Slavonic is X^0-final in the VP-domain but X^0-initial in the CP-domain. Their proposal of X^0-finality in the VP-domain is motivated by their observation of frequent topicalizations that produce verb-final orders, though they do not exclude the possibility of Old Church Slavonic being head-initial in the VP domain, with verb-final patterns being the result of movement of objects and other elements across the verb. Somewhat confusingly, they use the term "Old Bulgarian" to refer to the language of the relics such as *Codex Surprasliensis*, which is more commonly referred to as Old Church Slavonic.

with the verb. Pancheva (2005: 139) argues that post-verbal clitics underwent the derivation presented in (96).

(96) $[_{TP}\ [_{vP}\ [_{V'}\ t_i\ V^0\ ]]\ [_T\ CL_i\ T^0]]$

In contrast to the proposal made in this chapter, according to which second position cliticization in Slavic arises when T^0 is lost and as a result the host for verb-adjacent cliticization becomes unavailable, Pancheva proposes that Wackernagel cliticization emerged in the history of Bulgarian due to a change in the head parameter of T^0, which switched from being head-final to head-initial. When the change occurs, the initial derivational stages of the cliticization remain unchanged, as the feature content of the clitics and T^0 to which they are attracted remains the same. Correspondingly, the main verb does not raise as high as to T^0; the specifiers remain on the left, and the adverbs are generated in specifiers of respective functional projections. However, due to the switch of T^0, pronominal clitics start to occur in front of T^0 and their placement with respect to the verb becomes reversed. Given that all the other properties remain unchanged, other constituents may now appear between the verb and the clitic, so the verb is no longer interpreted as the host for the clitics. Since the clitics maintain a leftward phonological dependency, they now lean onto elements located in Spec, TP or Spec, CP, which become their hosts. If there are no suitable host candidates in Spec, TP or Spec, CP and the clitic emerges as TP-initial at Spell Out, a PF "readjustment operation" (which in Pancheva's 2005: 133 view may involve a PF-driven reordering merger or pronunciation of a lower copy as in Franks's 1998 account) so that the clitics find their prosodic element to their left.

I would like to point out that this proposal implies a problematic assumption of a PF-driven syntactic operation (see Chapter 3, section 3.5.1). Moreover, an empirically problematic part of this proposal is that it does not capture Pancheva's earlier observation that Wackernagel clitics may be preceded exclusively by head elements (see the examples in 93). If what matters for the clitics is a prosodic host, there is no principled way of excluding phrasal hosts for the clitics at this stage of Bulgarian, the way they are available for second position clitics in contemporary Serbo-Croatian.

The derivation of second position cliticization prior to the satisfaction of the clitic prosodic requirements suggested by Pancheva (2005: 133) is given in (97).

(97) $[_{TP}\ CL_i\ [TP\ \ldots\ [vP\ \ldots\ t_i\ \ldots\ ]]]$

As shown in (97), as a further consequence of the T^0-initial system argued for by Pancheva, pronominal clitics undergo phrasal adjunction to TP. This happens due to the inherent category-ambiguity of clitics mentioned earlier, coupled with the fact that they are now no longer adjacent to the verbal head. Moreover, Pancheva contends that as (in her view) Spec, CP and C^0 cannot be simultaneously filled,

the only elements that may at most precede the clitics at this stage of Bulgarian are a conjunction and a complementizer or a conjunction and a phrasal material in Spec, CP. This in turn gives the effect of second position cliticization. This assumption is again problematic, as it is not clear how she can capture her own observation that Wackernagel clitics may be preceded only by a single word (see the examples in 93) in the Bulgarian language from that period. Furthermore, the postulate that Spec, CP and C^0 cannot be simultaneously filled may be reminiscent of the Doubly Filled Comp Filter, but it clearly is not observed in the Slavic languages, which permit co-occurrence of elements located in Spec, CP and C^0. In contemporary Slavic these projections may respectively be filled in by, for instance, a *wh*-element and the operator clitic *li*, the latter widely found in Old Slavic relics. Furthermore, all modern Slavic languages allow multiple *wh*-movement, with all *wh*-elements located above Spec, TP. Since we can assume that multiple *wh*-movement was available in the older stages of Bulgarian as well, it is not immediately clear how the second position effect can be explained in Pancheva's proposal.

In Pancheva's (2005: 133) view, the derivation in (97) predicts that the clitic remains the first element in TP if there is an available prosodic host, such as a *wh*-word or a conjunction. She quotes the data given in (98) in support of her thesis. Note though that since *počto* in (98a) is a *wh*-element, this example may in fact show that second position clitics may be preceded by phrasal items. See also the discussion concerning similar facts in Serbo-Croatian in Chapter 3, section 3.4.3.1.

(98) a. počto *mi* trudy daeši?
why me_{DAT} hardship give
"Why are you giving me hardship?" (10th Bg, Pancheva 2005: 134)

b. ili *go* ne znaete
or him_{ACC} NEG $know_{2PL}$
"Or you don't know him" (17th Bg, Pancheva 2005: 134)

Moreover, Pancheva (2005: 134) claims that her account predicts that a clitic should never occur in front of a *wh*-word or a complementizer. The prediction is in her view borne out by the data in (99). However, these examples may reflect a general restriction on clitic climbing out of subordinate clauses, which in section 4.2.3 has been shown not to be operative in Bulgarian.

(99) a. ti imьže *sę* kъ moždьnьmъ ne imatъ broda
and which REFL to hemispheres NEG have passage
"There is no passage leading from it [the ear] to the hemispheres of the brain"
(10th c. Bg)

b. no ot što *se* ti nerazumne sramiš ot svoj rod
but from what REFL you $unwise_{VOC.SG}$ be-ashamed from REFL community
"But why are you, unwise person, ashamed of your community?"
(18th c. Bg, Pancheva 2005: 134)

Furthermore, Pancheva (2005: 134) states that in principle there may occur a situation in which XP elements other than pronominal clitics adjoin to TP. In such a scenario, the clitics would be preceded by more than one element and the second position requirement would not be captured by her account. She precludes this from happening by making two additional assumptions. Namely, she postulates that T^0 is equipped with a feature that triggers topicalization to Spec, TP, and once this feature has been checked by movement, no further operations targeting Spec, TP may take place. Furthermore, she assumes that there are no TP-adjoined adverbs, which in her view are instead hosted in specifiers of designated functional projections, as argued for by Cinque (1999). This postulate is an assumption internal to her analysis, as other accounts (for instance Watanabe 1993 and Bošković 1995, 2001) argue that sentential adverbs are TP-adjoined. Irrespective of the choice of a theory of adverb placement, it seems that this analysis still cannot capture Pancheva's (2005) own empirical observation that Wackernagel clitics in Bulgarian could be preceded exclusively by heads, and not by branching phrases.

The final problem with Pancheva's analysis of Wackernagel cliticization in Bulgarian is related to the position of operator clitics. She assumes that Wackernagel clitics are adjoined to TP, yet the operator clitics exemplified in (100) must be located higher than TP. For instance, *bo* in (100c) is a complementizer, so presumably it occupies C^0. Likewise, the particle *že* in (100a–b) licenses focus on the element that precedes it, so it is also located in the CP domain, rather than adjoined to TP.

On a side note, Pancheva (2005: 142–143) presents charts that provide detailed statistics of the various types of clitic placement in the history of Bulgarian. She shows that second position clitics constituted only 7.9% of all cliticization patterns in the 14th century, whereas in the 15th century there were only post-verbal clitics and no second position clitics were attested (the focus particle *že* in 100a is presumably excluded from the statistics because it occurs within an NP). The fact that the operator clitics exemplified in (100) uniformly occur in second position during the period with virtually no other second position clitics may indicate that these clitics follow a cliticization mechanism that is independent of generalized second position cliticization, as has also been argued for operator clitics in contemporary Slavic languages in section 3.4.3 in Chapter 3.

(100) a. Mnog *že* vrěd vъ nix kryaše *sę*
many FOC harm in them hide REFL
"A lot of harm was hiding inside them" (15th c. Bg)

b. bl(a)gyj *že* b(o)gъ pomagaet *mi*
kind FOC god helps me_{DAT}
"The kind God helps me" (14th c. Bg)

c. Vъsьčeski *bo* diavol hotē uloviti ego tъštaše *sę*
in-every-way because devil $want_{PR.PART}$ $catch_{INF}$ him strove REFL
"Because the devil, wanting to catch him, was striving in every way"
(14th c. Bg, Pancheva 2005: 147)

As has been noted in section 4.5.3.1, around the 17th century Bulgarian begins to lose second position clitics, which are slowly being replaced by preverbal clitics. The new pattern eventually prevails in the 19th century and is still observed in Modern Bulgarian. The preverbal clitics can be located rather low in the structure, so it is clear that they are not second position elements, as shown in (101).

(101) a. i Ioanъ mnogo *gy* pouči
and Ioan many them$_{ACC}$ instructed
"And Ioan taught them a lot" (17th c. Bg, Pancheva 2005: 136)

b. zaštoto ne *se* tъrpjat ot nikoe pravitelstvo
because NEG REFL tolerate by no government
"Because no government tolerates them" (19th c. Bg, Pancheva 2005: 136)

An empirical observation that Pancheva considers important for her analysis is that the new type of cliticization emerges together with clitic doubling, which is not attested in the earlier stages of Bulgarian. If the clitics originate in argument VP positions, the doubled objects cannot be arguments as well. Hence, in Pancheva's view, an analysis which assumes that preverbal clitics move as XP elements from argument positions and adjoin to a maximal projection, the way they did in the previous stage of Bulgarian, is untenable. Therefore, she proposes, partly following analyses due to Borer (1986), Jaeggli (1986), and Sportiche (1996), that preverbal clitics, in the new type of cliticization, are merged as adjuncts to the heads of designated functional projections. Furthermore, she implies that these functional projections are lower than T^0, given that the clitics can be lower than a finite verb, which in her view does not reach T^0 in Bulgarian. The preverbal clitic placement is illustrated in (102), while (103) presents the syntactic structure that she suggests derives this type of clitic distribution.

(102) narodь, što běha *se* sъbrale pri nego
people who were REFL gather$_{PART.M.SG}$ at him
"people who had come to him" (17th c. Bg, Pancheva 2005: 137)

(103) $[_{TP} \ldots T^0 \ldots [_{XP} [_X \text{CL } X^0] \ldots [_{vP} V^0]]]$ (Pancheva 2005: 137)

As far as the trigger of this change is concerned, Pancheva assumes that the shift from the Wackernagel to the preverbal clitic placement correlates with a lower ratio of XP movement affecting different types of constituents targeting Spec, TP. As has been noted above, Pancheva posits that during the time when Bulgarian was a second position clitic language, T^0 was marked for a feature that triggered obligatory topicalization, analyzed by her as A'-movement operation of a phrasal constituent to Spec, TP. The constituent undergoing topicalization could be the subject or some other element. In case a non-subject element moves to Spec, TP, the subject remains in Spec, vP and in effect it occurs post-verbally, given that the verb moves out of vP. Pancheva (2005: 153–154) provides many instances of the

topicalization, which as shown in (104)–(109) may affect a number of different categories. She points out that such structures are not felicitous in Modern Bulgarian and that in general topicalization targets positions higher than Spec, TP in Modern Bulgarian. Examples of this type are important because the high frequency of corresponding structures in Old Church Slavonic has led Dimitrova-Vulchanova and Vulchanov (2008) to argue for the head-final status of VP in this language. I return to such examples in section 4.5.3.3.

(104) tova *se* pomoli Juda bogu
that REFL ask$_{\text{PART.M.PL}}$ Judas God
"Judas asked God that" (18th c. Bg)

(105) i otvěštavъ starecъ reče emu: … i vъ drugõ ned(ě)lę
and answering the-old-monk told him … and in other Sunday
prïide starecъ kъ bratu…
came the-old-monk to young-monk
"And in response, the old monk told him: …And the next Sunday, the old monk came to the young one …" (14th c. Bg)

(106) se priõtъ b(og)ъ pokaanïe tvoe
thus accepts God repentance your
"Thus God accepts your repentance" (14th c. Bg)

(107) togizi ze prorok Ilïę yčenikatok si Elisea i utide
then took prophet Ilija student REFL Elisej and went
na edno męsto… i tamъ reče Ilïa na Elisea
to one place… and there said Ilija to Elisej
"Then the prophet Ilija took his student Elisej and went to a place… There Ilija told Elisej" (18th c. Bg)

(108) pakъ utide angelъ i vtorïju patъ…
again went the-angel and second time
"The angel went there again for the second time" (18th c. Bg)

(109) i togiva otide Ioannь, i najde čl(ově)ka… i isčeli go
and then went Ioan and found the-man and cured him
i drugo mnogo čjudo stori ap(o)s(to)lь tamo
and other many wonder did the-apostle there
"And then Ioan went and found the man… and cured him. And the apostle did many more wonders" (17th c. Bg, Pancheva 2005: 153–154)

According to Pancheva, the loss of the topicalization feature on T^0 and the resulting loss of topicalization targeting Spec, TP led in consequence to the loss of second position cliticization. Her reasoning is as follows. Second position clitics could either be hosted by elements preceding them in the CP domain (a complementizer, a *wh*-word, or a conjunction; see the structure schematized in 110a) or by a constituent located in Spec, TP (as shown in 110b) (recall that she assumes that in Old Church Slavonic lexical verbs do not reach T^0 but only Asp^0).

(110) a. $[_{CP}$ X(P) $[_{TP}$ =CL $[_{TP}$ XP T $[_{AspP}$ $[_{Asp}$ V Asp]]]]]
b. $[_{TP}$ $[_{TP}$ (cl) $[_{TP}$ XP =CL T $[_{AspP}$ $[_{Asp}$ V Asp]]]]]

The loss of the topicalization to Spec, TP gave rise to a situation in which the number of contexts with phrasal material intervening between the verb and the clitics fell into decline. At the same time, the ratio of cases in which the clitics ended up being adjacent to the verb significantly increased. When the number of such cases reached a substantial threshold, learners may have posited a new grammar in which the clitics are reinterpreted as being verb-adjacent. In this new grammar the clitics are analyzed as elements generated in head positions adjoined to functional heads in the extended projection of the verb, rather than as XP elements that raise from argument positions within VP. In addition, the previous topicalization strategy is surpassed by an increasing number of cases of left-dislocation that target specifier positions above TP. This type of mechanism has been preserved and constitutes part of the grammar of Modern Bulgarian.

4.5.3.3. Evaluation of Pancheva's (2005) account

Pancheva's analysis covers a remarkably large set of data, spanning different cliticization patterns in the history of Bulgarian. The wealth of empirical observations is impressive, but the analysis does suffer from a number of serious shortcomings. First, the idea that Old Bulgarian was a T^0-final language is not entirely conclusive. Pancheva (2005: 146) presumes that finite verbs did not target T^0 in Old Bulgarian but only landed in Asp^0, a projection below T^0 (though the verb could raise to C^0 in *wh*-movement and similar contexts), which means that the only evidence that is available to the child acquiring this type of grammar comes from the position of the pronominal clitic (such as the accusative clitic *ja*) with respect to the auxiliary enclitic, such as *estъ* in (111a). The derivation proposed by Pancheva for such structures is given in (111b).

(111) a. svętъ *bo* mŏš stvorilъ *ja* estъ
holy because man create$_{PART.M.SG}$ them$_{ACC}$ is$_{AUX}$
"Because a holy man has created them" (9th c. Bg, Pancheva 2005: 139)
b. $[_{TP}$ $[_{vP}$ $[_{V'}$ t_i V^0]] $[_T$ CL_i T^0]]

Both the pronoun *ja* and the auxiliary verb are phonologically weak and their distribution in the clause is subject to their prosodic restrictions, therefore suggesting the direction of a head parameter on the basis of such elements is problematic. Admittedly, it has been proposed in the literature that not all languages show a uniform head parameter specification for all projections and that there are cases in which a particular head may have a different head directionality than other projections in the syntactic structure. For instance, Pintzuk (1999) claims that Old English was not strictly head-final, as IP could historically be head-final and head-initial. In a similar vein, Kroch and Taylor (2000) postulate variation

between head-initial and head-final VP and IP projections in the Early Middle English period. These two options represent a case of grammar competition in the sense of Kroch (1989, 1994), which occurs during a period of variation between two structures that are not compatible with each other within a single grammar. Such two structures are taken to represent two contradictory parameter settings (such as head-final versus head-initial constructions), or, within the Minimalist framework, the presence of lexical items with contradictory features (see Pintzuk 2002: 278 for more discussion).

An example of an analysis that postulates this type of approach is Pintzuk's (2002) study of the variation between OV and VO orders in Old English. Pintzuk suggests that these two word orders do not show true optionality. Rather, they should be analyzed as an instance of competition between two grammars that differ with respect to I^0-initial or I^0-final placement. The former parameter setting corresponds to the situation in which the finite main verb precedes its complements, whereas the latter to the case in which the finite main verb follows its complements. For the purpose of the investigation, Pintzuk (2002) examines the distribution of VP structures with different orderings of the auxiliary, the main verb, and its DP objects. In her later work carried out in collaboration with Haeberli (Haeberli and Pintzuk 2006), they investigate word order possibilities within verb clusters in Old English. Specifically, they examine the internal syntax of structures that contain two verbal elements, one finite (the auxiliary) and one non-finite (the main verb) and their positions with respect to adjuncts and complements. They assume that the observed word order variation may arise due to a switch in the head directionality of functional projections in Old English.

Significantly, although Pancheva (2005), Pintzuk (2002), and Haeberli and Pintzuk (2006) all assume a diachronic change in the directionality of a single functional projection, the latter two analyses make this assumption on the basis of word order patterns involving non-clitic elements that represent different categories. By contrast, it seems that Pancheva makes a claim about the directionality of T^0 in Old Bulgarian solely on the basis of the position of pronominal clitics with respect to the auxiliary located in T^0. In her view, the finite verb does not reach T^0 in Old Bulgarian therefore its placement cannot be used as a reliable diagnostic. Thus, T^0 is proposed to be head-final in (111), as it is occupied by the auxiliary clitic *estъ*, which in turn is preceded by the accusative clitic *ja*.

It seems that Pancheva's analysis is problematic for a number of theoretical and empirical reasons. On the theoretical side, the problem is the learnability of T^0 directionality in Old Bulgarian on the assumption that the setting of the head parameter is supposed to be determined solely on the basis of the respective position of two phonologically weak elements, the auxiliary and the pronominal clitics, whose placement is determined not only by their syntax, but may also be restricted by their prosodic deficiency.

Moreover, on the empirical side, Pancheva's account is challenged by synchronic and diachronic cliticization data from Slavic languages. Thus, as has been fre-

quently observed in the literature, most Slavic languages that have clitics display an interesting split concerning the position of different person forms of the auxiliary verb with respect to the pronominal clitics. As shown in (112) for Serbo-Croatian, the 3rd person auxiliary clitic (such as *je* in 112a) occurs to the right of the pronominal clitics, while the other auxiliary forms (such as the 1st person form *sam* in 112b) appear to the left of the pronominal clitics. If Pancheva's account of cliticization were adopted to account for these facts, it would mean that in the contemporary Slavic languages that show this type of variation T^0 is head-final when it is occupied by the 3rd person singular auxiliary, and that T^0 is head-initial when it is filled in by the other auxiliary forms.

(112) a. On *mu* *ih* *je* dao
he him_{DAT} $them_{ACC}$ is_{AUX} $give_{PART.M.SG}$
"He gave them to him"
b. Ja *sam* *mu* *ih* dao
I am_{AUX} him_{DAT} $them_{ACC}$ $give_{PART.M.SG}$
"I gave them to him indeed" (S-C, Tomić 1996: 839)

This is not a welcome result given that there is a clear feature contrast concerning the auxiliary types that may occur in the two respective positions. Namely, on the assumption that the 3rd person is a null person, the auxiliary that specifies the number, but not the person feature, follows the pronominal clitics and occurs lower in the structure, while the auxiliaries that occur in front of the pronominal clitics are the ones that encode the person feature. See Migdalski (2006, ch.4) for an analysis that accounts for the auxiliary clitic placement in terms of the person/number feature specification, as well as Tomić (1996) and Bošković (2001) for alternative analyses of these data. Thus, the nature of this contrast suggests that it does not involve alleged competition between two grammars that differ with respect to T^0-initial and T^0-final placement but rather that the contrast is entirely synchronic and that the auxiliaries target different projections depending on their person/number feature specification.

Diachronically, Pancheva's claim is seriously challenged by the position of the auxiliary in the history of Bulgarian. Namely, in Old Bulgarian all auxiliary forms followed pronominal clitics (Sławski 1946), as in the pattern in (111) above, which in Pancheva's view exemplifies a T^0-final order. More examples of this type are given in (113) and at first sight they may support Pancheva's analysis, as in contrast to contemporary Slavic languages, all auxiliary forms occur to the right of the pronominal clitics.

(113) a. pustila *mę* *sta* oba carě
$let\text{-}go_{PART.F.DUAL}$ me_{ACC} $are_{AUX.2DUAL}$ two tsars
"Two tsars have sent me" (14th c. Bg)
b. tvoè zlàto što *mu* *si* pròvodilъ
your gold that him_{DAT} $are_{AUX.2SG}$ $send_{PART.M.SG}$
"Your gold that you have sent to him" (17th c. Bg, Sławski 1946: 76)

However, the auxiliary placement changed in the history of Bulgarian: in the 17th–18th century the first-person, second-person, and plural third-person auxiliary forms shifted across the pronominal clitics, adopting the current distribution (Sławski 1946: 76–77), as shown in (114). Importantly, the timing of the shift poses a problem for Pancheva (2005), as it occurred when according to her analysis Bulgarian had been T-initial for several centuries, with no second position clitics left.

(114) a. deto *si* *së* javilъ na mòata žena
that are$_{AUX.2SG}$ REFL appear$_{PART.M.SG}$ to my-the wife
"that you appeared to my wife" (17th c. Bg, Sławski 1946: 77)

b. nó *sa* *gi* zváli gotïi
but are$_{AUX.3PL}$ them$_{ACC.PL}$ call$_{PART.PL}$ Goths
"but they called them Goths" (18th c. Bg, Sławski 1946: 77)

I suggest that this fact indicates that second position cliticization is unrelated to the alleged loss of T-finality or the position of pronominal clitics with respect to the auxiliary. The lack of the correlation between these properties is also independently confirmed by Jung (2015) on the basis of Old Russian data. Namely, she shows that although Old Russian featured second position cliticization until the 14th century, the first and second person forms of the auxiliary rigidly followed the pronominal clitics throughout this period.[61]

4.5.3.4. Pancheva's (2008) arguments related to the distribution of negation and participle-auxiliary orders

In her later work, Pancheva (2008) provides additional diagnostics to determine head directionality of TP in Old Slavic, this time examining Old Church Slavonic data. She focuses on two types of patterns: the distribution of the *l*-participle with the auxiliary "be" and the interaction between verb placement and negation.

4.5.3.4.1. Participle-auxiliary orders in Old Church Slavonic

Thus, concerning the first pattern, Pancheva (2008) reports that both auxiliary–participle and participle–auxiliary orders were available in Old Church Slavonic, as exemplified in (115).

[61] Independently of the findings related to the position of the auxiliary and the pronominal clitics presented in this section, Dimitrova-Vulchanova and Vulchanov (2008: 254) point out a problem with Pancheva's (2005) estimates of the different types of clitic placement, which in my view may raise further doubts about the relationship between clitic placement and T^0-directionality. They observe that at least in *Codex Suprasliensis* (a late Old Church Slavonic text) clitic distribution is quite consistent and does not seem to be a matter of choice or statistical frequency. Clitics occur in second position if Spec, CP is filled, otherwise they are post-verbal. Dimitrova-Vulchanova and Vulchanov do not provide any data to substantiate this observation, but it might be the case that Spec, CP is filled in the presence of operator clitics, which, as has been shown in section 3.4.3 in Chapter 3, uniformly target second position.

(115) a. iže bě$_{\text{PAST.3PL}}$ axŏ prišъli$_{\text{PART.PL}}$ otъ vьsěkoję vьsi
who+FOC be from every village
"who had come from every village" (OCS, *Luke* 5.17)

b. učenici bo ego ošъli$_{\text{PART.PL}}$ bě$_{\text{PAST.3PL}}$ axŏ vъ gradъ
disciples for his go be in town
"because his disciples had gone to the town" (OCS, *John* 4.8, Pancheva 2008)

Corresponding cases of participle fronting are found in Modern Slavic and have received considerable attention in the literature since Lema and Rivero's (1989) analysis of the operation in terms of Long Head Movement, which in their view consists in raising of the *l*-participle from V^0 to C^0 in spite of the auxiliary being present in I^0, as illustrated for Modern Bulgarian in (116), with a derivation of the movement given in (117).

(116) a. Az sŭm$_{\text{AUX}}$ čel$_{\text{PART.M.SG}}$ knigata
I am read book-the

b. Čel sŭm$_{\text{AUX}}$ knigata
read$_{\text{PART.M.SG}}$ am book-the
"I have read the book" (Bg)

(117) $[_{CP}\ [_{C}\text{Part}_i]\ [_{IP}\ \text{Aux}\ [_{VP}\ [_{V}\ t_i]\ \text{DP}]]]$

The movement has also been analyzed as an instance of head adjunction of the participle to C^0 (Wilder and Ćavar 1994), to Aux^0 (Bošković 1997), or to a discourse-related focus projection $Delta^0$ (Lambova 2003). In my previous work (Broekhuis and Migdalski 2003; Migdalski 2005, 2006) I proposed that the operation is a case of predicate or locative inversion and that it involves XP remnant movement of the *l*-participle to Spec, TP. The XP-movement proposal explains a number of properties that had been unaccounted for previously, such as the subject gap requirement when the participle is preposed or the dependency of the operation on the auxiliary "be" and the agreement between the subject and the participle.

In her diachronic account, Pancheva (2008) admits that the structure in (115) could instantiate a case of participle fronting found in Modern Slavic, as has been argued for Old Church Slavonic by Willis (2000: 325–327). In fact, she observes that the movement analysis is empirically supported by the fact that the participle–auxiliary orders contain VP-elements following the auxiliary, such as *vъ gradъ* 'in town' in (115b), which may indicate that these elements have been evacuated out of the moved phrase headed by the participle. This seems also to be the most economical derivation; moreover, it underlyingly exemplifies a T-initial structure, given that the participle moves to the left. However, Pancheva (2008) points out that it is also possible to posit a T-final interpretation of such data, but in such a scenario the VP-internal elements would be extraposed out of VP to a position higher and to the right of the auxiliary. If a T-final analysis is assumed, the pattern presented in (115b) would be the basic one, and the auxiliary–participle order in (115a) could be derived via rightward participle movement. This assumption

would mean that the structure of Old Church Slavonic paralleled the structure of Old English (at least on Pintzuk's 1999 analysis), which is assumed to be T-final, and the auxiliary–participle orders are attributed to verb raising.

Pancheva (2008) points out that both orders, with the participle preceding or following the auxiliary, are optional as long as the auxiliary verb is not a clitic. Therefore, in order to limit a potential influence of the prosodic requirements of the clitic on the word patterns, she restricts her study to the cases involving the past tense auxiliary, which has an orthotonic, non-clitic form. Furthermore, she assumes that the word order that arises as a result of an optional operation will be statistically less frequent than the pattern that reflects the underlying order. Hence, she carries out a quantitative study of both orders, which in her view may be helpful in determining the directionality of T^0 in Old Church Slavonic.

The results of her study indicate that in the Old Church Slavonic relics she has investigated, both orders occur in a balanced proportion, though the participle–auxiliary pattern is slightly less common than the auxiliary–participle pattern: 41% versus 59%. Significantly, the results are very different in Modern Bulgarian, in which according to Pancheva's statistics, the auxiliary–participle order is considerably more frequent and constitutes 97% of the corpus data, versus 3% of the participle–auxiliary cases. Modern Bulgarian is clearly a T-initial language, and the infrequent, optional auxiliary-final order is a result of participle fronting. In Pancheva's view, the contrast in the availability of the two structures across the centuries indicates that Old Church Slavonic was a T-final language. In addition, she observes that there was a different rate of participle–auxiliary orders depending on whether an active or passive participle was involved. Namely, in *Codex Marianus* active participles occur in front of the auxiliary in 16% of the cases, whereas passive participles precede the auxiliary at a much higher rate, in as many as 67% of the cases. In Modern Bulgarian the rate is not that high. In Pancheva's view, this contrast gives support to the hypothesis which suggests that two grammars (T-final versus T-initial) are in competition. As has been argued by Kroch (1989), a diachronic change may be observed in some syntactic contexts earlier than in others, and this variation may be manifested through different ratios of the outputs produced by the new and the old grammars at a particular point in time. In the case of the language change investigated by Pancheva, it is plausible that the switch in the setting of the T-head parameter was initiated among active participles, which resulted in a higher rate of the participle–auxiliary orders among them.

Still, Pancheva makes use of an additional piece of argumentation to support her analysis which in my view is problematic. She admits that rather than due to the switch in the setting of the T-head parameter, the different ratios of the participle/auxiliary orders may have arisen across centuries because of different discourse factors that are reflected through these two patterns. Thus, it might be the case that a particular discourse context started or ceased to be expressed through

participle movement at a certain point in the language history. Yet, Pancheva rejects this possibility, pointing to the different ratios between active and passive participles preceding the auxiliary, which according to her remain unexplained if discourse factors were involved in the change.

4.5.3.4.2. Participle–auxiliary orders in Modern Slavic

In Modern Bulgarian participle fronting may trigger different discourse conditions, which in Pancheva's view are not well understood. They have been studied by Lambova (2003), who observes that participle movement may have different semantic import depending on whether it occurs across the present perfect auxiliary clitic (see 118a below as well as 116b above) or the orthotonic past perfect auxiliary, as in (118b). Since the auxiliary in (118a) is prosodically deficient and needs support to its left, the movement of the participle (or any other element to the position in front of the clitic) is obligatory. Conversely, movement of the participle across the non-clitic auxiliary, as in (118b), is optional. As has been mentioned above, in order to avoid a potential influence of the clitic prosodic requirement on word order permutations, Pancheva decides to restrict her diachronic study to the patterns involving participle fronting across the past tense auxiliary, thus the ones corresponding to (118b).

(118) a. Gledali *sa* filma
watch$_{PART.PL}$ are$_{AUX.3PL}$ movie-the
"They have watched the movie"
a'. **Sa* gledali filma
b. Gledali bjaxa filma
watch$_{PART.PL}$ were$_{AUX.3PL}$ movie-the
"They had WATCHED the movie"
b'. Bjaxa gledali filma
"They had watched the movie" (Bg, Lambova 2003: 111–112)

According to Lambova (2003), in contrast to the movement illustrated in (118a), the operation exemplified in (118b) always produces detectable semantic effects and is perceived as "marked." This fact is reflected in the translation of (118b), where the main verb is capitalized to show a focused interpretation. In Lambova's (2003: 113) view, participle fronting across the past tense auxiliary is felicitous when "the speaker is presenting the activity under discussion as an alternative." For instance, (118b) can be used in a situation in which "the discourse contains either explicit or implied reference to the movie being in possession, i.e. rented or owned" (Lambova 2003: 113). In such a scenario, a potential paraphrase of this example is "They have only seen the movie." The main verb is pronounced with a high tone, which is typical of contrastively focused elements in Bulgarian. All these properties lead Lambova to propose that when the participle raises across the past tense auxiliary, it targets a higher projection than it does during the movement

across the auxiliary clitic. She refers to this projection as Delta Phrase and assumes it is a discourse-related projection where focus is licensed, located above CP.

Given that participle movement across the past tense auxiliary requires a special discourse context in Modern Bulgarian, it is not surprising that it is not often found in the corpus examined by Pancheva. Yet, a question that arises is whether the same discourse requirement held in Old Church Slavonic. It is plausible that it did not. In fact, in her previous work discussed in section 4.5.3.1, Pancheva (2005) refers to a discourse-related syntactic change that occurred in Bulgarian between the 17th and the 19th centuries, which consisted in the loss of obligatory topicalization targeting Spec, TP, and which she reports was accompanied by a shift of Wackernagel pronominal clitics to the preverbal position. Although the Bulgarian data from that period provided by Pancheva (2005: 153–154) contain adverbials and objects in the topic position, it could be the case that Spec, TP was also typically filled by participles (as independently argued for Modern Bulgarian in Broekhuis and Migdalski 2003 and Migdalski 2005, 2006). This issue certainly deserves a more detailed investigation.

Another property that Pancheva (2008) does not pay attention to is the fact that the discrepancy in the ratio of participle fronting between Old Church Slavonic and Modern Bulgarian is not the only frequency contrast that can be observed between the two languages with respect to the syntax of participles. It has also been noted in the literature that compound tense structures formed with the auxiliary "be" and the *l*-participle were in general considerably less frequent in Old Church Slavonic than they are in the present-day South Slavic languages. For instance, Dostál's (1954: 599ff.) statistics show that in Old Church Slavonic the perfect tense was used sporadically, and usually in subordinate clauses. In his corpus study Dostál attests 10 thousand usages of the aorist, 2300 of the imperfect tense, and approximately 600 of perfect tenses (that is, approximately 5% of all the tense forms). A number of potential explanations of this discrepancy have been provided in the literature (see Migdalski 2006: 26–27 for a discussion); for example, Damborský (1967) points out that in the earliest stages of Slavic, the *l*-participle was an innovation and was not widely used; it became more common in later Old Church Slavonic manuscripts, such as *Codex Suprasliensis* and *Savvina kniga* (both from the 11th century; see Bartula 1981: 100). Consequently, structures with the *l*-participle may have been too novel and too innovative to be appropriate for biblical texts. Regardless of an actual reason for the sporadic usage of the complex tense forms, the fact that they are found less often in Old Church Slavonic than in the contemporary corpora of Slavic languages may have repercussions for the different ratios in the participle–auxiliary orders studied by Pancheva (2008).

The final argument used by Pancheva (2008) against the hypothesis of discourse factors being responsible for the different ratios of participle–auxiliary patterns in the history of Slavic is based on her observation that, as shown by the quantitative data in Kroch and Taylor (2000: 138), participle fronting constitutes 2–8% of all

clauses in Early Middle English, which is a much lower ratio than in Old Church Slavonic. However, this observation does not seem to me to bear much relation to the nature of participle movement in Slavic as it is quite a different operation than participle movement found in the Germanic languages. First, both Old Slavic and the contemporary Slavic languages make use of a special type of complex tenses that is not found in the Germanic or Romance languages. Namely, complex tenses in Slavic are formed with the verb "to be," which functions as the exclusive auxiliary, and the so-called *l*-participle, which agrees with the subject of a clause in gender and number and is a designated participial form used in complex tenses. In the Germanic and Romance languages complex tenses are constructed with either the verb "to be" or "to have" used as the auxiliary, which is accompanied by the participle that is morphologically the same as the passive participle. In Modern Slavic, such structures are found only in Kashubian and Macedonian (along with the typical complex tenses formed with the *l*-participle), and they are innovations that are not attested in Old Church Slavonic. Second, participle fronting displays different properties in the Slavic and the Germanic languages. A striking peculiarity of participle movement in Slavic that has received much attention in the literature is the fact that the participle may be raised entirely on its own, and it may not pied-pipe any other material, such as an object or an adverb. This restriction is exemplified in (119) for Bulgarian.[62]

(119) a. Pročel *e* knigata
read$_{PART.M.SG}$ is$_{AUX}$ book-the
"He has read the book"
b. *Pročel knigata *e*
c. *Bŭrzo pročel *e* knigata
quickly read$_{PART.M.SG}$ is$_{AUX}$ book-the (Bg, Migdalski 2006: 138)

The pied-piping restriction is not observed in the case of participle fronting across the auxiliary "have" in the Germanic languages such as Dutch and German (see Thiersch 1985; Den Besten and Webelhuth 1987; Koster 1987; Den Besten and Webelhuth 1990; and Müller 1998). As shown in (120), the past participle in Dutch may be fronted entirely on its own (see 120b); it may pied-pipe the direct object (see 120c) or even a VP-external constituent, such as the VP-adverb *te snel* 'too quickly' in (120d).

(120) a. Jan heeft het boek$_i$ niet [$_{VP}$ t$_i$ gelezen]
Jan has the book not read
b. [$_{VP}$ gelezen] heeft Jan het boek niet t_{VP}
c. [$_{VP}$ het boek gelezen] heeft Jan niet t_{VP}
d. [dat boek te snel gelezen]$_i$ [$_{C\text{¢}}$ heeft hij niet t$_i$]]
that book too quickly read has he not (Dutch, Migdalski 2006: 141)

[62] See Willis (2000) for a discussion of participle fronting in Old Church Slavonic.

A type of participle fronting related to the one found in the Germanic languages is attested within Slavic in only two languages, Kashubian and Macedonian (see Migdalski 2006, ch.3 for an extensive discussion as well as Tomić 1996, 2012 for an overview of the Macedonian data). As shown in the Macedonian examples in (121), in contrast to the *l*-participle in (119), which shows subject agreement, the past participle is morphologically invariant and does not agree with the subject or the object. It can be fronted across the auxiliary "have" either on its own (see 121a), together with the direct object (as in 121b), or an adverb (as in 121c). This type of fronting is not found in Old Church Slavonic. Significantly, as indicated by the translations of these examples, in all of them the fronted element is interpreted as topicalized or contrastively focused, which is not necessarily the case with *l*-participle fronting occurring across the auxiliary "be."[63]

(121) a. Kupeno gi imame knigite
buy$_{PTP.N.SG}$ them$_{CL.ACC}$ have$_{1PL}$ books-the
"We did buy the books!"

b. Kupeno knigite (nie) gi imame
buy$_{PTP.N}$ books-the we them$_{CL.ACC}$ have$_{1PL}$
"Buy the books, we did!"

c. Brzo pročitano gi imame knigite
quickly read$_{PTP.N.SG}$ them$_{CL.ACC}$ have$_{1PL}$ books-the
"We have read the books really quickly" (Mac, Migdalski 2006: 137–138)

All these data exemplifying the two types of participle fronting provided above suggest that these operations do not proceed in a uniform fashion and that they exhibit their own characteristics, for instance related to the question of whether any additional material can be fronted together with the respective participle or to the discourse or semantic import of the preposed material. Therefore, it does not seem correct to draw conclusions about syntactic properties of these operations solely on the basis of the ratio of their occurrence in language history. It is also entirely misguided to compare ratios of participle movement in different language groups when they in fact involve entirely different syntactic mechanisms.

4.5.3.4.3. The position of negation in Old Church Slavonic

The final observation provided by Pancheva (2008) in support of her T-final analysis of Old Church Slavonic comes from the interaction between negation and the verb. It has been pointed out in section 4.2.4 that negation may attract and incorporate into verbs in Modern Slavic, as a result of which the two elements then form a single prosodic word. The same mechanism applies in Old Church Slavonic, though as Pancheva (2008) shows, negation may attract finite verbs (see 122a; in-

[63] The clitic *gi* instantiates clitic doubling, which is obligatory with definite direct objects in Macedonian.

cluding the auxiliary; see 122b) and, in some cases, also the *l*-participle (see 122c), in contrast with Modern Bulgarian.

(122) a. ne ostavitъ *li* devęti desętъ i devęti vъ pustyni
NEG leaves Q nine ten and nine in wilderness
"Does he not leave the ninety-nine in the wilderness?" (OCS, *Luke* 15.4)
b. sego avraamъ něstъ sъtvorilъ
this Abraham NEG+is$_{AUX}$ do$_{PART.M.SG}$
"Abraham did not do this" (OCS, *John* 8.40)
c. ne moglъ *bi* tvoriti ničesože
NEG can$_{PART.M.SG}$ be$_{COND.3SG}$ do$_{INF}$ nothing
"He couldn't do anything" (OCS, *John* 9.33, Pancheva 2008)

Pancheva postulates that NegP is located above TP in Old Church Slavonic. The fact that negation may attract the *l*-participle and that as a result the "negation–participle–auxiliary" order is available is taken by Pancheva to be indicative of a potential T-final structure. In her view, such a structure can also be posited for "negation–auxiliary–participle" orderings on the assumption that negation attracts the auxiliary across the participle, as has been argued for Basque by Laka (1990: 25–42), who assumes that TP is head-final in Basque. More generally, since in Old Church Slavonic both "negation–participle" and "negation–auxiliary" orders are available, Pancheva claims that it is likely that there are two grammars (T-final and T-initial) that are in competition in Old Church Slavonic.

4.5.3.4.4. Empirical problems with Pancheva's (2008) analysis of the distribution of negation

I would like to point out empirical problems with Pancheva's claim concerning the potential relation between the position of negation and the directionality of T^0, which come from contemporary Slavic languages. First, there are languages such as Polish, which is clearly T-initial, but in which negation either precedes the auxiliary or the participle depending on the type of the auxiliary involved. For instance, negation adjoins to the future auxiliary (which morphologically is the perfective form of the verb "to be"), as in (123), but it may not adjoin to the perfect auxiliary, and then it attracts the *l*-participle instead, as shown in (124).

(123) a. Nie będziesz parkował tutaj samochodu
NEG be$_{PERF.1SG}$ park$_{PART.M.SG}$ here car
"You won't park your car here"
b. *Nie parkował będziesz tutaj samochodu (Pl)

(124) a. Nie parkowali-śmy tutaj samochodu
NEG park$_{PART.M.PL}$+AUX$_{1PL}$ here car
"We didn't park the car here"
b. *Nie-śmy parkowali tutaj samochodu (Pl)

Second, in Czech, which is also a T-initial language, negation is adjoined to the *l*-participle, and it may not be adjoined to the auxiliary "to be." However, negation adjoins to the verb "to be" when it is used as a copula. The contrast is presented in (125) and (126).

(125) a. Přišel jsi
come$_{PART.M.SG}$ are$_{AUX.2SG}$
"You have come"
b. Nepřišel jsi
NEG+come$_{PART.M.SG}$ are$_{AUX.2SG}$
"You haven't come"
c. *Nejsi přišel
NEG+are$_{AUX.2SG}$ come$_{PART.M.SG}$ (Cz, Toman 1980)

(126) a. Jsi hlupák / zdráv / na řadě
are$_{2SG}$ idiot / healthy / on row
"You are an idiot/healthy/next in line"
b. Nejsi hlupák / zdráv / na řadě
NEG+are$_{2SG}$ idiot / healthy / on row
"You are not an idiot/healthy/next in line"
c. *Jsi nehlupák/nezdráv/nena řadě (Cz, Toman 1980)

In the case of Czech, auxiliaries and copula verbs are morphologically the same (except for the fact that the auxiliary is null whereas the copula overt in the 3rd person singular and plural), so the placement of negation is evidently related to the categorial distinction between these two types of verbs. It is not contingent on the directionality of T^0, and there is no grammar competition involved in this case.

Furthermore, some diachronic facts indicate that the position of negation in complex tense structures is unlikely to be related to grammar competition even in Old Church Slavonic. First, there are remarkable frequency contrasts between the two types of negation placements, which seem to be contextually dependent and not a result of statistical frequency. For instance, Večerka (1989: 34, quoted in Willis 2000: 328) states that the negation–auxiliary pattern is four times as frequent as the negation–participle order in Old Church Slavonic. Correspondingly, Willis (2000: 329) points out that the auxiliary–negation–participle order is unattested in main clauses, which is unexpected if the variation is due to grammar competition.

Moreover, it has been observed in section 3.4.2.5, Chapter 3, that in subordinate clauses the position of the conditional auxiliary *bi* is contingent on the semantics of the complementizer, which in turn may have implications for the position of negation with respect to the auxiliary and the *l*-participle. Thus, Willis (2000: 330) points out that in Old Church Slavonic complementizers could attract the conditional auxiliary. The attraction was obligatory in the case of complementizer *a* (see 127), which introduced conditional clauses, but not in the case of *da* (see 128), which introduced indicative clauses.

(127) a. A *by* bylъ sьde
if $COND_{3SG}$ $be_{PART.M.SG}$ here
"If he had been here"
b. A *by* sьde bylъ
c. A *by* bylъ prorokъ
if $COND_{3SG}$ $be_{PART.M.SG}$ prophet
"If he had been the prophet" (OCS, Vaillant 1977: 219)

(128) a. Drъžaaxõ *i* da ne *bi* otъšelъ otъ nixъ
$held_{3PL}$ him that NEG $COND_{3SG}$ $leave_{PART.M.SG}$ from them
(OCS, *Codex Marianus*, Willis 2000: 330)
b. Drъžaaxõ *i* da *bi* ne otъšlъ otъ nixъ
$held_{3PL}$ him that $COND_{3SG}$ NEG $leave_{PART.M.SG}$ from them
(OCS, *Codex Zographensis*, Willis 2000: 330)
"And they held him, so that he would not leave them"

Thus, it can be assumed that in subordinate clauses introduced by the complementizer *a*, there will be no cases of negation–auxiliary orders, and only the negation–participle pattern will be attested. Such a contextual restriction would be surprising if the variation were due to grammar competition. It seems that, at least in the contexts presented in (127) and (128), the position of negation with respect to the participles is determined by movement, which in specific environments is obligatory.

To conclude, this section has shown that although impressive in its empirical findings, Pancheva's analysis (2005, 2008) of the cliticization patterns and the postulate of T-finality in Old Church Slavonic and Old Bulgarian are not tenable. The diagnostics that she uses in support of her claim of T-finality concerning the position of pronominal clitics and negation give wrong predictions when they are applied to the corresponding patterns in Modern Slavic, and they are also challenged by diachronic considerations related to the position of the auxiliary and pronominal forms in the history of Bulgarian. On a more general level, it has been shown in the literature that head-final languages exhibit many different syntactic properties that are not found in head-initial languages; for instance, more robust scrambling possibilities. In view of the empirical problems that follow from the proposal of T^0/head-finality of Old Church Slavonic, it seems that it is a safer alternative to assume that Old Church Slavonic was head-initial on a par with Modern Slavic unless more substantial evidence for T^0/head-finality has been found.

4.6. Degrammaticalization of pronominal clitics in Slavic

This section addresses the process of degrammaticalization of pronominal clitics into weak pronouns, which is another diachronic change observed in Slavic that

I attribute to the loss of TP. It affected the system of pronouns in Old Russian and Old Polish, and I argue that it is currently taking place in some contexts in Macedonian and, pending further study, also in Czech and Slovenian. The analysis presented here has been developed in a joint work with Hakyung Jung (Jung and Migdalski 2015, in preparation) and it focuses on Old Polish, Slovenian, and Macedonian data. See Jung (2013, 2015) and Jung and Migdalski (2015) for an extensive discussion of Old Russian facts.

4.6.1. Grammaticalization and degrammaticalization

Grammaticalization is a process of language change that involves a reanalysis of a lexical word into a grammatical item, and then into a more grammatical, bound item such as an affix (see, for instance, Kuryłowicz 1965). This process is often accompanied by the semantic bleaching and phonological weakening of a lexical word. For instance, it has been argued in the literature (see Hopper and Traugott 1993 and Anderson and Lightfoot 2002: 160) that the negative marker *pas* in French is an instance of grammaticalization. It developed from the lexical noun *pas* 'step' that was used to reinforce the negative particle *ne*. Other reinforcing lexical elements that frequently occurred with *ne* include *point* 'point,' *mie* 'crumb,' and *gote* 'drop,' but only *pas* was eventually grammaticalized. With a passage of time, *pas* started to be used in negated clauses that did not express motion, and eventually, having lost the lexical meaning of 'step,' it became an obligatory element in negated clauses in French.

Within Slavic, grammaticalization is exemplified by, for instance, the reanalysis of the verb "have" as an auxiliary in Kashubian and Macedonian, which has resulted in the formation of the so-called "have"-perfect (see Migdalski 2007 for details). This is a relatively novel structure in these two languages, which is exemplified in (129).

(129) a. To aùto mô rozjachoné kùrã
this$_{N}$ car$_{N}$ has run-over$_{PTP.N.SG}$ hen$_{F.SG}$
"This car has run over the hen" (Kashubian, Migdalski 2006: 131)

b. Mackata go ima ispieno mlekoto
cat$_{F}$-the it$_{ACC}$ has drink$_{PTP.N}$ milk$_{N}$-the
"The cat has drunk milk" (Mac, Migdalski 2006: 134)

In the grammaticalized variant of this structure found in Kashubian and Macedonian the participle always occurs in the morphologically invariant form (neuter singular) and may be instantiated by a virtually unrestricted class of verbs, including "be" and "have."

Most of the other Slavic languages feature a non-grammaticalized variant of this structure (termed "stative perfect" in Migdalski 2007), which involves the verb

"have" and the passive participle that agrees with the nominal head of the direct object. This structure has an ambiguous interpretation between a temporal and a possessive meaning and is exemplified in (130) for Polish.

(130) Mam upieczony chleb
have$_{1SG}$ bake$_{PASS.M.SG}$ bread$_{M}$
"I have bread that has been baked"/"I have baked some bread" (Pl)

In syntactic terms, grammaticalization is often viewed as a reanalysis of an element originally located in the Specifier of a (functional) head as the head of this particular projection. For instance, in her study of the development of the definite article in Romance, Giusti (2001) postulates that it emerged due to the reinterpretation of the Latin demonstrative *ille* hosted in Spec, DP as the definite article located in D^0. The process was accompanied by a phonological reduction as well as semantic bleaching through the loss of the [deictic] feature, which is found on demonstratives but not on the definite article.

In the generative tradition, grammaticalization is sometimes motivated by economy principles. For instance, van Gelderen (2004) posits that grammaticalization applies due to the Head Preference Principle ("Be a head"), which also implies that external merge is more economical than internal merge: Merge is less costly than Move given that Move implies Merge; furthermore, merging as late and/or as high in the structure as possible is the preferred option. The same economy insights are to be found in the postulates of Upwards Reanalysis (Roberts and Roussou 2003) and Late Merge (van Gelderen 2008).

In some traditional analyses (see, for example, Deutscher 2005), grammaticalization is assumed to reflect the way a simple protolanguage developed into modern languages. Thus, Deutscher (2005) proposes that the protolanguage made use of very simple utterances resembling telegraphic speech, which consisted of just nouns and verbs, as in *girl fruit pick* or *girl run*. In his view, the process of grammaticalization led to the development of other categories and an expansion of grammar, which was also fostered by the development of writing (see Sampson 2005 as well as Van der Hulst 2008: 322–324 for an overview and criticism of this approach). It seems that this view does not receive support from the data discussed in this section: Kashubian, a language that has not been completely codified and which is used by very few speakers in a written form, has grammaticalized the "have"-perfect, which is not attested in languages with a considerably longer writing tradition, such as Bulgarian. Furthermore, this type of approach to language history presumes that grammaticalization should be a unidirectional process, whereas the data presented in this section show that a reversal of this process is entirely plausible.

It seems that the unidirectionality of grammaticalization has been assumed since Meillet's (1912) first work on the topic. In this way it reflects the 19th-cen-

tury attitude toward language change, which was viewed as a process that is subject to the laws of nature, principles of history, and which proceeds in a certain direction (see the Introduction and Lightfoot 1999 for a discussion). However, it has also been argued that the postulate of the unidirectionality of grammaticalization is too strong and that a reversal of this process is possible, even though it is statistically less common (see Campbell 1991; Ramat 1992; Haspelmath 2004; Janda 2001; Traugott 2001; Norde 2009; Willis 2007). The reversal of grammaticalization is termed degrammaticalization.

Thus, although degrammaticalization is less frequent, a substantial number of phenomena representing this process have been described in the literature. For instance, it is exemplified by the reinterpretation of *down*, which is a preposition or a particle (a functional category), as a verb (a lexical category), as in *He downed the beer in one*. Furthermore, in the history of English, degrammaticalization occurred during the development of the Saxon genitive, which in Old English had the form of the inflectional suffix *-es*, which marked genitive case. In Middle English, the suffix was temporarily degrammaticalized into the possessive pronoun *his*, yielding structures such as *Christ his sake*, which in turn was then weakened into a clitic, as in the current form *-'s*. Within Slavic, the noun *nešto* 'thing' in Bulgarian has been argued to be a result of degrammaticalization of the lexeme with the same morphological form that was initially an indefinite pronoun. See Anderson and Lightfoot (2002: 160–161) for more examples of this process.

In the following section I discuss an instance of degrammaticalization of pronominal clitics into weak pronouns, which occurred diachronically in Old Polish and is currently taking place in Slovenian and Macedonian.

4.6.2. Properties of weak pronouns in Slavic

In their seminal paper on pronominal systems across languages, Cardinaletti and Starke (1999) observe that the traditional division between clitics and strong pronouns is insufficient. They suggest that it is necessary to introduce an intermediate category, which they refer to as a weak pronoun. They also develop a set of detailed criteria that can be used to distinguish weak pronouns from strong pronouns and clitics. It seems that crosslinguistically there is some variation with respect to which particular characteristics are displayed by weak pronouns. For presentational purposes, in this section I outline three properties exhibited by weak pronouns in Polish that make them syntactically different from pronominal clitics in South Slavic and other West Slavic languages such as Czech and Slovak. For a more detailed treatment of weak pronouns in Polish, see Rappaport (1988); Witkoś (1998); Franks and King (2000); and in particular Cetnarowska (2003).

First, in comparison to pronominal clitics, weak pronouns in Polish seem prosodically more independent, whereas syntactically, they exhibit properties that are

typical of XP-nominals rather than of head-like elements. For example, in contrast to pronominal clitics found in South Slavic, which must follow the strict dative–accusative order, both dative–accusative and accusative–dative orderings of weak pronouns are possible. Although the dative–accusative pattern seems more common and semantically neutral (see Witkoś 1998), the accusative–dative order is also available, and the choice of the respective position of these elements seems to be determined by information structure requirements, as illustrated in (131) on the basis of Cetnarowska's (2003) observations.[64]

(131) a. Czy Maria pożyczyła Barbarze swój rower?
if Maria lend$_{PART.F.SG}$ Barbara$_{DAT}$ her-own bicycle$_{ACC}$
"Did Maria lend her bicycle to Barbara?"

b'. Tak, w końcu *jej* *go* pożyczyła, mimo że Markowi pożyczyć
yes, in end her$_{DAT}$ it$_{ACC}$ lend$_{PART.F.SG}$ although Marek$_{TOP.DAT}$ lend$_{INF}$
go nie chciała
it$_{ACC}$ NEG want$_{PART.F.SG}$
"Yes, she eventually lent it to her, even though she didn't want to lend it to Marek"

b". Tak, w końcu *go* *jej* pożyczyła, mimo że motoru pożyczyć
yes, in end it$_{ACC}$ her$_{DAT}$ lend$_{PART.M.SG}$ although moped$_{TOP.GEN}$ lend$_{INF}$
jej nie chciała
her$_{DAT}$ NEG want$_{PART.F.SG}$
"Yes, eventually she lent it to her, even though she didn't want to lend her a moped"
(Pl)

The two sentences given in (131b) are potential answers to the question in (131a). They are partly synonymous and differ with respect to information structure, which is reflected in the ordering of the weak pronouns. The answer in (131b') is about Barbara, who is interpreted as the topic in this sentence and contrasted with Marek. The dative weak pronoun *jej*, which refers to Barbara, precedes the other pronoun. The answer in (131b") is about a moped, which is the topic in this clause and the accusative weak pronoun *go*, which refers to it, precedes the dative weak pronoun. In both clauses, the weak pronouns that are interpreted as topics occur first. This observation suggests that in contrast to the pronominal clitics in South Slavic, whose order is strictly invariant, the respective placement of weak pronouns in Polish may reflect information structure arrangements.

Another distinct property of weak pronouns in Polish is their lack of obligatory adjacency to any other element. Thus, weak pronouns are not required to be adjacent to an element of a specific lexical category, such as a verb as in languages with verb-adjacent clitics, or to other pronominal elements, as shown in (132). See also Rappaport (1988: 320–321 for a discussion of related data).

[64] The object *motoru* in (131b") is marked for genitive case rather than accusative because of the "Genitive of Negation" requirement, which affects direct objects in negated clauses in Polish.

(132) Jan *mu* wczoraj chciał *go* wynająć a nie sprzedać
Jan him$_{DAT}$ yesterday wanted it$_{ACC}$ rent$_{INF}$ but not sell$_{INF}$
"Jan wanted to rent it to him rather than sell it yesterday" (Pl)

The requirement concerning the lack of adjacency to other pronominal elements is indirectly observed also in the case of pronominal clitics in Serbo-Croatian. Thus, it has been shown in section 4.2.2 that pronominal clitics in Serbo-Croatian may be split as long as they are second elements within their own intonational phrase. For instance, in the example in (133) the auxiliary clitic *si* and the dative clitic *me* are separated from the genitive clitic *ih* with a parenthetical. However, the splitting possibility is not as readily observed in clauses without a parenthetical in Serbo-Croatian as it is in Polish because of the second position requirement that holds in Serbo-Croatian. Placement of two non-adjacent pronominal clitics within the same intonational phrase would violate this requirement.

(133) Ti *si* *me*, kao što *sam* već rekla, lišio
you are$_{AUX}$ me$_{DAT}$ as am$_{AUX}$ already say$_{PART.F.SG}$ deprive$_{PART.M.SG}$
ih juče
them$_{GEN}$ yesterday
"You, as I already said, deprived me of them" (S-C, Bošković 2001: 60)

Finally, weak pronouns can be freely scrambled across the clause in Polish, largely on a par with non-pronominal nominals, and the only constraint that they need to obey is the avoidance of the clause-initial position.[65] In general, weak pronouns are also avoided clause-finally or in front of a prosodic boundary. Thus, Spencer (1991: 367–368) observes that they are attested at the end of a clause only in structures that consist of just one other lexical item, as shown in (134).

(134) a. Często (*go*) spotykam (*go*) na ulicy
often him$_{ACC}$ meet$_{PRES.1SG}$ him$_{ACC}$ on street
"I often meet him on the street"
b. Spotykam *go*
"I meet him" (Pl, Spencer 1991: 367–368)

The next section addresses properties of pronominal clitics that occur in non-verbal predicates in Macedonian. I argue that in this particular environment the pronominal elements are being reanalyzed as weak pronouns. The change is attributed to a recent impoverishment of the tense system in Macedonian.

[65] It seems that this restriction is getting relaxed, as some speakers allow weak pronouns clause-initially, for instance the dative form *mi*, especially when it occurs with the reflexive pronoun *się*.

(i) %Mi się wydaje, że…
me$_{DAT}$ REFL seems that
"It seems to me that…" (Pl)

4.6.2.1. The development of weak pronouns in Macedonian

It has been mentioned in section 4.3.3.2 that the two South Slavic languages, Bulgarian and Macedonian, have retained the simple aspectual past tenses, the aorist and the imperfect. However, these two languages have retained the aspectual tenses to different degrees. Whereas both of the tenses are very productive in Bulgarian and both the aorist and the imperfect can be combined with perfective and imperfective aspect, the tense system of Macedonian is less robust. Namely, in Macedonian the aorist is the default past tense for perfective verbs, while the imperfect is the default past tense for imperfective verbs (in addition, imperfects are formed from perfective verbs in structures with the future auxiliary particle *ќе*). According to Friedman (2002: 267), this is a very recent reduction of the tense system, as until the middle of the 20th century Macedonian permitted imperfective forms of verbs to occur in the aorist. Jung and Migdalski (2015) take this fact to be significant and note that the modification of the tense system in Macedonian coincides with a modification of its cliticization. On a par with Bulgarian, Macedonian has verb-adjacent clitics. However, in non-verbal predicate patterns, such as adjective phrases, noun phrases, and passive participles, clitics seem to be located in second position, as shown in (135). In the case of nominal predicates, the clitics may not be preceded by more than one constituent (see 135c) and they are also precluded in the clause-initial position (see 135d), though this requirement is becoming relaxed, as will be shown below.

(135) a. Petko *mi* *e* tatko
Petko me_{DAT} is father
"Petko is my father"
b. Tatko *mi* *e*
father me_{DAT} is
c. *Petko tatko *mi* *e*
Petko father me_{DAT} is
d. **Mi* *e* tatko
me_{DAT} is father (Mac, Tomić 2000: 295; Bošković 2001: 255)

Korubin (1974), Tomić (1997, 2000), and Baerman and Billings (1998) point out that recently some speakers of Macedonian have started to allow clause-initial placement of clitics when they are found in adjectival predicates and passive participles (see 136b and 137a). Furthermore, they also permit non-second position occurrence, with the clitics appearing lower in the structure, as indicated in (136c) and (137c).

(136) a. Mil *si* *mu*
$dear_{M.SG}$ are_{2SG} him_{DAT}
"He likes you"
b. %*Si mu* mil
c. Petko sekogaš *mi* *e* mil
Petko always me_{DAT} is $dear_{M.SG}$
"Petko is always dear to me" (Mac, Franks and King 2000: 86)

(137) a. %*Mu* *e* rečeno da bide točen poveḱe pati
him$_{DAT}$. is tell$_{PASS}$ to be$_{SUBJ}$ punctual more times
"He was told to be punctual more than once"
b. Rečeno *mu e* da bide točen poveḱe pati
c. Na Petreta (*mu* *e*) od strana na komisijata (*mu* *e*)
to Peter$_{DAT}$ him$_{DAT}$ is from side of commission-the him$_{DAT}$ is
poveḱe pati (*mu* *e*) rečeno da bide točen
more times him$_{DAT}$ is tell$_{PASS}$ to be$_{SUBJ.3SG}$ punctual
"Peter was more than once told by the commission to be punctual"
(Mac, Tomić 2000: 296–299)

Bošković (2001: 254–264) examines these data and suggests that they may indicate that Macedonian represents an intermediate stage between a language with second position and verb-adjacent clitics. However, given the examples in (136c) and (137c), which feature non-second position placement of the pronouns, I propose that a different type of change is taking place, which is not related to the switch between verb-adjacent versus second position cliticization. As shown in (138), which is the Bulgarian variant of (136b) provided by Vesela Simeonova, the clitics must be adjacent to the passive participle in such structures in Bulgarian. By contrast, Macedonian does not require the clitics to be verb-adjacent or appear in second position, as they can be scrambled to different positions within the clause.

(138) Na Petŭr *mu* *e* kazvano mnogo pŭti ot strana na komisijata
to Peter him$_{DAT}$ is tell$_{PASS}$ many times from side of commission-the
da bŭde točen
that be$_{SUBJ.3SG}$ punctual
"Peter was more than once told by the commission to be punctual" (Bg)

Therefore, it is more likely that the clitics in non-verbal predicates in Macedonian are being reinterpreted as weak pronouns. On a descriptive level, they undergo the process of degrammaticalization, as a result of which they become prosodically strengthened and exhibit more robust scrambling possibilities. Jung and Migdalski (2015) point out a potential correspondence between the clitic strengthening and the recent impoverishment of tense marking in Macedonian. They suggest that the modification of the Macedonian cliticization system is related to a (gradual) loss of T^0, which precludes head-adjunction of the pronominal clitics and leads to their reanalysis as weak pronouns.

4.6.2.2. The emergence of weak pronouns in Slovenian

The distribution of Macedonian clitics in the context of non-verbal predicates resembles the behavior of clitics in Slovenian, which is a second position clitic language, but in addition it allows clitics to occur in the clause-initial position in some contexts. The data addressed in this section are taken from Franks and King

(2000), Bošković (2001), and Franks (2010), who also provide a detailed description of the environments in which clause-initial clitics can be found.

The examples in (139) illustrate the clause-initial placement of sequences of auxiliary and pronominal clitics. According to Franks (2010), who refers to the observations by Priestly (2002), Milojević-Sheppard (1997), Golden and Milojević-Sheppard (2000), and the references cited therein, such clauses involve the deletion of the understood or previously implied first word or phrase. For instance, the element that is assumed to be deleted in (139a) and (139b) is the question particle *ali*, whereas in (139c) the missing element is the expletive *to*.

(139) a. *Si* *ga* videl?
are$_{AUX.2SG}$ him$_{ACC}$ see$_{PART.M.SG}$
"Have you seen him?"
b. *Se* *je* Rajko res poročil?
REFL is$_{AUX}$ Rajko really marry$_{PART.M.SG}$
"Did Rajko really get married?"
c. *Se* *mi* *je* smejal
REFL me$_{DAT}$ is$_{AUX}$ laugh$_{PART.M.SG}$
"He was laughing at me" (Slo, Franks 2010)

However, Franks points out there are also contexts in which there is no obvious element that could potentially occur in front of the clitics and then be deleted. They are exemplified in (140).

(140) a. *Sem* *ga* videl
am$_{AUX}$ him$_{ACC}$ see$_{PART.M.SG}$
"I saw him"
b. *Bomo* videli
be$_{FUT.1PL}$ see$_{PART.PL}$
"We'll see"
c. *Ga* pelje kot otroka, in *je* ubogal
him$_{ACC}$ leads like child and is$_{AUX}$ obey$_{PART.M.SG}$
"She leads him like a child, and he obeyed" (Slo, Franks 2010)

As far as prosodic properties of Slovenian clitics are concerned, Franks observes that in the examples quoted above the clitics form a single prosodic unit with the verb even though by default they are Wackernagel clitics, requiring an overt lexical element to their left. This fact indicates, in Franks's view, that the clitics in Slovenian may function either as proclitics or enclitics and as such they are prosodically neutral. Franks's hypothesis receives additional support from his observation that in Slovenian clitics may occur entirely on their own, without any prosodic support, as in (141b), which is the affirmation to the question in (141a). Furthermore, the final clitic *gà* in (141b) is stressed — it receives default stress that is placed on the final syllable.

(141) a. Ali *mu* *ga* daješ?
Q him_{DAT} it_{ACC} give
"Are you giving it to him?"
b. *Mu* *gà*
him_{DAT} it_{ACC}
"(Yes, I am giving) it to him" (Slo, Franks 2010)

The possibility of the clause-initial occurrence of clitics in Slovenian strongly resembles the cliticization facts attested in Czech, which are discussed in section 3.5.2.4.1, Chapter 3.[66] Recall from that section that the clause-initial placement in Czech is more common in colloquial registers.[67] Clitic-first placement in Slovenian seems to be typical of the colloquial language as well (see Franks and King 2000: 40), which may indicate that in both languages these forms are innovations. Therefore, it is possible to hypothesize that the clause-initial occurrence of the clitics indicates that they undergo the process of degrammaticalization, on a par with Macedonian, where this process has also begun recently.

The next section overviews diachronic data from Polish. It shows different stages of the degrammaticalization of pronominal clitics, which are closely related to the decline of morphological tense marking.

4.6.2.3. The emergence of weak pronouns in Old Polish

This section provides an analysis of tense marking and cliticization patterns in three Old Polish relics: the oldest Polish prose text *Holy Cross Sermons* (*Kazania świętokrzyskie*) from the late 13th/early 14th century, and two slightly later ones, *Queen Sophia's Bible/Sárospatak Bible* (*Biblia królowej Zofii*) from 1433–1455 and *Gniezno Sermons* (*Kazania gnieźnieńskie*) from the early 15th century. A more detailed examination of these texts is included in Jung and Migdalski (2015, in preparation), who in addition discuss a related process of degrammaticalization that took place in Old Russian. A cursory study presented here shows that the process of degrammaticalization of pronominal clitics that is currently taking place in Macedonian was completed in Old Polish and that it also coincided with the decline of tense morphology.

The examples in (142) illustrate the occurrence of verbs marked for the imperfect and the aorist tenses in *Holy Cross Sermons* (*Kazania świętokrzyskie*), the oldest Polish prose text from the late 13th/early 14th century. This text contains several

[66] Still, Slovenian is unique among the Slavic languages when it comes to the possibility of pronouncing pronominal clitics in isolation, as in (141).

[67] In addition, Czech is developing clitic "slippage," which is a term used by Short (2002: 495) to refer to occurrences of pronominal clitics in third position (as in non-verbal predicates in Macedonian) when they are preceded by a stressed element representing old information. According to Short, this type of clitic placement is becoming increasingly common even in non-stressed contexts, especially in spoken registers.

of these forms, but they are less frequent than the periphrastic tense constructed with the *l*-participle and the auxiliary "be."

(142) a. Jemuż *biesze* imię Symeon, święty, prawdziwy, bogobojny
him$_{DAT}$+FOC be$_{IMP.3SG}$ name Simon holy true God-fearing
"His name was Simon, holy, true, God-fearing"
(OP, *Sermon III*, *On St. Michael's Day*)

b. *pośpieszychą* się do kościoła na modlitwę przed Boga wszemogącego
hurry$_{AOR.3PL}$ REFL to church to prayer because God Almighty
i *poczęchą* się modlić
and start$_{AOR.3PL}$ REFL pray$_{INF}$
"They hurried to church for a prayer to God Almighty, and they started to pray"
(OP, *Sermon VI, The Cleansing Of The Blessed Virgin Mary*)

As far as the position of pronominal clitics is concerned, they tend to be placed in second position or they are verb-adjacent, as illustrated in (143).

(143) a. a togodla *ji* we złe chustki ogarnęła
and therefore him$_{ACC}$ in bad cloth wrap$_{PART.F.SG}$
"and therefore she wrapped him in bad cloth" (OP, *Sermon III*, *On St. Michael's Day*)

b. Naleźli *ji*, prawi, pieluszkami ogarnienego a w jasłkach położonego
find$_{PART.M.PL}$ him$_{ACC}$ true nappies$_{INST}$ wrapped and in cribs laid
"They found him wrapped in nappies and laid in cribs"
(OP, *Sermon III*, *On St. Michael's Day*)

However, it seems that the pronominal clitics are on the way to become prosodically strengthened and reinterpreted as weak pronouns. This is evidenced by the fact that they are sometimes found as complements of prepositions, as shown in (144). In contemporary Slavic languages, clitics may not be objects of prepositions; rather, a strong form of a pronoun is required in such a context.

(144) Sam, prawi, *przez mię* przysiągł jeśm
he say$_{AOR.3SG}$ without me swear$_{PART.M.SG}$ am$_{AUX}$
"He said that he has sworn without me…" (OP, *Sermon III*, *On St. Michael's Day*)

Jung and Migdalski (2015) observe that in Old Russian clitics may act as complements to prepositions, too, as shown in (145) for the accusative clitic *tę*.

(145) za *tę* golovy svoi sъkladyvaèmь
for you$_{ACC.SG}$ head$_{ACC.PL}$ own$_{ACC.PL}$ lay down$_{1PL}$
"We bow down to you" (OR, *Hypatian Chronicle* 1177, Zaliznjak 2008: 36)

Zaliznjak (2008: 36), who addresses instances of pronominal clitics introduced by prepositions such as the one in (145), suggests that these are residues of a former diachronic stage in which the clitics were allegedly prosodically independent. Still, Jung and Migdalski (2015) point out that it is equally possible to hypothesize

that the change was occurring in the opposite direction and that the sequences such as *za tę*$_{ACC}$ represent an intermediate stage of the reanalysis of the clitic as a pronoun, as illustrated in (146).

(146) P + weak pronoun ↔ *za tę*$_{ACC}$ ↔ P + clitic

Furthermore, Jung and Migdalski (2015) observe that in Old Slavic prepositions could be proclitics. Since proclitics may serve as hosts for enclitics, the string of a preposition and a clitic/weak pronoun is a prosodically independent unit. As a result, such combinations could be ambiguous for the speakers of Old Polish and Old Russian, given that the clitic could be interpreted as a tonic element when it occurred as an argument introduced by a preposition. Even though the phonological make-up of such a pronominal form was that of a clitic, the speakers could interpret it morphosyntactically as a non-clitic variant due to the prosodic support of the preposition. This ambiguity may have provided a sufficient condition for the reinterpretation of the pronominal clitics as weak pronouns and triggered their degrammaticalization.

Moving back to Old Polish, the slightly later texts such as *Queen Sophia's Bible/Sárospatak Bible* (*Biblia królowej Zofii*) from 1433–1455 or *Gniezno Sermons* (*Kazania gnieźnieńskie*) from the early 15th century virtually do not exhibit any simple past tense forms any more, which are replaced with the periphrastic tense formed with the *l*-participle and the auxiliary "be." Furthermore, the usage of pronominal forms seem to be on the rise, as they are attested considerably more frequently than in *Holy Cross Sermons*, in particular in *Gniezno Sermons*. What is also striking is the fact that weak/clitic forms are often used interchangeably in parallel structures, with apparently the same pragmatic and semantic import. For instance, the structure in (147) contains a number of clauses introduced by the conjunction *i* 'and,' which all largely have the same syntactic structure, yet some arguments of the verbs are clitics, such as *ji*, and some other arguments are strong pronouns, such as *jemu*. This fact may indicate that clitics such as *ji* were no longer interpreted as prosodically different than the other pronominal forms.

(147) Tegdy wziął Pan Bog człowieka i postawił *ji* w raju
then take$_{PART.M.SG}$ God man$_{ACC}$ and put him$_{ACC}$ in paradise
rozkoszy, aby działał a ostrzegał *jego*. I przykazał *jemu*…
bliss$_{GEN}$ so-that worked and protected him$_{ACC}$ and commanded him$_{DAT}$
"The Lord God took the man and put him in the Garden of Eden to work it and take care of it. And the Lord God commanded him…"
(OP, *Queen Sophia's Bible*, *Genesis*, 2,15–16)

As far as their syntactic placement is concerned, neither weak pronouns nor clitics need to be verb-adjacent or occur in second position. Moreover, it appears that the clitic/weak forms display largely the same distribution as strong forms.

(148) a. I przywiodł *je* przed Adama, aby *je* opatrzył
and brought them$_{ACC}$ before Adam so-that them$_{ACC}$ saw
a jimiona *jim* dał
and names them$_{DAT}$ give$_{PART.M.SG}$
"He brought them to Adam to see what he would name them"
(*OP, Queen Sophia's Bible*, *Genesis*, 2, 19)

b. Nazwał jest Adam jimiona *jich* wszelikiemu stworzeniu źwierzęcemu
name$_{PART.M.SG}$ is$_{AUX}$ Adam names them$_{GEN}$ all beings animal
"Adam gave names to all the livestock" (OP, *Queen Sophia's Bible*, *Genesis*, 2, 20)

Still, there is an instance of a regular second position placement of a clitic in some homilies from *Gniezno Sermons*. The clitic is the dative form *ci*, which functions as an ethical dative. Recall from section 3.4.3 that the ethical dative is an operator clitic and that such clitics target second position irrespective of whether a language has other Wackernagel clitics or not. Hence, *ci* in examples such as the ones in (149) follows the regular distribution of other operator clitics in Slavic. Notably, argumental variants of other pronominal elements, such as the accusative form *je* in (149b), are most likely weak pronouns and do not assume a designated syntactic position in the clause structure.

(149) a. ten*ci* się jest był w łonie u swe miły matuchny panny Maryje
this+DAT REFL is$_{AUX}$ be$_{PART}$ in womb at his kind mother virgin Mary
"Who had been in the womb of his kind mother Virgin Mary"
(OP, *Sermon 10*, 180r, *Gniezno Sermons*)

b. cożci jest *je* przezeń był nasz miły Kryst czynił drzewie
what+DAT is$_{AUX}$ them$_{ACC}$ because be$_{PART.M.SG}$ our kind Christ made earlier
"that because of them our kind Christ had made earlier"
(OP, *Sermon 10*, 179r, *Gniezno Sermons*)

Summarizing, although a more detailed examination of Old Polish relics is required, the cursory analysis provided in this section shows that the decline of tense morphology in Polish was accompanied by the strengthening of pronominal clitics. The pronominal clitics became prosodically independent and began to occur in the same syntactic environments as strong pronouns and nouns, possibly with the exception of the clause-initial placement.

4.7. Summary

The main aim of this chapter has been to provide a principled account for the variation in the cliticization patterns observed in Slavic, in particular for the contrast between verb-adjacent and second position cliticization. So far most of the analyses have explained the contrast by postulating different projections occupied by the

respective clitic types in the structure or by appealing to divergent PF conditions. However, as observed first by Stjepanović (1998, 1999) and Bošković (2001), the two cliticization systems represent different syntactic mechanisms. The data related to VP-ellipsis and clitic splits indicate that whereas verb-adjacent clitics cluster and adjoin to a single projection, such as T^0, each of the second position clitics forms an independent syntactic constituent and lands in a separate specifier in a functional projection above VP. This chapter has provided more empirical arguments in support of the syntactic contrast between the two cliticization patterns, related to clitic climbing, the incorporation of the clitics into negation, and the availability of the Person Case Constraint.

The main argumentation for the hypotheses developed in this chapter has been drawn from diachronic data. Examples extracted from Old Church Slavonic, Old Serbian, and Old Polish relics show that initially second position cliticization was restricted to operator clitics *li*, *bo*, and *že*, which all specified the illocutionary force of a clause. Subsequently, pronominal clitics lost verb-adjacency and started to occur in second position. The process has been shown to be strictly related to the decline of tense morphology, namely the loss of the aorist and the imperfect. Thus, it occurred very early in Slovenian, whose oldest text *Freising Manuscripts* from the 10th–11th century features sporadic cases of the aorist and consistent second position clitic placement, whereas in Montenegrin dialects, in which the simple past forms are still found in the literary language, second position clitics were attested as late as in the 19th century.

The process of the decline of tense marking has been argued to begin once the semantic independence of tense from aspect is lost. This happens when the combinations of aorist forms with imperfective aspect and of the imperfect tense with perfective aspect become unavailable, with only the perfective aorist and the imperfective imperfect variants left. Such a scenario has been argued to give rise to data ambiguity for the language learner, as a result of which aorist and imperfect are no longer recognized as independent tense forms distinct from aspect.

Old Russian and Old Polish relics provide additional support for the hypothesis of the dependency between tense marking and cliticization, though they display a different type of development of their pronominal forms. With the loss of tense morphology, pronominal clitics in these languages became reinterpreted as weak pronouns, with a potential intermediate stage of second position cliticization. Weak pronouns exhibit properties that are more typical of XP-nominals than of clitics, as they may be scrambled across the clause, allow different types of orderings and do not need to be adjacent to each other. Consequently, the reanalysis of clitics as weak pronouns is argued to be an instance of degrammaticalization, understood as a reinterpretation of pronominal heads as phrasal elements. On a more general level, since it represents a reversal of grammaticalization, this process provides an empirical argument against the idea of directionality in language change and language drift. Moreover, the process of degrammaticalization is also

shown to be taking place synchronically in the context of non-verbal predicates in Macedonian, the language which still features verb-adjacent pronominal clitics but has recently lost the independence of tense and aspect marking, as well as in Czech and Slovenian.

This chapter has also addressed other analyses of the diachrony of cliticization in Slavic carried out in the literature. They all have focused on single languages and as a result they lack the empirical breadth of the current study. Moreover, they have been shown to be empirically untenable. For instance, Pancheva's (2005, 2008) analysis of diachronic changes in Bulgarian cliticization, which attributes a shift in the position of pronominal clitics to a switch in the headness parameter, has been demonstrated to produce conflicting results when applied to corresponding data from other Slavic languages and is also challenged by the timing of the changes in the placement of pronominal clitics with respect to the auxiliary. The major advantage of the current study is that it is based on solid empirical bases and that it appeals to tense morphology, an independent grammatical property, whose presence or absence has been argued to decide about the type of cliticization observed in a language.

Conclusion

This work has investigated two second position effects, the V2 rule in Germanic and second position cliticization in Slavic. These two mechanisms represent a peculiar syntactic operation that requires placement of an element, a finite verb or a clitic, after a category-neutral, clause-initial constituent. They have been hypothesized to involve related syntactic operations in the literature but so far they have not been examined in a comparative way in detail, especially in a diachronic perspective. The main aims of this work have been to determine the trigger of second position verb and clitic placement and to establish a grammatical property that decides about the presence and absence of a second position effect in a language.

In the first description of second position phenomena in old Indo-European languages by Bartholomae (1886) and Wackernagel (1892), the process was attributed to prosodic requirements of the clitics or the verb, which needed to be supported by stressed lexical material to their left. In contemporary Germanic languages, the V2 order may at first sight seem to be contingent on phonological requirements in Northern Norwegian dialects, in which the finite verb occurs in second position if the *wh*-word in the prefield contains at least two syllables; otherwise, the verb targets third position. However, as has been established by Westergaard (2005) and Westergaard and Vangsnes (2005), the V3 order is preferred with pronouns and expletives and when the subject is definite or context-given. This observation indicates that verb placement is influenced by information structure requirements and that the length of the prefield element may be an epiphenomenon. This fact suggests, in turn, that a syntactic analysis of V2 and V3 orders is applicable to Northern Norwegian, on a par with other Germanic languages.

A major issue in the syntactic analyses of V2 in Germanic since the 1980s has been the position occupied by the verb in V2 clauses. Den Besten (1977/1983) suggested that the verb lands in C^0 in matrix clauses, which allowed him to straightforwardly capture the impossibility of the V2 order in subordinate clauses headed by the complementizer in languages such as Dutch and German. However, despite its elegance, later studies put Den Besten's proposal into question, mainly due to the observation by Travis (1984) that the elements preceding the verb may have

different interpretations so it is unlikely that the verb always lands in the same projection, as well as on the basis of Zwart's (1993b) study of the position of clitic and tonic subjects with respect to the verb in Dutch. More recently, Postma (2013) suggested that the position of the verb may be determined not only by a particular structure in which it occurs, but it is also subject to crosslinguistic variation: whereas some Germanic dialects permit V2 placement in both T^0 and C^0, some other dialects restrict the position of the verb to C^0. Furthermore, detailed examination of Scandinavian languages has shown that the presence of the complementizer does not always preclude the V2 order in subordinate clauses, and that embedded V2 is optionally possible depending on the degree of assertion expressed by the verb in the matrix clause. Correspondingly, Frey's (2006) study indicates that the prefield constituent preceding the verb is unlikely to target a uniform syntactic position either. It may be occupied by base-generated material such as conjunct adverbials, elements that move from the highest position in the middle field without any semantic import such as expletives, or topicalized constituents that reach the prefield via A'-movement, which results in a topicalized interpretation of the raised element.

The conclusion reached in Chapter 1 on the basis of the variation in the structural positions that can be occupied by the verb and the prefield elements in V2 structures is that V2 placement is not a uniform syntactic phenomenon, and that V2 is actually an umbrella term that is used to refer to different operations which result in verb movement to second position. This conclusion also implies that there is no uniform trigger for V2 movement. Therefore it does not seem correct to motivate all instances of the V2 order in the same way; for instance, by ascribing V2 placement to overt Force marking. Still, it is possible to make crosslinguistic generalizations about the occurrence of the V2 order. For instance, it has been observed in the literature that V2 structures are restricted to tensed environments (see Den Besten 1977/1983; Roberts and Roussou 2002; Koster 2003; Jouitteau 2010), and this generalization is also confirmed by V2 languages outside the Germanic group, such as Karitiana, in which V2 orders are possible only in main clauses with tense-marked verbs, while in subordinate clauses verbs are not tensed and occur clause-finally. The generalization of tense dependency also holds for second position cliticization, as is shown in Chapter 4.

The conclusion concerning the non-uniformity of V2 structures receives additional support from the survey of the historical development of V2 structures across Germanic carried out in Chapter 2. Thus, the data from Gothic relics show that initially the verb targeted second position in operator contexts, related to clause typing or illocutionary force specification, which in fact largely correspond to the environments of "residual" V2 observed in Modern English. In Old English texts V2 structures were more common than in Modern English, but the current less frequent occurrence is not due to the loss of verb movement to second position but rather due to the modification of the TP-system, in particular the rise of the

EPP feature on T^0 in Middle English, and the corresponding emergence of obligatory subject placement in Spec, TP, which resulted in the lower linear position of the verb. Other old Germanic dialects, such as Old High German and Old Norse, expanded their V2 grammars, which eventually developed into uniform V2 systems, though the motivation for the expansion is a matter of debate. For instance, Axel (2007) attributes the growth of the V2 system in Old High German to the decline of sentential particles, which encoded the illocutionary force of a clause, whereas Fuss (2008), who presents a critique of Axel's proposal, suggests that V2 clauses expanded in Old High German because of the emergence of expletives, which arose as a result of the reanalysis of temporal adverbials. I demonstrate that Fuss's hypothesis is challenged by empirical facts from Old Norse, in which the development of a consistent V2 grammar predates the emergence of expletives by several centuries. Moreover, I provide a critique of the prosodic analysis due to Dewey (2007), which ascribes the spread of V2 grammars to the loss of the prosodic dependency of V2 structures, by showing that an alternative, syntactic analysis of V2 in Old Germanic, which relies on the availability of Left Branch Extraction in Old Germanic, may offer a simpler explanation of the diachronic changes.

Indirectly, the multitude of the accounts of the diachrony of V2 clauses suggests that the loss or the emergence of the V2 pattern cannot be attributed to a single factor. Likewise, it also shows that establishing a parametric value that decides about the presence or absence of the V2 system in a language is a challenge because V2 is not a uniform phenomenon. What is clear though is that there is a strict distinction between the operator, Force-encoding V2 pattern, which emerged earlier and was available already in Gothic, and the generalized V2 order, which developed later in most Germanic languages independently of the operator V2. These two patterns display different syntactic properties and in research on contemporary Germanic languages they are sometimes referred to as "V2-Force" versus "V2-Fin," especially in studies that assume Rizzi's (1997) split-CP analysis of the left periphery in the clause (see Biberauer 2016).

The division between generalized and Force-related V2 orders is supported by the analysis of second position cliticization in Slavic carried out in Chapter 3. In that chapter I show that the traditional division of the two cliticization systems in Slavic into verb-adjacent cliticization, attested in Bulgarian and Macedonian, versus second position cliticization, found in Czech, Serbo-Croatian, Slovak, and Slovenian, is not sufficient. I observe that there exists an additional group of operator clitics, which encode the illocutionary force of a clause. They are always found in second position irrespective of whether a language has other (generalized) second position clitics or not. Diachronically, on a par with operator V2 in Germanic, they occur in second position earlier than the other clitics, and in the languages with generalized second position cliticization they may display special syntactic properties. For instance, they may raise higher in the structure than other second position clitics, and they may also impose special restrictions on the category and

the syntactic status of their hosts. The proposal of the additional, distinct class of operator clitics affirms the close crosslinguistic correlation between the two second position effects examined in this work. Notably, operator clitics constitute a special class of second position clitics not only in Slavic, but as has been established by Kaisse (1985) and Hale (1987, 2007), also in many other languages, including Ancient Greek, Finnish, Ngiyambaa, Pashto, Papago, Tagalog, Vedic Sanskrit, and Warlpiri. It is thus likely that this division is universal.

In the majority of linguistic literature, the two major types of cliticization in Slavic, verb-adjacent and second position cliticization, are assumed to result from different placement of the clitics in the structure, with second position clitics located higher than verb-adjacent clitics, or due to a prosodic condition. However, Stjepanović (1998, 1999) and Bošković (2001) show that the two types of cliticization involve different syntactic mechanisms: whereas verb-adjacent clitics cluster and target a single projection, each second position clitic forms an independent constituent and raises to a separate specifier in the functional projections above VP. Suitable evidence for this observation comes from the divergent distribution of the two types of clitics in the context of VP-ellipsis and clitic splits. Chapter 4 provides additional support for this syntactic contrast, related to the availability of the Person Case Constraint, clitic climbing, and the interaction of clitics with negation.

The main aim of Chapter 4 has been to establish a grammatical property that determines the availability of a particular type of cliticization. On the basis of the diachronic investigation of old Slavic languages, it shows that cliticization is contingent on the availability of tense morphology. Thus, in Old Church Slavonic and in the oldest stages of other old Slavic languages pronominal clitics are verb-adjacent, whereas second position cliticization is restricted to operator clitics. Pronominal clitics gradually shift to second position and the process is demonstrated to have been contemporaneous with the loss of simple tenses, the aorist and the imperfect. It occurs very early in Old Slovenian, whose oldest relic *Freising Manuscripts* from the 10th–11th century contains very few aorist forms and features regular second position cliticization, whereas in Montenegrin dialects, which till recently showed a high frequency of aorist structures, second position cliticization was still attested in the 19th century. The shift to second position did not occur in Bulgarian and Macedonian, which still have the simple tense forms.

The correlation between the shift of pronominal clitics to second position and the loss of tense morphology is captured in syntactic terms through the assumption that the TP projection is not a universal one, and that it may be lost with the decline of tense morphology. In languages with tense morphology, T^0 is the adjunction site for pronominal clitics, as evidenced by the applicability of the Person Case Constraint in these languages. Once T^0 is lost, pronominal clitics may not adjoin to a suitable head projection any more and instead each of them targets a separate specifier in the extended functional projections of VP. This type

of cliticization procedure explains the availability of the syntactic mechanisms in languages with second position clitics that are not observed in verb-adjacent clitic languages, such as clitic splits, clitic climbing, VP-ellipsis, and the impossibility of clitic incorporation into negation. They all indicate that second position clitics do not cluster and do not adjoin to a single head projection.

The process of the language change addressed in this work is argued to be initiated by the loss of the semantic independence of tense from aspect. Namely, it starts once combinations of aorist forms with imperfective aspect and of the imperfect tense with perfective aspect cease to be available in a language. Such a situation presents a case of data ambiguity for the child acquiring the language, who may no longer recognize the aorist and imperfect tenses to be distinct from aspect morphology.

Chapter 4 has also shown that the loss of tense morphology may lead to another type of language change, which is the reinterpretation of pronominal clitics as weak pronouns. This process occurred in Old Russian and Old Polish and is claimed to be taking place in some contexts in Czech, Slovenian, and Macedonian. As a result of this change, pronominal forms became prosodically more independent and syntactically mobile. The process is argued to be an instance of degrammaticalization, understood as a reversal of grammaticalization, with former head elements reinterpreted as phrasal material. Grammaticalization has often been claimed in the traditional linguistic literature to be unidirectional, so the data investigated in Chapter 4 provide an empirical argument against the idea of language drift and the directionality in language change.

The major theoretical contribution of Chapter 4 is the observation, on the basis of a solid, crosslinguistic empirical basis, of an independent, parametric grammatical property that decides about the type of cliticization that can be potentially attested in a language. This property is tense morphology, which if available, substantiates the TP projection and through the T-head provides appropriate adjunction site for verb-adjacent clitics. If there is no tense morphology and the TP projection is missing, verb-adjacent cliticization is argued not to be possible, and prosodically-deficient pronominal forms may be instantiated only by second position clitics or weak pronouns. The generalization argued for in this work is based on the study of Slavic languages, though it may also be supported by Philippine languages, which on a par with most Slavic languages display second position clitics and render tense distinctions via aspectual marking. It remains to be determined whether other languages with second position clitics may provide support for this generalization, synchronically and diachronically.

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