

# **The Syntax of Compound Tenses in Slavic**

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# The Syntax of Compound Tenses in Slavic

Proefschrift

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## Abbreviations

ACC	accusative
AOR	orist
AUX	auxiliary
Bg	Bulgarian
COND	conditional
CL	clitic
COM	comparative
Csb	Kashubian
EMPH	emphatic
F	feminine
FOC	focus particle
FUT	future auxiliary
GEN	genitive
GER	gerundive/gerund
IMP	imperfectum (tense)
IMPF	imperfective (aspect)
IMPV	imperative
INF	infinitive
INST	instrumental
IPT	impersonal participle (in Polish)
M	masculine
Mac	Macedonian
N	neuter
NOM	nominative
NV	non-virile
OCS	Old Church Slavonic
PAP	present active participle
PARTIT	partitive
PASS	present passive participle
PAST.PAP	past active participle
PAST.PASS	past passive participle
PAST	past tense
PART	the /-participle
PF	synthetic perfect (in Latin)
PI	Polish
PL	plural
PLQPF	pluperfect
POSS	possessive
PRAP	present active participle
PRES	present tense
PRF	perfective (aspect)
PRON	pronoun
PROX	proximate (demonstrative, in Macedonian)
PTC	particle
PTP	past participle

Q	the question/focus particle <i>li</i>
REFL	reflexive
Rus	Russian
S-C	Serbo-Croatian
SUBJ	subjunctive
VIR	virile
VOC	vocative

# Introduction

It has often been noted that Slavic languages show considerable resemblance in their lexicon and morphology. However, their syntactic structures differ to a large degree. This dissertation is concerned with one facet of the syntactic variation. It examines the syntax of compound tenses in Slavic, taking into account their diachronic development from Proto-Indo-European via Old Church Slavonic to the current stages. The two research questions it seeks to explore are what structure compound tenses have in general, and how and why they differ in Slavic languages.

## 1. Theoretical embedding

The analysis is couched in the framework of generative linguistics; in particular it follows its recent version that is currently being developed as the Minimalist Program (cf. Chomsky 1995 and subsequent work). One of the cornerstones of this framework is the observation that children attain grammatical competence very rapidly and to the utmost perfection even though the linguistic data they are exposed to are fragmentary and seem insufficient to acquire the level of complexity represented by natural language. This paradox is explained through the existence of *Universal Grammar*, which is understood as a set of basic, biologically inherited principles that condition the way language-specific Grammars are constructed. These principles are parameterized, so that each language may set their values differently. However, given the speed at which language is attained, these rules must be very simple and general, while the parameter values must be deducible from very limited language input. Thus, the task of the generative linguist is to study language data and to try to capture them into simple and insightful generalizations.

The data investigated in this dissertation cover compound tenses in a selection of Slavic languages. Compound tenses are structures formed with at least two verbs: the auxiliary and the main verb. Auxiliaries differ from other types of verbs in several respects.<sup>1</sup> They form a closed class of functional categories, which in many languages show distinct morphological and phonological properties. For example, the auxiliary *be* is the only verb in English with a suppletive paradigm. The peculiar morphosyntactic properties are especially evident in the case of the auxiliaries which have lexical counterparts. For instance, in some varieties of English only the auxiliary *have*, but not the main verb *have*, can be negated or undergo subject inversion.

The distribution of auxiliaries in the clause structure is also quite restricted. They are always very selective about the category of their complements, as normally they accept only verbs of a specific category. For instance, the auxiliary *have* in English is always complemented by the past participle. Moreover, the type of auxiliary may influence the morphological form of its complement. Thus, past participles in many Romance and Germanic languages agree in  $\varphi$ -features with the subject when they are selected by the auxiliary 'be', but not 'have'.

The semantic function of auxiliaries is rather limited, as they merely express grammatical properties of predicates, such as tense, aspect or mood. In this way they perform a role akin to that of inflectional morphology on the verb. In some more radical accounts, auxiliaries are claimed to be devoid of any semantic value. For

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<sup>1</sup> See Barbiers and Sybesma (2004) for a recent overview of the properties of auxiliaries, which was also used in this introduction.

instance, Chomsky (1993) argues that all auxiliaries are uninterpretable at LF. Likewise, Emonds (2000) states that they are lexicalized post-syntactically (that is, at PF), because they encode only formal features, which do not play any role at LF. This might indeed be true of some of them, such as the spurious *do* in English or the copula *be*, but in general this view seems too strong, given that some auxiliaries, such as modal verbs, clearly contribute to the clause interpretation (cf. Barbiers and Sybesma 2004).

According to Pollock (1989: 385ff), auxiliaries do not assign theta roles to the constituents that they are subcategorized for. On the basis of data from English and French, he relates this property to syntactic movement, which in his opinion is only available to verbs that are not theta role assigners, but it is not really clear why this should be so. This is not a widely-accepted view, though, and this dissertation follows the proposals due to Hoekstra (1984, 1986), Roberts (1987), and Broekhuis and Van Dijk (1995), who argue that *have* is a transitive auxiliary, whereas *be* is an unaccusative auxiliary. The former introduces an agent and assigns accusative case to the object, while the latter is unable to perform these functions, on a par with other unaccusative verbs.

The relation of auxiliaries with respect to other verbs has been a matter of a long debate in generative grammar. On the one hand, Chomsky (1965) proposed that auxiliaries are categorially different from the main verb, therefore they do not project a separate VP, but rather they are extensions of the VP template. On the other hand, Ross (1969) claimed that auxiliaries have the same functions as main verbs; consequently, they project their own VP and their own maximal clausal projection. In the current framework these two lines of reasoning correspond, respectively, to a monoclausal versus bi-clausal interpretation of the compound tense structure. This dissertation will not tackle this issue (see Erb 2001, Julien 2001, Van Riemsdijk 2002, and Breitbarth 2005 for some discussion), and I will assume that in Slavic compound tense constructions are uniformly monoclausal, with the participle projecting the lexical head Part, which is dominated by several functional projections up to TP.

Finally, it is important to point out that auxiliaries differ from main verbs also in their phonological properties. For instance, in English their onset and the nucleus may be eliminated, as in (1).

- (1) If I'd known you're coming, I'd have baked a cake

Correspondingly, the perfect auxiliaries in Slavic are often clitics, and their phonological requirements are reflected in the syntactic patterns of compound tenses. Moreover, it will be shown that the phonological reduction of certain verbs indicates the reanalysis of a lexical verb as an auxiliary.

The status of the past participle, which constitutes the main verb in compound tenses, is subject to equal controversy. In contrast to auxiliaries, participles form an open class of lexical items to which new members may be added, and are as rich in their semantic content as other lexical verbs. However, their categorial status is far from clear. In languages with overt agreement morphology, participles are specified for number and gender, on a par with adjectives, but not for person, in contrast to finite verbs. They can also appear in the contexts which are inaccessible for verbs; for instance, they may modify nouns (e.g. *the forgotten story* vs. *\*the forget story*), or appear with linking verbs, such as *remain* (e.g. *the door remained closed* vs. *\*the door remained close*).

Moreover, participles occur in many types of constructions. That is, unlike auxiliaries, whose distribution is limited to compound tenses, participles perform a variety of functions. For instance, in many Indo-European languages the same type of



participle that is used in compound tenses as an “active” past participle appears in passive structures, as in *I have forgotten this story* and *a forgotten story*. This fact has given rise to the idea, most recently explicitly verbalized by Emonds (2000 ch. 5), of a uniform categorial treatment of past and passive participles. Even though this proposal is not unproblematic, because unaccusative verbs such as *arrive* may occur as perfect participles but never as passive participles, I will demonstrate that it is basically correct and receives more support from Slavic data. I will argue that just as passive participles, past participles are unable to project an external theta role and assign structural case, but through the process of grammaticalization of the compound tense formed with the auxiliary ‘have’, the participle increases its verbiness and may be formed from a wider spectrum of verbs.

## 2. The compound tenses in Slavic

Most of the generalizations concerning the nature of participles and auxiliaries have been made in the generative literature on the basis of Romance and Germanic data. The Slavic languages have not received much attention, even though they use compound tense constructions that are not found in many other Indo-European language groups. They also exhibit a wide range of morphologically and functionally diversified participles. Thus, their examination may lead to a verification of some assumptions concerning the properties of compound tenses.

The Slavic languages have developed a compound tense which is formed with the verb ‘be’ as the exclusive auxiliary in all contexts, irrespectively of the transitivity of the main verb. This is a rare pattern outside Slavic. In Germanic and Romance languages it is found only in the dialect of Terracina (Italo-Romance) and Shetlandic (a variety of Scots English, cf. Bentley and Eythórsson 2004). In other Germanic and Romance languages the verb ‘be’ is selected as the auxiliary only in unaccusative and passive structures; that is, when the subject is an internal argument of the verb.

In Slavic, the auxiliary is accompanied by the so-called “/-participle”, which is used as the main verb (cf. 2a). In contrast to the Germanic and Romance languages, the participle in the compound tense is morphologically different than in the passive construction. As (2b) shows, the /-participle may never be used as the passive participle.

- (2) a. Ivan e čel knjigata  
 Ivan be<sub>PRES.3SG</sub> read<sub>PART.M.SG</sub> book-the  
 “Ivan has read/been reading the book”  
 b. Knigata e četana/\*čela ot Ivan  
 book-the<sub>F</sub> be<sub>PRES.3SG</sub> read<sub>PASS.F.SG/readPART.F.SG</sub> by Ivan  
 “The book is being read by Ivan” (Bg)

The /-participle is also not a past participle, because in some Slavic languages it is used to express future meanings, as shown in (3a) for Polish and in (3b) for Serbo-Croatian. Example (3b) represents the so-called *Future II* construction.

- (3) a. Jan będzie pisał list  
 Jan be<sub>PRF.1SG</sub> write<sub>PART.M.SG</sub> letter<sub>ACC</sub>  
 “Jan will be writing a letter” (Pl)

- b. Kad budemo govoreli s Marijom...  
 when be<sub>PRF.1PL</sub> speak<sub>PART.PL</sub> with Marija  
 “When/if we speak with Marija...” (S-C)

The *l*-participle renders the aspectual meaning of the predicate. Thus, the form *čel* in (2a) is specified for the imperfective aspect. It can also appear with an aspectual prefix, such as *pr-* in (4), which characterizes perfective meaning.

- (4) a. Ivan e pročel knjiga  
 Ivan be<sub>PRES.3SG</sub> read<sub>PART.M.SG</sub> book-the  
 “Ivan has read the book” (Bg)

However, the auxiliary ‘be’ shows aspectual distinctions as well. For instance, when it is used in the imperfective aspect in Old Church Slavonic (cf. *běaxō* in 5a), the complex tense is interpreted as the pluperfect. When the verb ‘be’ occurs in the perfective (cf. *bōdemъ* in 5b), it gives rise to the future perfect interpretation. Note that both of the examples in (5) contain the *l*-participle as the main verb. This indicates that the temporal interpretation of these sentences depends on the form of the auxiliary, rather than the participle. This fact casts a serious doubt on the idea that auxiliaries do not have any semantic value.

- (5) a. Мънози же от иудеи бѣахō пришло къ Мартѣ  
 many<sub>FOC</sub> from Jews be<sub>IMP.3PL</sub> come<sub>PART.SG.N</sub> to Martha  
 i Marii da utěšetъ i  
 and Mary to comfort them  
 “And many of the Jews had come to Martha and Mary to comfort them”  
 (OCS, Lunt 1974: 98)
- b. ... вѣскōжō се i родили бōdemъ  
 why even bear<sub>PART.PL</sub> be<sub>PRF.1PL</sub>  
 “Why will we have been born?” (OCS, Schmalstieg 1983: 159)

Diachronically, the *l*-participle is a Slavic innovation. It derives from a class of Proto-Indo-European adjectives ending in *\*-lo*, which were completely verbalized and reanalyzed as participles. It still has adjectival morphology, and agrees with the subject of a clause in gender and number, but is virtually not found outside the compound tenses. In this respect the *l*-participle differs from the corresponding categories in many other Indo-European languages, which can be used as adjectives outside the compound tense paradigm.

Previous accounts of compound tenses in Slavic did not pay attention to the special character of the *l*-participle described above or to the fact that they are always constructed with the verb *be* as the auxiliary. Hence, there are a number of interesting issues that have not been addressed. For instance, how is the *l*-participle different from the past participle in the Germanic and Romance languages? Why does it always agree with the subject? What grammatical roles do the *l*-participle and the auxiliary ‘be’ perform in the compound tense structure? How do its properties influence the syntax of compound tenses in Slavic?

The examination of the *l*-participle structures and their relation to compound tenses found in other Indo-European languages will be facilitated by the fact that two Slavic languages, Kashubian and Macedonian, have alongside developed a compound tense which is structurally the same as the corresponding constructions in Germanic

and Romance. As shown in (6a) for Macedonian, the auxiliary ‘have’ is accompanied by the past participle *skinato*, which is morphologically the same as the passive participle (cf. 6b). However, the past participle always occurs in an invariant, singular neuter form, and never agrees with the subject or its complement.

- (6) a. Ja imam skinato mojata kosula  
 her<sub>CL.ACC</sub> have<sub>1SG</sub> tear<sub>PTP.N</sub> my-the shirt<sub>F.SG</sub>  
 “I have torn my shirt”
- b. Novoto palto mu e skinato  
 new-the<sub>N</sub> coat<sub>N</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> tear<sub>PASS.N</sub>  
 “His/her new coat is torn” (Mac)

Some other Slavic languages use a related construction exemplified in (7) for Polish.

- (7) Mam już wszystkie ciasta upieczone  
 have already all cakes<sub>ACC.NV.PL</sub> bake<sub>ACC.PASS.NV.PL</sub>  
 “I have already baked all the cakes” (Pl)

The principal difference between (6) and (7) is agreement in case, gender, and number between the direct object and the participle in the latter example. Moreover, the structure in (7) displays various lexical and aspectual restrictions on the participle. Diachronic studies show that the construction corresponding to the one in (7) was the source of the compound tense formed with the auxiliary ‘have’ in the Germanic and Romance languages (the so-called ‘have’-perfect). The fact that it is found in a number of Slavic languages at different stages of its grammatical development permits an investigation of this diachronic process from a synchronic point of view. The questions that will be posed in relation to the ‘have’-perfect will include the way its syntactic configuration becomes modified with its grammaticalization. The most evident indication of the process is the loss of the object agreement on the participle. How and why is it lost? Does the grammaticalization of the ‘have’-perfect imply a categorial shift of the auxiliary or the participle? Does it reverse the inability of the participle to assign structural case and a theta role? How does it influence the status of the auxiliary ‘have’? And, on a more general level, what is the structure of the ‘have’-perfect in comparison to the ‘be’-perfect? What is the function of the auxiliaries and the participles in the respective constructions?

Apart from looking at the structural properties of compound tenses, the dissertation also investigates typological differences in a number of Slavic languages. All of them originate from a common ancestor, but the inventory and the structure of their tense systems have been considerably diversified throughout history. It seems that most studies of language change focus on external sources of linguistic variation, which arise due to contacts among speakers of different dialects. An issue that is investigated less often is how internal properties of a language may trigger a modification of its grammar. In the case at hand, I will examine the tense and aspect system in Old Church Slavonic (that is, the oldest written variant of Slavic), which according to some studies (cf. Hewson & Bubenik 1997) was imbalanced because of an overlap in marking aspectual distinctions by both aspectual morphology and aspectual past tenses. Due to this overlap, the whole system was uneconomical, unstable and hence prone to simplification. The simplification occurred either via a semantic reanalysis, which gave rise to new meanings of semantically superfluous constructions, or through a

morphological reduction of certain compound tense structures. It will be demonstrated that the morphological reduction is directly reflected in syntax.

### 3. Organization of the thesis

The outline of the thesis is as follows. Chapter 1 is a detailed introduction to the tense and aspect system that Old Church Slavonic inherited from Proto-Indo-European. It discusses the simple and compound tense forms found in this language, and shows how they are represented in the language groups that subsequently evolved. The presentation is very detailed, because I believe that it is crucial for any linguist to ground his/her analysis on solid, crosslinguistic data in order to be able to make valid generalizations. The analysis will help the reader understand the complexity of the tense and aspect distinctions in Slavic as well as the sources of structural differences among these languages.

Chapter 2 analyzes the compound tenses formed with auxiliary ‘be’ and the *l*-participle in Bulgarian and Serbo-Croatian. In particular, it examines properties of the *l*-participle and argues that in contrast to the past participle in Germanic and Romance, it is able to assign structural case and project an external theta role. These assumptions are used to make specific claims about the structure of the VP in Slavic and are applied in the analysis of the widely-discussed *l*-participle fronting across the auxiliary to the clause-initial position. Contrary to all previous accounts, which advocate a head movement approach via “Long Head Movement” (cf. Lema and Rivero 1989; Rivero 1994a) or head adjunction (Wilder and Ćavar 1997; Bošković 1997), it is argued that the *l*-participle undergoes remnant XP-movement and lands in Spec, TP to check the  $\varphi$ -features of T.

Chapter 3 is devoted to an analysis of the compound tense formed with the auxiliary ‘have’ and the past participle. As was mentioned above, this is the default compound tense in Germanic and Romance, but among the Slavic languages, it has been fully developed only in Kashubian and Macedonian. Some other Slavic languages, such as Polish and Czech, use non-grammaticalized variants of the construction, which permits studying its development in detail. The chapter will also investigate past participle movement across the auxiliary ‘have’ in Macedonian and in this way verify the claims made about the *l*-participle and its movement in chapter 2.

Chapter 4 explores phonological and syntactic properties of the auxiliary ‘be’, which in Old Church Slavonic and South Slavic is a clitic. The auxiliary always clusters with pronominal clitics, so it is necessary to examine them together. In contrast to other elements in the clause in Slavic, clitics must rigidly appear in designated positions. The South Slavic languages exhibit a remarkable diversity in the distribution of clitics. It is shown that this reflects a process of language change, which involves a shift from the second position clitics in Old Church Slavonic and Serbo-Croatian to verb-adjacent clitics in Bulgarian and Macedonian. The change is argued to have a syntactic reflex: second position clitics target specifier positions, whereas verb-adjacent clitics are adjoined to T.

Chapter 5 discusses the syntax of compound tenses in Polish. In comparison with South Slavic languages, such as Bulgarian and Serbo-Croatian, its structure has been simplified. For instance, the auxiliary ‘be’ has been largely reanalyzed as an affix on the *l*-participle. It will be demonstrated that the impoverishment of the auxiliary form has an effect on the syntax of its compound tenses. For instance, it will be claimed that unlike in Bulgarian and Serbo-Croatian, the *l*-participle is not able to undergo XP-movement. It moves as a head and incorporates into the auxiliary.

# Chapter 1 The diachrony of compound tenses in Slavic

## 1.1 Introduction

The aim of this chapter is to set the scene for the analysis carried out in the subsequent parts of the thesis and to discuss the diachronic development of compound tenses in the Slavic languages. Even though the main part of this work is synchronic in nature, the analysis will become more insightful by paying attention to the historical changes that have taken place. It will be shown that the present variation in the syntax of compound tenses in Slavic is a direct result of the different solutions adopted in each of the languages in order to eliminate certain inconsistencies in the tense and aspect system in Proto-Slavic and Old Church Slavonic.

Furthermore, the chapter is meant as an extensive overview of the tense and aspect systems in the Slavic languages. Consequently, some of the topics that are discussed here may receive scarce attention in the subsequent sections of the thesis. However, they are included here because it is hoped that at least some of the readers will treat the chapter as a thorough descriptive introduction to the system of compound tenses in Slavic.

The chapter is organized as follows. After a brief typological overview of the Slavic languages in section 1.2, it presents the emergence of tense and aspect specification in Proto-Indo-European in section 1.3. Next, it demonstrates that Proto-Slavic inherited a rather conservative model of expressing temporal relations, which was further modified and elaborated over time. One of the features of the model was an excess of aspectual marking, which was subsequently reduced in distinct ways in particular Slavic groups. The syntactic effects of the implemented solutions will be investigated in the later parts of the thesis. The present chapter concludes by describing the current state of affairs in the tense and aspect system of the modern Slavic languages in section 1.3.4.

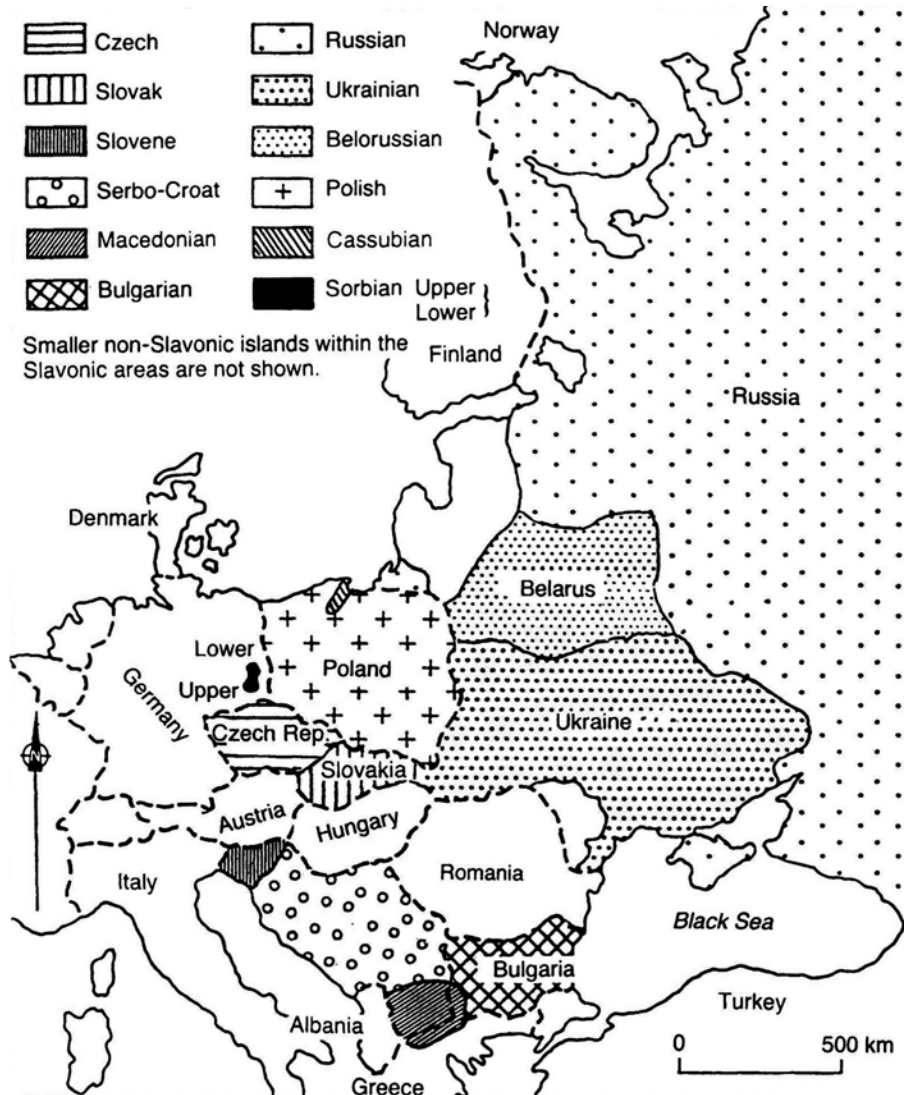
## 1.2 The division of the Slavic languages

The present section describes typological divisions among the Slavic languages. The languages comprise three major groups: South, West, and East. The thesis is concerned mainly with three South Slavic languages: Bulgarian, Macedonian, Serbo-Croatian, and one West Slavic representative, Polish. These languages were selected on the basis of distinct features of their compound tense structures. Since the contemporary East Slavic languages have virtually no compound tenses any more, they will receive little attention. For ease of reference, the map in (1) presents the distribution of the Slavic languages.<sup>2</sup>

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<sup>2</sup> The map comes from Comrie and Corbett (2002: 2; map 1.1). I thank Routledge for granting permission for the reproduction of the map.

(1)



### 1.2.1 The common ancestor

All Slavic languages derive from a common ancestor, which is referred to as Proto-Slavic. Since there are no written records of this language, it is a reconstruction based on a comparison of grammatical forms of other Slavic and Indo-European languages. Most likely, Proto-Slavic started to differentiate into dialects around the 6<sup>th</sup> century, when Slavs spread into south-eastern and central Europe. However, it is usually assumed that the unity of Proto-Slavic was finally split around the 9<sup>th</sup>-10<sup>th</sup> century, with

the attainment of statehood by Bulgaria, Carantania, Croatia, Serbia, Bohemia, Moravia, Pannonia, Poland, and Kievan Rus' (cf. Schenker 2002: 114).

Old Church Slavonic was the first literary and liturgical Slavic language. Its grammar was reconstructed on the basis of the earliest Slavic relics. The manuscripts were never dated, but the oldest of them are assumed to originate from approximately 863 (Huntley 2002). The earliest texts were not preserved, and the few manuscripts available come from the end of the 10<sup>th</sup> century. These are translations of Greek ecclesiastical texts made by two monks from Salonika, Constantine (Cyril) and Methodius. They were delegated by the Byzantine Emperor Michael the 3<sup>rd</sup> to go to Moravia (currently part of the Czech Republic) and to translate the most important liturgical books into the local dialect. Gradually, Methodius's followers were moving southwards, and established two cultural centers: in Macedonia and at the court of the Bulgarian Tsar Simeon (893-927). After a period of growth, the Bulgarian state was destroyed by the Byzantine armies at the end of the 10<sup>th</sup> century. The state of Macedonia lost its independence some time later, and as a result, the language and culture were preserved only in Croatia and some Bulgarian, Macedonian, and Serbian monasteries. After the baptism of the ruling prince Vladimir in 988, a variant of the Church Slavonic language evolved in Russia (Lunt 1974: 2).

Constantine and Methodius devised an alphabet for the Slavic language. Presumably, the authors' native dialect was South-Eastern Macedonian, but the texts may have been influenced by local Moravian varieties. At any rate, the manuscripts demonstrate that the differences between the Slavic dialects, which were all used over a very large geographical area, were still insignificantly small in the 9<sup>th</sup> century. It was only after the year 1100 that independent descendants of Old Church Slavonic started to differentiate into Macedonian-Church Slavonic, Serbian-Church Slavonic, and Russian (Rus'ian)-Church Slavonic (Lunt 1974). Notably, Rus'ian texts had some distinct features already before 1100, and that is why the language is also referred to as Old East Slavonic (Whaley 2000b). However, as far as the tense system is concerned, Old Russian did not differ in any fundamental way from Old Church Slavonic (cf. Van Schooneveld 1959: 142).

## 1.2.2 Sources of the division

The contemporary division of Slavic languages has both historical and linguistic motivations. Historically, it is related to the influence of the Byzantium culture and the Orthodox religion on Bulgaria, Macedonia, Russia, Ukraine, and Byelorussia, and the Latin/Roman culture. The current states of Croatia, the Czech Republic, Poland, Slovakia, Slovenia, and the area of Lusatia in the eastern parts of Germany were influenced by the Catholic or the Protestant creed. In theological or culture studies the split is referred to as *Slavia Orthodoxa* versus *Slavia Romana* (cf. Dalewska-Greń 1997: 560), and in fact it cuts through the group of the South Slavic languages. For example, speakers of Slovene and Croatian belong to *Slavia Romana*, while speakers of Serbian, Bulgarian, and Macedonian belong to *Slavia Orthodoxa*. The division is also evident in the alphabetical systems that are used. The languages of *Slavia Orthodoxa* are codified in the Cyrillic script, whereas the languages of *Slavia Romana* use the Latin alphabet.

Let me investigate the criteria of the linguistic divisions. As far as tense marking is concerned, all the Slavic languages use or have used the present perfect tense composed of the resultative *l*-participle (cf. section 1.3.3.5.1) and the auxiliary 'be' (cf. section

1.3.3.5.2). In South Slavic, the auxiliary (cf. 2a) has largely the same distribution and the same morphological forms as the copula (cf. 2b).

- (2) a. Čel sŭm knigata  
 read<sub>PART.MSG</sub> be<sub>AUX.PRES.1SG</sub> book-the  
 “I have read the book”  
 b. Dovolēn sŭm  
 glād<sub>MSG</sub> be<sub>PRES.1SG</sub>  
 “I am glād” (Bg)

In West Slavic, the forms of the copula and of the auxiliary diverge (cf. the discussion of Czech in section 1.3.4.2.2); and the auxiliary has been morphologically impoverished, most severely in Polish, where it was reanalyzed as a suffix on the *l*-participle (cf. 3a). An example of a construction with a copula is given in (3b).

- (3) a. Czytal-em książkę  
 read<sub>PART.MSG</sub>+<sub>AUX.PRES.1SG</sub> book<sub>ACC</sub>  
 “I (have) read a book”  
 b. Jestem zadowolony  
 be<sub>PRES.1SG</sub> glād<sub>MSG</sub>  
 “I am glād” (Pl)

In the East Slavic languages the auxiliary has disappeared completely, and the *l*-participle functions as the past tense preterite (cf. section 1.3.4.2.1).

- (4) Ja čital knigu  
 I read<sub>PART.MSG</sub> book<sub>ACC</sub>  
 “I (have) read a book” (Rus)

Apart from the compound tense based on the auxiliary and the *l*-participle, some of the South Slavic languages use aspectual past tenses, the aorist and the imperfectum. They were inherited from Old Church Slavonic, and I will characterize them in sections 1.3.3.1 and 1.3.4.1.2. Outside South Slavic, the aspectual tenses were preserved only in Sorbian. Elsewhere, the present perfect tense formed with the *l*-participle took the role of the default past tense. However, the meaning of the present perfect is undergoing changes in Bulgarian and Macedonian, too; and it is more and more often used to characterize events that have not been witnessed by the speaker (cf. section 1.3.4.5.1).

The Slavic languages also vary with respect to ways of expressing the future. In South Slavic the future tense is constructed with a variant of the verb ‘want’ as the auxiliary, which is followed by a subjunctive form of the main verb. In East and West Slavic, the future meanings are rendered through finite verbs marked for the perfective aspect, or with a perfective form of the auxiliary ‘to be’, followed by the infinitive or the *l*-participle. More details will be given in section 1.3.4.4.

The East and West Slavic languages share some characteristics; therefore they will sometimes be jointly referred to as the North Slavic group. Most of the South Slavic languages are members of the Balkan Sprachbund, and as such, they share a number of features with non-Slavic languages of the region. As far as the system of verbal categories is concerned, the striking property of the Sprachbund is the absence of the infinitive. Another characteristic feature is the analytic future tense marked with the auxiliary that is a descendant of the verb ‘to want’. Lindstedt (2000a) argues that the



Sprachbund features should also include the opposition between the aorist and the imperfectum, because even though the tenses are of a Proto-Slavic origin, they most presumably have been retained due to the presence of related tenses in the non-Slavic languages of the area. Non-Slavic innovations, which arose exclusively because of contacts with genetically unrelated languages, include *have*-perfects in Macedonian (cf. section 1.3.4.5.2) as well as the renarrated mood in Bulgarian and Macedonian (cf. section 1.3.4.5.1). Certainly, none of these features can be considered exclusively Balkan. For example, we find some not fully developed forms of *have*-perfects in Czech and Polish. Still, it is the combination of all these grammatical properties that characterizes the Balkan Sprachbund.

Outside the tense-aspect system, the division of the Slavic languages is related to the availability of morphological case. Most Slavic languages have seven case morphological distinctions including vocative. The only exceptions are Bulgarian and Macedonian, which have only preserved some case distinctions on pronouns (cf. chapter 4). These are also the only Slavic languages that have developed the definite article. The article is postnominal and emerged as a reduced form of the demonstrative.

## 1.3 The Tense and Aspect system

The following sections will investigate the tense and aspect systems in more detail. I will begin with a brief diachronic discussion of the ways in which tense and aspect were expressed in Proto-Indo-European in section 1.3.1. Subsequently, I will show how the systems developed in Old Church Slavonic and contemporary Slavic languages in sections 1.3.3 and 1.3.4, respectively.

### 1.3.1 The Tense System in Proto-Indo-European

The notions of tense and aspect are both related to the concept of time. The difference is that while tense locates the eventuality described in a clause in relation to speech time or other points in time, such as past, present, or future, aspect is independent of other points in time: it expresses the internal temporal organization of an event, and the degree of its completeness. In other words, tense is a deictic category, but aspect is not. For instance, in order to determine whether the proposition expressed by the sentence in (5) is true or not, it is necessary to establish who the speaker is, as well as where and when the sentence was uttered.

(5) I was in Longyearbyen last Monday

Conversely, the truth of the propositions represented by the sentences in (6) is the same, even though they differ in aspect (Smith 1989: 108; cf. also Osawa 1999).

(6) a. Thatcher treats her Cabinet colleagues like children  
b. Thatcher is treating her Cabinet colleagues like children

It is commonly assumed (cf. e.g. Lehmann 1974: 139-141, 186) that tense did not exist as a separate grammatical category in Early Proto-Indo-European. There were no

independent verbal affixes for marking tense, and verbs were specified only for aspect. The primary distinction was between imperfective (non-terminative, stative) versus perfective (terminative). The distinction was marked by different morphological endings, represented by the *m*-inflection for perfective forms and the *b*-inflection for imperfective forms, with the paradigm given in (7).

(7) The *m*-inflection and the *b*-inflection in Early Proto-Indo-European<sup>3</sup>

	<i>m</i> -inflection	<i>b</i> -inflection
1SG	*-m	*-x
2SG	*-s	*-th
3SG	*-t	*-∅

(Lehmann 1974: 141)

Another type of aspectual contrast was made between momentary and durative, which was signaled by changes to the form of the root. For instance, it is hypothesized that the durative (continuous) action was signified by an accented *e* vowel in the root, whereas the roots of the verbal forms expressing momentary actions had no principal accent and hence a *∅* (null) vowel (Lehmann 1974: 186). This pattern is found in Sanskrit and Greek, for instance in the Greek forms *éleipon* 'I was leaving' and *élipon* 'I left' (Lehmann 1993: 179).

Implicitly, the aspectual marking on verbs rendered the time of an event. For example, the events characterized by verbs in the perfective aspect were understood as occurring in the past. As a result, time reference in Proto-Indo-European was computed from aspectual distinctions.

The temporal relations could also be expressed by adverbs or adverbial particles. This strategy can be observed in Sanskrit or Greek texts, where particles define the time of action denoted by the verb. As an illustration, consider the Greek example from the *Iliad* 1.70, in which the past reference of the event is indicated by the particle *pró* 'before'.

(8) Hòs ēidē tá t' eónta tá t' essómēna pró t' eónta  
 who knew those <sub>PTC</sub> being those <sub>PTC</sub> will-be before <sub>PTC</sub> being  
 "Who knew the things happening now, those that will happen and those that  
 have happened?" (Ancient Greek, Lehmann 1974: 139)

Explicit expression of tense was a later innovation. The first real tense marker was the present tense suffix *-i*. Presumably, it originated from an enclitic deictic particle, which had the meaning of 'here and now', and was related to a corresponding locative case ending in noun declension (Watkins 1962: 102-103). Thus, it is argued (cf. Shields 1992) that the earliest method of expressing temporal relations was based on the opposition between "now-here" and "not-now-here", which was in fact deictic in nature, because it could also refer to spatial relations.

The tense marking was slowly spreading through the entire verb system, but the division of the concept of "not-present" into the notions of the past and the future took place much later, in dialectal Indo-European. Consequently, three types of tenses evolved: present, aorist, and perfect. The aorist expressed a past event, because it referred to an action that was completed at the moment of speech. The present

<sup>3</sup> As is customary in the literature, the asterisk marks a reconstructed form.

rendered uncompleted actions, whereas the perfect emphasized the result of an event, and thus linked the past to the moment of speech.

The semantic interactions between tense and aspect were rather complex and gave rise to modification of the system in particular Indo-European dialects. For example, Albanian, Old Armenian, Baltic, and Slavic largely retained the aspectual distinctions. Some other varieties, such as Celtic, Germanic, Latin, Late Sanskrit, and Biblical Greek strengthened the tense markings. However, none of them developed a purely aspectual or a purely tense system for establishing temporal relations. They always used a combination of the two (Lehmann 1993: 181).

Proto-Indo-European did not have a future tense; the future was initially indicated through modalities of subjective or optative forms (Schenker 2002: 94). Separate forms for expressing the future developed only in Late-Proto-Indo-European and were found only in some of the dialects (for example, in Sanskrit, Greek, Italic, and Baltic; Lehmann 1974: 190).

The pluperfect tense was also a later invention. It was used to refer to actions that took place before a narrated event. The imperfect tense (the imperfectum) emerged rather late, too, and it had a clear aspectual flavour in the sense that it was used to describe long-lasting or repetitive actions that were not completed. Once the imperfectum came into existence, it contrasted with the aorist, which referred to punctual, completed events. However, some Indo-European languages never developed the imperfectum. For example, Germanic lacks it completely.<sup>4</sup>

### 1.3.2 Modifications of tense and aspect systems in Proto-Slavic

This section discusses modifications of the Proto-Indo-European tense system within the Slavic family. The languages of the family inherited the simple past tenses of Proto-Indo-European, but in addition to them, they radically extended the system of aspect marking. A major development includes the emergence of the perfect tense, which was formed with verbal adjectives ending in *\*-lo* reanalyzed as participles and the auxiliary ‘to be’. Furthermore, they introduced their own forms of the imperfective future and the pluperfect.

As is well known, the Slavic languages robustly mark aspectual oppositions. The opposition between the perfective and imperfective encompasses virtually all verbs, both finite and nonfinite ones. Almost all verbs in the Slavic languages form aspectual pairs. Each member of a pair describes the same kind of event, but one of them appears in the non-perfective aspect (such as *czytać* ‘to read’; *kupować* ‘to buy’ in Polish), whereas the other member occurs in perfective aspect (such as *przeczytać* ‘to have read’; *kupić* ‘to have bought’ in Polish). Aspectual distinctions are found even on verbal nouns, as in the Polish examples of *kupienie* ‘an event of one purchase’ and *kupowanie* ‘an event of buying something taking place in time’ (cf. Rozwadowska 1997 ch. 3). More examples will be provided in section 1.3.3.2; for the time being I will explain the source of the aspect morphology in Slavic.

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<sup>4</sup> Note that the contemporary German tense called ‘imperfect’ does not express an imperfective meaning. Germanic languages have never developed a real ‘imperfect’ tense, comparable to ‘imparfait’ in French, so the term used in German grammars may be inappropriate.

Inflected verbs in Proto-Indo-European had a three-element structure: the stem was formed by a root followed by a thematic suffix and an inflectional ending. The thematic suffix assigned a stem to a particular inflectional paradigm, but it could also render aspectual information. For example, in Ancient Greek the aspectual specification of the verb depended on the thematic suffix, underlined below. The form in (9a) is imperfective, while the form in (9b) is perfective.

- (9) a. deík-ny-nai  
 “to be showing”  
 b. deík-s-ai  
 “to have shown”

(Ancient Greek, Długosz-Kurczabowa & Dubisz 2001: 283)

The inflectional endings spelt out the inflectional categories, such as  $\varphi$ -features, supine or infinitive morphology (Schenker 2002: 83). As an illustration, consider the reconstructed paradigm of the Proto-Slavic verb *\*nesti* ‘to carry’ (Długosz-Kurczabowa & Dubisz 2001: 265). The first element of the verb is the root; the second one is the thematic suffix, whereas the final element carries inflectional morphology.

- (10) The paradigm of *\*nesti* ‘to carry’ in the present tense

	SINGULAR	DUAL	PLURAL
1	nes- <u>ō</u> -mь	nes-e-vě	nes-e-mь
2	nes-e-šь	nes-e-ta	nes-e-te
3	nes-e-ть	nes-e-te	nes-o-nti

(Proto-Slavic, Długosz-Kurczabowa & Dubisz 2001: 265)

In Late-Proto-Indo-European, the verbal morphology became simplified, and the majority of thematic suffixes blended with the inflectional endings. As a result, verbs acquired a two-element structure. The modification can be observed in a later version of the Proto-Slavic paradigm of the verb *\*nesti* ‘to carry’ presented in (11), in which the forms of the 1<sup>st</sup> person singular and the 3<sup>rd</sup> person plural has a two-element structure.

- (11) The paradigm of *\*nesti* ‘to carry’ in the present tense (later version)

	SINGULAR	DUAL	PLURAL
1	<b>nes-<u>ō</u></b>	nes-e-vě	nes-e-mь
2	nes-e-šь	nes-e-ta	nes-e-te
3	nes-e-ть	nes-e-te	<b>nes-<u>ō</u>ть</b>

(Proto-Slavic, Długosz-Kurczabowa & Dubisz 2001: 265)

In Proto-Slavic the change was triggered by phonological readjustments, and it involved the nasalization of the vowel  $\bar{o}$  when it was followed by nasal consonants, as in *nes-o-nti* → *nes-ōть* in (10) and (11).

The fusion of the two verb-final elements in Late-Proto-Indo-European had also semantic consequences. Due to the weakening of the distinction between the aspect-marking thematic suffix and the inflectional endings, it was becoming more and more difficult to mark the opposition between completed and ongoing events morphologically. The change was taking place slowly, but the aspectual system of Late-Proto-Indo-European started to show gaps.

In most of the Indo-European languages the inconsistencies were remedied through the development of new aspectual tenses, such as the Imperfait and Passé Simple in French. However, Proto-Slavic was in this respect the most conservative language in the Proto-Indo-European family, because it retained the original ways of marking aspect.

Still, the aspectual system it had inherited from Proto-Indo-European was irregular, because sometimes there were no systematic pairs of verbs marked for perfective and imperfective aspect throughout the whole paradigm (cf. the forms in 11). Moreover, not all Proto-Indo-European verbs were available in both aspectual forms.

Therefore, Proto-Slavic had to reconstruct and regularize the whole verbal system. The regularization was done by using old word-formation morphemes for the missing member of an aspectual twin. For example, if there was a verb characterizing an ongoing event, a related verb with perfective meaning was derived from it by adding an already existing perfectivizing suffix. Still, the formation of a consistent system of aspectual pairs was a huge task, and the already existing perfectivizing or imperfectivizing morphemes were not sufficient. Therefore, new morphemes had to be coined by extracting suffixes from existing verbs. For example, there was a suffix *nō*, which was typical of a conjugation class which in the majority of cases listed verbs characterizing completed events. The verbs from this class had imperfective equivalents in the so-called *-a-* conjugation class. At some point the morpheme *nō* left its own conjugation class, and started to be used throughout the verbal system as a perfectivizing morpheme. As a result of this spread, all the verbs containing the *nō* formant were reinterpreted as derived perfective verbs, whereas the corresponding verbs from the *-a-* conjugation class were reanalyzed as basic imperfective forms (cf. Młynarczyk 2004: 15-17; Klemensiewicz et al 1964: 242-253). The pattern can be seen in the Old Church Slavonic examples in (12).<sup>5</sup>

- (12) a. krič-a-ti  
      “to shout<sub>IMP</sub>”  
      b. krik-nō-ti  
      “to shout<sub>PRF</sub>”
- (13) a. dviḡ-a-ti  
      “to lift/carry<sub>IMP</sub>”  
      b. dviḡ-nō-ti  
      “to lift/carry<sub>PRF</sub>”

Ultimately, a highly uniform system of aspectual pairs of verbs was created.

Apart from taking recourse to aspectual marking, Proto-Slavic further developed the aspectual tenses, the aorist and the imperfectum, which had been inherited from Proto-Indo-European. In this way aspect was doubly marked in Slavic: through the tense forms of the aorist and the imperfectum, as well as through the perfective/imperfective aspectual morphemes. Consequently, temporal relations in (Proto-) Slavic were expressed via an intricate interplay of temporal and aspectual markers. As an illustration, consider an example of an aspectual pair of the verb *nesti* ‘to carry’ in Old Church Slavonic, presented in four different tenses. The forms indicate

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<sup>5</sup> Old Church Slavonic is transcribed in different ways in the literature. For consistency the spelling of all the examples used in this dissertation follows the convention of Lysaght’s (1982) dictionary.

that the distinction between the aspects is morphologically independent of the tense distinctions, and that each of the tenses could appear in the perfective or the imperfective aspect.

(14) Tense and aspect distinctions in Old Church Slavonic

TENSE/ASPECT	imperfective	perfective
3SG present	nesetъ	ponesetъ
3SG aorist	nese	ponese
3SG imperfect	nesěaše	ponesěaše
3SG perfect	nesъ jestъ	ponesъ jestъ

(OCS, cf. Van Schooneveld 1951: 97)

As far as the modifications of the Proto-Indo-European tense system are concerned, the biggest innovation in Proto-Slavic was the replacement of the late Proto-Indo-European synthetic form of the perfect tense with an analytic construction, which consisted of the copula ‘to be’ and the resultative *l*-participle (cf. section 1.3.3.4.3 for details).

Minor additions included the introduction of the imperfective future and the pluperfect. The Proto-Slavic future tense was formed with an infinitive plus a finite form of some phase verbs, such as ‘to begin’, ‘to have’, ‘to be’, or ‘to want’ (Schenker 2002: 95; cf. section 1.3.3.4.1). The pluperfect was formed with an imperfective form of the verb ‘to be’ functioning as the auxiliary and the *l*-participle (cf. section 1.3.3.4.2).

### 1.3.3 Old Church Slavonic

This section will analyze the tense and aspect system of Old Church Slavonic. It will describe the simple past tenses: aorist (cf. section 1.3.3.1.1) and imperfectum (cf. section 1.3.3.1.2), and examine the ways the tenses interacted with perfective and imperfective aspect (cf. section 1.3.3.2). Special attention will be paid to Slavic innovations, such as the compound tense formed with the so-called *l*-participle and the auxiliary ‘be’ (cf. section 1.3.3.4). The section will conclude with an overview of other types of participles that were used in this language (cf. section 1.3.3.5).

#### 1.3.3.1 Simple past tenses in Old Church Slavonic

I have just demonstrated that aspect is obligatorily specified on all verbs in Slavic. At the same time, Slavic languages inherited two aspectual tenses from Proto-Indo-European: aorist and imperfectum. Let me investigate the meanings of the past tenses and aspects, as well as the semantic interpretations triggered by combinations of particular types of tenses and aspects in detail.

##### 1.3.3.1.1 The aorist

Throughout its history, Proto-Slavic had three different types of aorist formations. Two of them, termed the ‘root’ (or ‘simple’, with suffixes added directly to the verb stem) aorist and the ‘sigmatic’ aorist (with the tense marker *s* between the stem and the suffixes) were inherited from Proto-Indo-European. The third type emerged alongside

and eventually replaced the two older variants (Lunt 1974: 90, Schenker 2002: 98) as the only productive type, with the paradigm given in (15).

(15) The paradigm of the aorist in Old Church Slavonic

	singular	dual	plural
1	-(o) хъ	-(o)xově	-(o)xomъ
2	-(e) Ø	-(o)sta	-(o)ste
3	-(e) Ø	-(o)ste	-(o)šę

(OCS, Lunt 1974: 87)

The aorist was the default, simple past tense in Proto-Slavic, which was used to refer to actions regarded as basic in narrative texts. It related to concrete, temporally independent events, without referring to the results of their occurrence. The actions described could happen either once or in a series, but successive usage of the aorist did not necessarily indicate distinct successive events. This was determined by the context. Successiveness could be semantically marked by perfectivity.

The aorist normally denoted bounded eventualities, that is the ones with a specific beginning and an end-point. However, it did not imply specific reference to the duration of an event or to the stretch of time between the event and the moment of speaking. Neither did it specify the time when an event took place or the consequences of an action. I will contrast the meanings expressed by the aorist with the meanings denoted by the present perfect in section 1.3.3.4.3.

Długosz-Kurczabowa and Dubisz (2001: 276-277) point out that the semantics of the aorist underwent some changes in the history of Slavic. In Proto-Indo-European and Proto-Slavic, the tense denoted past events, without referring to any aspectual distinctions. With the development of the imperfectum, the present perfect, and the pluperfect in Late Proto-Slavic, the aorist started to be used for denoting momentaneous, completed events. An example of usage of the aorist is provided in (17) below, where it is contrasted with the imperfectum.

### 1.3.3.1.2 The imperfectum

The imperfectum was inherited from Proto-Indo-European, but its morphological realization is a Slavic innovation. It consisted of a verbal root, followed by the suffix –*ǣax*, plus the suffixes of the root aorist.

(16) Paradigm of the imperfectum in Old Church Slavonic

	singular	dual	plural
1	-ǣaxъ	-ǣaxově	-ǣaxomъ
2	-ǣaše	-ǣašeta	-ǣašete
3	-ǣaše	-ǣašete	-ǣaxō

(OCS, Lunt 1974: 86)

The imperfectum characterized actions as non-completed and emphasized the duration or the repetition of an action (Schenker 2002: 101). Most of the time, it referred to a background action that was happening simultaneously with some other occurrence in the past. The other occurrence could be explicitly specified, and usually expressed by the aorist, or understood from the context.

As an example, consider the following fragment from *Savvina Kniga*.





- (20) a. stōp-aj-ōt̃b  
“to tread”
- b. stōp-i-ti  
“to have trodden”

c) the difference in thematic suffix plus a modification of the root

- (21) a. prašt-aj-ōt̃b  
“to forgive”
- b. prost-i-ti  
“to have forgiven”

d) suppletion, that is the use of completely different stems (an exceptional strategy)

- (22) a. glagola-ti  
“to say”
- b. rek-ōt̃b  
“to have said”

Since imperfective aspect marks the incompleteness of the event denoted by the verb, it is closely related to the imperfectum, which is an aspectual past tense. Importantly, the perfective aspect (found in Old Church Slavonic, but also in Greek and expressed with the aorist) is significantly different from the tense dubbed “perfect” in the Germanic languages. The tense denotes the anteriority of the action with respect to the speech time or some other past time. The aspect is a feature of an event which may be described with a present, past, or future tense. It never refers to the moment of speaking. In German the distinction is conveniently expressed by the pair of terms *perfektisch*, which refers to tense, and *perfektivisch*, which refers to aspect (cf. Kuryłowicz 1964: 90ff).

The retrospective aspect did not have a separate verbal form, and was expressed through the use of compound formations that consisted of the *l*-participle and the auxiliary ‘to be’. It could relate to the past (in the present perfect, cf. section 1.3.3.4.3) or to the future (in Future II, cf. section 1.3.3.4.1.2).

What is the difference between the perfective and retrospective aspects? It is somewhat delicate. The perfective aspect always views an event as bounded or completed, whereas the retrospective aspect does not necessarily do so. The latter merely gives a retrospective view of an event, which need not be completed.

According to Hewson & Bubenik (1997), the three types of aspect also differ as to the way the subject is positioned with respect to the event. In the imperfective aspect, the subject is positioned “in the middle” of an event. In the perfective aspect, the agent is presented at the very last moment of the action, in the position just before the completion of the event. In the retrospective aspect, the agent is presented right after the event, as immediately “external” to it, and occurring in a “resultant” state.

- (23)
- |                 |  |                        |
|-----------------|--|------------------------|
| Event time      |  |                        |
| -----x- - - - - |  | (imperfective aspect)  |
| -----x-         |  | (perfective aspect)    |
| ----- x         |  | (retrospective aspect) |
- (cf. Hewson & Bubenik 1997: 32)

In Old Church Slavonic retrospective aspect was represented analytically with finite forms of the auxiliary *to be* and the *l*-participle. The perfective aspect was expressed synthetically through aorist forms, which contained aspectual prefixes (cf. the chart in 18).

The important thing is that in Old Church Slavonic the two kinds of aspect could be expressed on one verbal form. Retrospective aspect was marked via the compound

tense formed with the *l*-participle. However, the *l*-participle could at the same time represent perfective or imperfective aspect, signified by a prefix or a derivational suffix. As an example, compare the two Old Church Slavonic compound tense forms.

- |      |    |                                |                        |                                     |
|------|----|--------------------------------|------------------------|-------------------------------------|
| (24) | a. | Neslъ                          | jesmъ                  | <b>imperfective + retrospective</b> |
|      |    | carry <sub>IMPF.PART.MSG</sub> | be <sub>1SG.PRES</sub> |                                     |
|      |    | “I have been carrying”         |                        |                                     |
|      | b. | Poneslъ                        | jesmъ                  | <b>perfective + retrospective</b>   |
|      |    | carry <sub>PRF.PART.MSG</sub>  | be <sub>1SG.PRES</sub> |                                     |
|      |    | “I have carried”               |                        |                                     |

The variant in (24a) represents retrospective aspect, because it occurs in the compound tense, with a finite form of the auxiliary ‘to be’ and the *l*-participle. However, the *l*-participle is also specified for imperfective aspect. The *l*-participle in (24b), which contains the aspectual prefix *po*, represents perfective aspect. Since the sentence is constructed with the *l*-participle, at the same time it expresses retrospective aspect. A similar contrast obtains in English, even though English does not have uniform markers of perfective aspect. A sentence like *I have been writing a letter* is imperfective and retrospective, whereas *I have written down a letter* is perfective and retrospective.

### 1.3.3.3 Some interactions between tense and aspect

Chart (14) in section 1.3.2 demonstrated that in Old Church Slavonic the aspectual distinctions were morphologically independent of the tense distinctions. On the one hand, almost all verbs occurred in aspectual pairs; with one member of the pair being perfective, and the other one imperfective. On the other hand, each of the aspectually-marked verbs could be found in either of the aspectual tenses, the aorist or the imperfectum. How did aspect interact with tense, then?

Since the imperfectum expressed durative or uncompleted past actions which were simultaneous with some other actions, it was used almost exclusively with verbs specified for imperfective aspect. As far as the aorist is concerned, the situation was slightly more complex. I pointed out in section 1.3.3.1.1 that in Late Proto-Slavic the aorist acquired some aspectual meaning. Most of the time it rendered instantaneous completed events, so as a rule it was used with perfective forms of verbs. However, the aorist could also characterize a series of short-term events, or a long-lasting past event, when it was viewed as occurring in its entirety (cf. Hewson & Bubenik 1997: 89-90).

Let me examine the interactions in more detail, starting with the “default” cases of imperfective verbs in the imperfectum, and the perfective verbs in the aorist. In the following translation of *Luke 24.14* into Old Church Slavonic, the short-term event described with the perfective aorist occurs in its entirety and is contrasted with an ongoing process, which is expressed with the imperfective imperfectum.

- |      |                           |                                  |                           |                                 |       |       |   |
|------|---------------------------|----------------------------------|---------------------------|---------------------------------|-------|-------|---|
| (25) | I ta                      | besədovaašete                    | kъ                        | sebě                            | o     | vsěxъ | sixъ... i   |
|      | and                       | converse <sub>IMPF.IMP.3PL</sub> | to                        | REFL                            | about | all   | this  |
|      | and                       | samъ                             | Isusъ                     | približi                        | se    | i     | iděaše  |
|      | and                       | himself                          | Jesus                     | approach <sub>PRF.AOR.3SG</sub> | REFL  | and   | go <sub>IMPF.IMP.3SG</sub>  |
|      | “And they were conversing | with one another                 | about all these things... |                                 |       |       |   |
|      | and Jesus approached      | and was going along              | with them”                |                                 |       |       |   |
|      |                           |                                  |                           |                                 |       |       | (OCS, <i>Zographensis</i> , <i>Luke</i> 24.14, Huntley 2002: 151) |

It may seem semantically contradictory to find perfective forms of the imperfectum tense or (somewhat less so) imperfective forms in the aorist. Yet, such cases are readily observed in Old Church Slavonic texts. Dostál (1954: 599-600) provides ample statistics concerning the occurrence of the imperfectum and the aorist tenses with imperfective and perfective aspectual markings in Old Church Slavonic texts. The results of his calculations are presented in chart (26).

(26)

Verbal Aktionsart/ Aspecto-Temporal Category	Imperfective	Perfective
Imperfectum	99%	1%
Aorist	40%	60%

(Dostál 1954: 599-600)

The fact that the “unexpected” combinations of the imperfective aorist and perfective imperfectum are found in the corpus proves the intricate nature of the Old Church Slavonic tense system. Because of this complexity, the language could express very intricate temporal relations, but admittedly, the system also had some weak points, which will be discussed in section 1.3.4. For the time being, let me discuss the meanings of the semantically unexpected combinations of tense and aspect values.

### 1.3.3.3.1 Imperfectum + Perfective Aspect

The combination of the imperfectum with a perfective aspect could be used to express repeated actions of single, short-term, momentary events, such as a repeated action of giving a single kiss in the translation of *Luke 7.38*.

- (27)      Načęť            močiti    nodzě            ego    slězami    i  
begin<sub>PRF.AOR.3SG</sub>    bathe<sub>INF</sub>    foot<sub>NOM/ACC.DUAL</sub>    he<sub>GEN</sub>    tear<sub>INST.PL</sub>    and  
vlasý            glavy            svoeje            otiraaše            i    oblobyzaaše  
hair<sub>INSTR.PL</sub>    head<sub>INSTR</sub>    her-own<sub>GEN</sub>    wipe<sub>IMPF.IMP.3SG</sub>    and    kiss<sub>PRF.IMP.3SG</sub>  
nodzě            ego            i            mazaše            müromb  
foot<sub>NOM/ACC.DUAL</sub>    he<sub>GEN</sub>    and    anoint<sub>IMPF.IMP.3SG</sub>    myrrh<sub>INSTR</sub>  
“She began <sub>PRF.AOR</sub> to bathe his feet with her tears and wiped<sub>IMPF.IMP</sub> [them]  
with the hair of her head, and kissed<sub>PRF.IMP</sub> his feet, and anointed<sub>IMPF.IMP</sub>  
[them] with myrrh”      (OCS, *Luke 7.38*, cf. Hewson & Bubenik 1997: 90)

In this example there is one verb in the perfective aorist: *načęť* ‘began’ and two imperfective verbs in the imperfectum: *otiraaše* ‘was wiping’ and *mazaše* ‘was anointing’. The verb *oblobyzaaše* ‘kissed’ is also marked for the imperfectum, but has a perfective aspectual form. It expresses repeated events of imprinting a single kiss. In the original version of the text in Greek the verb is in the imperfectum.

The example in (28) contains two verbs in the perfective aspect. The perfective-marked imperfectum characterizes the event as an ongoing process, while the perfective aorist indicates the immediacy of the reaction.

- (28) I ěviše se přědъ ními ěko bledi glagoli ixъ  
 and appear<sub>PRF.AOR.3PL REFL</sub> before them as pale words them<sub>ACC</sub>  
 i ne iměaxō imъ věry  
 and not have<sub>PRF.IMP.3PL</sub> them<sub>DAT</sub> faith  
 “And their words appeared<sub>PRF.AOR</sub> to them to be nonsense and they would  
 not believe<sub>PRF.IMP</sub> them”  
 (OCS, *Zographensis, Marianus*; Luke 24:11, OCS, Huntley 2002: 151)

### 1.3.3.2 Aorist + Imperfective Aspect

The imperfective marking of aorist verbs was considerably more common, as the aorist could be used to describe long-lasting events in their entirety. As an example, consider the following sentence taken from *Suprasliensis*.

- (29) Aky kъ člověku bo besědova i  
 as to man be<sub>COND.3.PL</sub> converse<sub>IMPF.AOR.3SG</sub> and  
 vьzira na nъ  
 look<sub>IMPF.AOR.3SG</sub> to him  
 “For he conversed<sub>IMPF.AOR</sub> with him and looked<sub>IMPF.AOR</sub> at him as if he were a  
 man”  
 (OCS, *Suprasliensis* 122.30, Huntley 2002: 151)

The use of the imperfective form of the aorist signified that that the event took place, but it did not imply whether the event was completed or not.

Summarizing, it has been shown that Old Church Slavonic combined all types of aspect and tense distinctions with each other. In the past tense the imperfective aspect normally coincided with the imperfectum, whereas the perfective aspect with the aorist. The combinations with contradictory aspectual values, that is the perfective imperfectum or the imperfective aorist, are statistically less frequent (cf. the chart in 26). However, Lunt (1974: 137) points out that that this is because the situations requiring them are not common. They occur in narrations of complex past events, but these type of passages are scarcely attested in Old Church Slavonic. However, the fact that they do appear indicates that tense and aspect were two independent systems.

I will present the current state of relations between tense and aspect in contemporary Slavic languages in section 1.3.4.1.2. The subsequent section will analyze the compound tense forms in Old Church Slavonic.

### 1.3.3.4 The Compound Tenses in Old Church Slavonic

The Proto-Slavic compound tenses were constructed with the (resultative) *l*-participle (cf. section 1.3.3.5.1) and a present tense form of the auxiliary verb *byti* ‘be’. Both the *l*-participle and the auxiliary could occur in either perfective or imperfective aspect. I will investigate the tenses in turn according to the aspectual form of the auxiliary ‘be’.

#### 1.3.3.4.1 Future tenses

Old Church Slavonic lacked a uniform future marker, so a number of different strategies were used to render the future time. Most frequently future events were expressed by perfective verbs in the present tense; cf. chart (18). However, the future could also be expressed periphrastically with two types of tenses: Future I and Future II.

## 1.3.3.4.1.1 Future I

Future I was rendered by combinations of the infinitival form of the main verb with a finite perfective variant of certain verbs, usually *bōdōtь* ‘to be’ (cf. 30) and *imamь* ‘to have, be destined to’, *xotetь* ‘to want’ and less frequently *načьnōtь* and *včьnōtь* ‘to begin’ (Lunt 1974: 136-137). The infinitival forms occurring with these verbs could be in either perfective or imperfective aspect (cf. *stradati* in 30).

- (30) I мѣнѣ бōdōtь stradati podružija i volę svojeje  
 and me<sub>DAT</sub> be<sub>PRF.1SG</sub> go-without<sub>INF.IMPF</sub> marriage and freedom<sub>REFL</sub>  
 “And I will have to be deprived of marriage and my [own] freedom”  
 (OCS, *Suprasliensis* 237 1-2, Whaley 2000a: 24)

Eventually, one type of the verb prevailed as the auxiliary: a descendant of *bōdōtь* in North Slavic and a descendant of *xotetь* in South Slavic.

1.3.3.4.1.2 Future II (*Futurum Exactum*/Future Perfect)

Apart from the Future I, there was another construction for characterizing future events in Old Church Slavonic, termed Future II. The Future II was formed with the perfective form of the auxiliary verb ‘to be’ followed by the *l*-participle. The *l*-participle could be either in the perfective or, more commonly, in the imperfective aspect. The tense was used to denote future events preceding some other future event, as in the following example from *Suprasliensis* 379.10.

- (31) Ašte na to sьtvorimь vладыky podražali bōdem  
 if for it accomplish<sub>PRES.1PL</sub> Lord imitate<sub>PART.IMPF.PL</sub> be<sub>PRF.1PL</sub>  
 “We will accomplish that if we [will] have been<sub>PRF</sub> imitating<sub>IMPF</sub> the Lord”  
 (OCS, Huntley 2002: 152)

Here, the *l*-participle in the imperfective form *podražali* ‘imitate’ depicts an ongoing process, which is a condition for occurrence of another event that will take place in more distant future.

Future II was used very rarely in Old Church Slavonic, as only seven examples have been found. This might be accidental, because, as Whaley (2000b) points out, the scarcity might be due to contextual properties of Old Church Slavonic relics. Since the texts were typically past-tense narrations, they seldom required future perfect forms.

Let us investigate the semantics of Future II. In a nutshell, it renders the meaning of “past in the future”. According to Comrie’s (1985: 69ff.) definition, the future perfect is a relative tense which characterizes an event (E) happening before or after the moment of speech (S) which is described from the perspective of a future reference point (R). In Old Church Slavonic, the future orientation of the reference point (R) was expressed by the perfective form of the verb *bōdōtь* ‘to be’, and the event (E) was represented by the *l*-participle (Whaley 2000b).

Importantly, Whaley (2000a: 110) argues that the Future II in Slavic did not have to express the future reference *per se*, as it could also characterize irrealis or even past-tense meanings. Rather, Whaley claims that the tense rendered “a displaced perception of state”. What she means by this is that the future reference point (R) is not just the “vantage point” from which the event (E) is perceived. It also marks the point at which there occurs a change in the speaker’s knowledge about the event.

As an illustration, consider the usage of the Future II in an example taken from *Codex Suprasliensis*. The fragment is about Mary, who has been recently informed by an angel that she will give birth to Jesus, and is not certain whether she should tell Joseph about it.

- (32) I Marija vь sebě si razmyšljaše provědē li se Iosifu  
 and Mary in herself<sub>REFL</sub> ponder<sub>PRAP</sub> speak-out<sub>Q</sub> REFL Joseph<sub>DAT</sub>  
 ili pače sьkryjō tainoje se jeda bōdetь sьlgaľь prixodivyi  
 or hide secret<sub>REFL</sub> in case be<sub>PERF.3SG</sub> lie<sub>PART.MSG</sub> come<sub>PAP</sub>  
 “And Mary pondered to herself, ‘Shall I tell this to Joseph, or hide this secret,  
 in case the one who had come [i.e., the angel] will have lied’”  
 (OCS, *Suprasliensis* fol. 239, II. 23-25, cf. Whaley 2000a: 110)

Given the context, the future event characterized by Future II *bōdetь sьlgaľь* ‘will have lied’ may only refer to the moment before Maria finds out whether the angel was telling the truth or lying. That is, the event of lying takes place before Mary’s thought, while her realization of the lie will occur in the future. Furthermore, the use of *jeda* ‘in case’ signifies an irrealis meaning of the clause, and it refers to Mary’s speculations.

Whaley points out that the future reference of the future perfect was of a secondary importance. In fact, a number of its occurrences in the oldest Slavic texts were even completely incompatible with a pure future-tense reference. Most of the time the interpretation of Future Perfect coincided with past-tense or irrealis meanings. It did not imply the actual reference time with respect to the moment of speech. It only established the chronology of a described state with the perception of this state by the speaker. Section 1.3.3.5.1 will relate these types of meaning to the general semantic properties of the *l*-participle.

### 1.3.3.4.2 The pluperfect

The pluperfect described past events that took place before some other past events. It was formed with the *l*-participle and the auxiliary ‘to be’, which appeared either in the imperfectum or in the imperfective form of the aorist. According to Lunt (1974: 98), the use of the auxiliary in the imperfectum (cf. 33a) implied that the past action co-occurred with some other event, which was explicitly mentioned or just implied by the context, whereas the aorist form of the auxiliary (cf. 33b) simply stated an independent, past action.

- (33) a. Mънози že ot ijudei běaxō prišľo kь Martě  
 many<sub>FOC</sub> from Jews be<sub>IMP.3PL</sub> come<sub>PART.SG.N</sub> to Martha  
 i Marii da utěšetь i  
 and Mary to comfort them  
 “And many of the Jews had come to Martha and Mary to comfort them”  
 b. Ne bě že ne u Isusъ prišľь vь vьsь  
 not be<sub>IMP.F.AOR3SG</sub> FOC not at Jesus come<sub>PART.MSG</sub> in town  
 “Now Jesus had not yet come into the town”  
 (OCS, J 11.19; J 11.30, Lunt 1974: 98)

It appears, however, that the meaning distinctions related to the selection of imperfectum form of the auxiliary versus the imperfective aorist variant were not always so clear. For example, Huntley (2002: 153) states that there were no discernable

semantic differences in the uses of the auxiliary. The imperfectum form was possibly used less often because it is attested only in third-person forms.

### 1.3.3.4.3 Present Perfect

The origin of the perfect tense deserves considerably more attention, because in most of the contemporary Slavic languages the perfect replaced the aspectual past tenses (the aorist and the imperfectum) and became the default way of characterizing past events (cf. section 1.3.4.2). Moreover, it was subject to the most radical modifications in the history of Slavic languages, both with respect to its meaning and its morphological form. The details of these modifications will be presented in section 1.3.4.

#### 1.3.3.4.3.1 The form of the Present Perfect

In Old Church Slavonic the present perfect was formed with the imperfective form of the auxiliary ‘to be’ in the present tense and the *l*-participle. The participle usually appeared in the perfective form, but imperfective variants were also frequently found. The participle agreed with the subject and was specified for gender and number. The chart in (34) presents the paradigm with the imperfective form of the *l*-participle *neslъ* ‘to have been carrying’ in all potential number, gender (masculine, feminine, and neuter) and person variations.

#### (34) The form of the Present Perfect in Old Church Slavonic

	singular m/f/n	dual m/f/n	plural m/f/n
1	neslъ/a/o jesmъ	nesla/ě/ě jesvě	nesli/y/a jesmъ
2	neslъ/a/o jesi	nesla/ě/ě jesta	nesli/y/a jeste
3	neslъ/a/o jestъ	nesla/ě/ě jeste	nesli/y/a sōtъ

(OCS, Bartula 1981: 100)

Let us investigate a few examples of its usage. In (35), the *l*-participle is in the perfective form, whereas the auxiliary ‘to be’ is in the imperfective form. The event characterized by the perfect tense is completed and precedes the speech time.

- (35)            Prišelъ                    jestъ                    vasilisikъ  
                   come<sub>PART.PRF.MSG</sub>    be<sub>IMPF.PRES.3SG</sub>    Basiliscus  
                   ‘Basiliscus has come’                    (OCS, *Suprasliensis* 20.2, Huntley 2002: 152)

When the participle appears in the imperfective form, the completion of the described event is undetermined. In (36), the event of lying at home may still be taking place at the speech time.

- (36) Radujōtŭ se zĕlo jako u svoixŭ sōtŭ  
 rejoice<sub>IMPF.PRES.3PL</sub> REFL completely as at own be<sub>IMPF.PRES.3PL</sub>  
 sī doma ležali  
 this home lie<sub>PART.IMPF.M.PL</sub>  
 “They rejoice<sub>IMPF.PRES</sub> greatly, because they have (be<sub>IMPF.PRES</sub>) been lying<sub>IMPF</sub> at  
 home with their people” (OCS, *Suprasliensis* 267.17, Huntley 2002: 152)

#### 1.3.3.4.3.2 The meaning of the present perfect

In Old Church Slavonic the present perfect was used to refer to an action that takes place in the past, but whose results are significant for the time of speaking. Since the tense expressed the resultative aspect, the action did not necessarily have to be viewed as completed.

- (37) Otrokovica nĕstŭ umrĕla nŭ sŭpitiŭ  
 damsel NEG+be<sub>3SG</sub> die<sub>PART.F.SG</sub> but sleep<sub>PRES.3SG</sub>  
 “The damsel is not dead, but sleepeth” (OCS, *Mk* 5.39, Lunt 1974: 98)

Van Schooneveld (1959: 87) argues that the perfect tense relates the result of an action to the subject. In this way it differs from the aorist, which concentrates on the action itself, without any reference to the result or the influence of an event on the subject. Moreover, the perfect tense presents events with no relation to their development in time, as this type of meaning is rendered by the imperfectum.

Schmalstieg (1983: 156) quotes an example of a biblical passage that elucidates the semantic difference between the aorist and the present perfect. The fragment describes the story of Jairus’ daughter (*Mark* 5.22-43). Jesus is approaching the president’s house, when some messengers come and say to Jairus, using the aorist.

- (38) Dŭšti tvoĕ umrĕtŭ  
 daughter your die<sub>AOR.3SG</sub>  
 “Your daughter just died”

Subsequently Jesus enters the president’s house and says, using the present perfect.

- (39) Nĕstŭ umrĕla nŭ sŭpitiŭ  
 not+be<sub>PRES.3SG</sub> die<sub>PART.F.SG</sub> but sleep<sub>PRES.3SG</sub>  
 “(The child) is not dead but asleep”

The Old Church Slavonic translator skillfully presented the event from two perspectives. The messengers report a simple past occurrence and use the aorist. Jesus presents the result of the past event for the present moment, and therefore uses the present perfect form. Hewson & Bubenik (1997: 91) remark that the semantic difference was not expressed in the original Greek text, in which the aorist was used in both sentences.

Słoński (1926: 8) carefully investigates Old Church Slavonic translations of Greek biblical texts and notices that as a rule the Greek perfect tense was rendered as the aorist in the Slavic versions. Moreover, Słoński’s study indicates that the perfect tense in Old Church Slavonic was found very rarely. He examined *Codex Marianus*, *Suprasliensis*, and *Glagolita Clozianus*, compared them with the original Greek texts and found 190 occurrences of the perfect in the original Greek relics, which were matched by only 17 perfects in the Slavic translation. By contrast, the present perfect forms in



the Old Church Slavonic texts were most of the time translations of the aorist. It is very difficult to pinpoint any semantic differences in the two translation strategies. Possibly, the Old Church Slavonic perfect might have had a different meaning from the Greek perfect. One of the differences could relate to the availability of forms marked for the imperfective aspect in the Slavic perfect tense, which were not possible in Greek.

However, the distribution of the perfect tense in the paradigm is more revealing. Sloński (1926: 21) observes that the perfect tense was found almost exclusively in the 2<sup>nd</sup> and the 3<sup>rd</sup> person singular. According to him, this is due to the fact that the 2<sup>nd</sup> and the 3<sup>rd</sup> person singular forms of the aorist were phonetically the same. Therefore, the translator would replace the aorist with appropriate forms of the perfect for clarity. What this suggests again is that in Old Church Slavonic the meaning of perfect tense was very close to the aorist. As will be demonstrated in section 1.3.4, this was one of the weaknesses of the system, which gave rise to radical modifications of the tense system in the Slavic languages.

Dostál's (1954: 599ff.) calculations confirm that in Old Church Slavonic the perfect tense was used rather rarely, and usually in embedded clauses. In his study of tense usages in Old Church Slavonic relics, Dostál finds 10 thousand uses of the aorist, 2300 of the imperfectum, and approximately 600 of perfect tenses (i.e., around 5%). The striking thing is that the tense which was the least common in Old Church Slavonic has become the one that is most widely used in modern Slavic languages.

Lunt (1974: 98) points out that the reason for the rare occurrence of the present perfect could be the fact that it was not necessary to render the type of temporal relation it characterizes in the written texts from that time. However, this does not seem a valid explanation, since there are a lot of events in the Bible that took place in the past, but the results of which are still significant for the present time.

Another reason for the scarce use of the present perfect could be a late emergence of this tense in Slavic, which possibly arose later than the simple past tenses. For instance, Damborský (1967) argues that in the earliest stages of Slavic, the *l*-participle was unknown. Bartula (1981: 100) observes that there are few examples of the present perfect in the earliest Old Church Slavonic manuscripts, whereas in the more recent ones they are found more often, especially in *Codex Suprasliensis* and *Savvina kniga* (both from the 11th century). Therefore, the translators of biblical texts may have been reluctant to use a novel form that did not match the archaic nature of biblical texts.

Finally, Lindstedt (1994: 33-34) observes that the present perfect could never occur in "plot-advancing" sentences, because it was not a narrative tense in Old Church Slavonic. This is the reason why it was typical of dialogues as well as monologues represented by psalms and prayers.

Section 1.3.4.2 will show that the meaning of the perfect tense has undergone radical modifications in all the contemporary Slavic languages.

#### 1.3.3.4.4 The conditional mood

The conditional mood was constructed with the *l*-participle and a special conditional variant of the verb 'to be' (Schmalstieg 1983: 157). Alternatively, the aorist variants of the verb 'to be' could be used as the conditional auxiliary. The chart in (40) shows only the singular and the plural forms, because the dual was not attested in the conditional mood.

## (40) The conditional auxiliaries in Old Church Slavonic

	singular	plural
1	bi <b>mь</b>	bi <b>mь</b>
2	bi	biste
3	bi	bišę/bō

(OCS, Schmalstieg 1983: 157)

The conditional mood expresses irrealis meaning, as indicated in the following example.

- (41) G(ospod)i ašte bi bylъ sьde nebi  
 Lord if be<sub>COND.2SG</sub> be<sub>PART.MSG</sub> here NEG+be<sub>COND.3SG</sub>  
 bratrъ moi umrъlъ  
 brother my die<sub>PART.MSG</sub>

“Lord, if you had been here, my brother would not have died”

(OCS, J.11.21, Schmalstieg 1983: 157)

### 1.3.3.5 Participial forms in Old Church Slavonic

Old Church Slavonic relics exhibit a rich participial system. The participles combine the functions of verbs and adjectives. Along with adjectives, they are inflected for gender, number, case, and definiteness.<sup>8</sup> They are also specified for the verbal categories of tense, aspect, and genus.<sup>9</sup> However, the temporal distinctions expressed by the participles were relative, rather than absolute: events occurring simultaneously with the tense of the main verb were expressed by present participles, whereas the events which are anterior to the tense of the main verb were expressed by past participles. There were five morphologically distinct forms of the participles: present active, present passive, past active, past passive, and the (resultative) *l*-participle (Lunt 1974: 139-141; Schenker 2002: 104-106; Dostál 1954: 614ff.) The resultative participle deserves a wider mention, therefore it will be analysed in a separate section (1.3.3.5.1). The morphological forms of the participles are described in the chart in (42).<sup>10</sup>

<sup>8</sup> The definiteness marking is related to two declensions of adjectives and passive participles in Old Church Slavonic: the nominal declension (which produced the so-called “short forms”) and the pronominal declension (which had “long forms”). The pronominal declension contained the demonstrative pronoun *j*, which functioned like a postpositional definite article (cf. Klemensiewicz *et al* 1964: 323-326 and Lavine 2000 ch. 3).

<sup>9</sup> The genus distinction is concerned with the opposition between active and middle constructions (as in, for example, *He opened the door* versus *The door opened*). It had been morphologically distinguished through inflection in Proto-Indo-European, but Proto-Slavic lost these distinctions. This opposition was taken over by a newly developed contrast of reflexive and non-reflexive forms. The middle construction was rendered with the reflexive particle *se* (cf. Schenker 2002: 94).

<sup>10</sup> The suffixes listed in the chart sometimes do not correspond to the ones exemplified in the data below. This is because they often undergo morpho-phonological alternations in the presence of inflectional morphemes.

## (42) Types of participles in Old Church Slavonic

Participles	Present	Past
Active	present tense stem + <i>-ǫŕ-</i> or <i>-ęŕŕ</i>	infinitival stem + <i>-ŭŕ-</i> or <i>-vŭŕ-</i>
Passive	present-tense stem + <i>-m-</i>	infinitival stem + <i>-ŭŭ-</i> , <i>-mŭ-</i> , or <i>-emŭ</i>
Resultative (the <i>l</i> -participle)	infinitival stem + <i>-l</i> suffix	

The Present Active Participle denoted actions that co-occur with the events expressed by the main verb.<sup>11</sup>

- (43) Reče že prítъčō k nimъ glagoļe  
 speak<sub>AOR.3SG</sub> FOC parable<sub>ACC.F.SG</sub> to them say<sub>PAP.NOM.M.SG</sub>  
 “And he spoke a parable to them saying...” (Luke 12:16-21)

The Present Passive Participle often rendered the meaning of a possibility, as in *vidimъ* ‘being seen, visible’, *nerazorimъ* ‘indestructible’. It could be formed only from transitive verbs.<sup>12</sup>

- (44) Nitъsomuže bōdetъ kъ tomu da isypana bōdetъ  
 nothing<sub>DAT</sub> be<sub>PRF.3SG</sub> to that<sub>DAT</sub> to cast<sub>PASS.F</sub> be<sub>PRF.3SG</sub>  
 vъnъ i popiraema tčlovjēky  
 out and tread<sub>PASS.NOM.F.SG</sub> men<sub>INST</sub>  
 “(It is thenceforth good for) nothing, but to be cast out, and to be trodden  
 under foot of men” (OCS, Matthew 5:1-13)

The Past Active Participle characterized events that started before the action denoted by the main verb.

- (45) Uzbrjēvъ že narody vъzide na gorō  
 seeing<sub>PAST.PAP.NOM.M.SG</sub> FOC multitude go-up<sub>AOR.3SG</sub> to mountain  
 i jēko šēde pristōpišę kъ nemu utčenitsi ego  
 and when sit<sub>AOR.3SG</sub> come<sub>AOR.3PL</sub> to him<sub>DAT</sub> disciples his  
 “And seeing the multitudes, he went up into a mountain, and when he was  
 set, his disciples came unto him” (OCS, Matthew 5:1-13)

The Past Passive Participle was used to describe a state which was caused by an external agent and which begun before the reference time. It may also be employed predicatively in passive constructions. A number of passive participles were used as adjectives, for instance *směrenъ* ‘humble’ or *učenъ* ‘learned’ (Lunt 1974: 141).

<sup>11</sup> Example (43) comes from: <http://www.utexas.edu/cola/depts/lrc/eicol/ocsol-1-X.html>

<sup>12</sup> Examples (44) through (46) come from: <http://www.utexas.edu/cola/depts/lrc/eicol/ocsol-6-R.html>

- (46) Blaženi milostivii jěko ti  
 blessed<sub>NOM.M.PL</sub> merciful<sub>NOM.M.PL</sub> as they  
 pomilovani bōdōtъ  
 obtain-mercy<sub>PAST.PASS.NOM.M.PL</sub> be<sub>PRF.3PL</sub>  
 “Blessed are the merciful, for they shall obtain mercy”  
 (OCS, Matthew 5:1-13)

The inventory of the participles was subsequently modified in particular Slavic languages. All of them were inflected for case and agreed in  $\varphi$ -features with the subject. The only participle that has never been marked for morphological case (that is, which only appeared in nominative) was the resultative *l*-participle.

### 1.3.3.5.1 The *l*-participle

Of particular relevance for the topic of this thesis is the *l*-participle, which is also known as the “resultative participle” or the “*participium praeteriti (perfecti) activi II*” (Bartula 1981: 94, Schenker 2002: 106). It is formed with the suffix *-l* attached to the infinitival aorist stem.<sup>13</sup>

- (47) Infinitive: da-ti  
                   give<sub>INF</sub>  
*l*-participle: da-lъ/-la/-lo  
                   give<sub>PART.MSG/F.SG/N.SG</sub>

In Old Church Slavonic the *l*-participle was used in all compound tenses and always occurred with a finite form of the verb ‘to be’ as the auxiliary.

#### 1.3.3.5.1.1 *The meaning of the l-participle*

The semantic role of the *l*-participle is to denote the result of a completed or uncompleted action. In other words, it focuses on a past, future or present state that results from a previous action.

According to Kowalska (1976: 20) the *l*-participle has always been used in relative tenses. It conveys the meaning of a ‘distance’ from the speaker’s perspective. The distance could be related to the chronology of events in the case of future or past tense constructions, or to probability or possibility in the case of modal/conditional constructions.

<sup>13</sup> In contemporary Bulgarian and Macedonian the *l*-participle can be derived from both aorist and imperfectum infinitival stems, as shown in (i) and (ii), respectively.

- i. Xodil sŭm  
     go<sub>PART.AOR.MSG</sub> be<sub>PRES.ISG</sub>  
     “I have gone”/“I went, they say”  
 ii. Xodel sŭm  
     go<sub>PART.IMP.MSG</sub> be<sub>PRES.ISG</sub>  
     “I was going”/“I used to go, they say” (Bg, Lindstedt 1994: 44)

The meaning of the aspectual distinctions is reflected in the translations. The second part of the translations represents ‘the renarrated mood’, which is described in section 1.3.4.5.1.

Lunt (1952: 91) claims that the meaning of an event which is “distanced”<sup>14</sup> can be realized in two ways. First, the use of the *l*-participle may specify that the speaker did not witness the described event; therefore responsibility for accuracy of the statement is withheld. This is the case in “renarrated mood” constructions (cf. section 1.3.4.5.1). Second, the *l*-participle may denote an eventuality that has begun or took place in the past, and which is still relevant at the moment of the utterance. This is one of the original meanings of Slavic perfect tenses (cf. section 1.3.3.4.3).

The temporal meaning of the *l*-participle is of a secondary importance. This can be readily observed in Future II constructions (cf. section 1.3.3.4.1.2), which make use of the *l*-participle. Recall that the Future II does not necessarily characterize future events, and may frequently express *irrealis* or even past tense meanings.

### 1.3.3.5.1.2                      Development of the *l*-participle

It is generally assumed that the *l*-participle derives diachronically from a group of Proto-Indo-European verbal adjectives ending in *\*-lo* (cf. Damborský 1967). The adjectives signified likelihood to perform a certain action or referred to a characteristic feature of the person involved. The *\*-lo* forms also served as a stem of *nomina agentis* (agent participles) and proper names in many Indo-European languages. Examples of such forms include *discipulus* ‘student’ or *legulus* ‘gatherer of fallen olives’ in Latin; *dēlos* ‘apparent, evident’ in Ancient Greek; *bitil* ‘applicant’, *tribal* ‘cattle driver’, or *Unterlandjfel* ‘delegate’ in Old German. In Slavic they were often the base of pejorative agent participles, such *krzykacza* ‘a shouter’ *jakała* ‘stutter’ or *guzdracza* ‘dawdler’ in Polish (cf. Wojtyła-Świerzowska 1974: 103ff). Many of them became sources of surnames, either in the adjectival or nominal form, such as *Szukacza* ‘searcher’ (agent) / *Szukalski* ‘searching’ (adjectival), *Pekacza* ‘bursting’ / *Pekalski* ‘someone who bursts’ or *Czekacza* ‘awaiting’ / *Czekalski* ‘someone who waits’ (Damborský 1967: 126ff).

At some point, some of the *\*-lo* adjectives were reanalyzed as participles in compound tenses. The process occurred in three Indo-European subgroups: Armenian, Slavic, and Tocharian, and to a lesser extent in Umbrian (only in future perfect forms) and Indic (Middle Indo-Aryan in active perfective participles; cf. Hewson & Bubenik 1997: 74). In Slavic, they emerged as *l*-participles. It is remarkable that the forms found in Armenian and Tocharian are morphologically similar to the Slavic *l*-participle and that they always occur with the copula ‘be’ as well.

In East Tocharian, *l* is a gerundive suffix attached to the present tense or to the subjunctive stem. The resulting forms express necessity or possibility, respectively. The gerundives are found with a copula, and can be used attributively or predicatively. The copula may be dropped with predicative gerundives (cf. 48).

- (48)                      Nervvamn-oko      kälale  
                          nirvana-fruit      obtain<sub>GER</sub>  
                          “(By praising God) the fruit of nirvana is obtainable”  
    (East Tocharian, Krause and Werner 1960: 186-187)

The only participle that is available in Classical Armenian is formed by adding the suffix *eal* to the aorist stem. The participle is indifferent to voice distinctions, because Classical

<sup>14</sup> Friedman (1977: 36) argues against the meaning of ‘distance’. For him the *l*-participle renders the opposite meaning, because if an event is relevant for the present moment, it cannot be distant.

Armenian had no separate passive participle. As in Tocharian and Slavic, it is accompanied by the copula.

- (49)             $\check{Z}$ amanek    haseal        ê  
                   time            come<sub>PART</sub>    is  
                   “Time has come”                    (Classical Armenian, Hewson & Bubenik 1997: 75)

### 1.3.3.5.1.3                    *L-participles versus l-adjectives*

Even though the *l*-participle originated from a class of *\*-lo* adjectives, the process did not involve a reanalysis of all *\*-lo* adjectives as participles. Both *l*-adjectives and *l*-participles exist in Slavic, although their distribution varies across the languages. They can be distinguished from each other by means of a few criteria (cf. Damborský 1967).

As an illustration, chart (50) presents the derivations of the form *wytrwał* (+ inflection), ‘persist’, which in Polish is a potential stem for both an *l*-participle and an *l*-adjective with the meaning ‘persistent’. The form *wytrwał* is compared with the form *odeszł* (+ inflection), ‘leave’, which can be a stem for the *l*-participle, but does not have a corresponding adjectival variant.

(50)

	<i>l</i> -adjectives	<i>l</i> -participles
gradation	<i>wytrwał</i> -szy “more persistent” <i>najwytrwał</i> -szy “the most persistent”	impossible: <i>*odeszł</i> -szy <i>*najodeszł</i> -szy
modification with ‘very’	possible, e.g. <i>bardzo wytrwali żołnierze</i> “very persistent soldiers”	impossible
nominalization	<i>wytrwał</i> -ość “persistence”	impossible: <i>*odeszłość</i>
adverb formation	<i>wytrwał</i> -o “persistently”	impossible: <i>*odeszł</i> -szo
case morphology	available, e.g. <i>wytrwałych żołnierzach</i> “persistent <sub>LOC</sub> soldiers <sub>LOC</sub> ”	unavailable/only in nominative case

As the chart indicates, *l*-adjectives are potential stems for derivation of adverbs, nouns and they are gradable. They also decline for case and can be premodified by the degree adverb *bardzo* ‘very’. By contrast, even though *l*-participles are morphologically adjectival, their distributional properties are different. This is related to the fact that the *l*-participle may never appear independently of the auxiliary verb. For instance, the Old Church Slavonic lexeme *pisalъ* ‘written’ can only occur together with a finite form of the copula as a part of a paradigm, as in *pisalъ jesm* ‘I have written’. Occurrences of the *l*-participle outside compound tenses are unattested.

### 1.3.3.5.1.4                    *Grammatical properties of the l-participle*

In contrast to the other participles found in Old Church Slavonic (cf. section 1.3.3.5) and *l*-adjectives, the *l*-participle does not decline for case. Moreover, just as the related formations in Classical Armenian, both the *l*-participles and the *l*-adjectives are indifferent to voice distinctions, so they can have either active or passive meanings. For instance, the Old Polish adjectives *ukradły* ‘stolen’, *dowiodły* ‘proven’ had a passive meaning, whereas the contemporary Polish adjectives *przybyły* ‘arrived’ and *powstały*

‘arisen’ are active (Damborský 1967: 145).<sup>15</sup> This property supports the claim made in chapter 2 and 3 that unlike passive participles, *l*-participles are able to assign accusative case to the object.

Finally, since *l*-participles are non-finite, they are not specified for tense. In fact, this follows from their semantics. Given that they express the result following from a past or future action, they are void of a temporal meaning.

### 1.3.3.5.2 The auxiliary / copula ‘to be’

The compound tenses in Slavic are constructed with various forms of the verb ‘to be’ functioning as the auxiliary. The following sections will provide the full paradigms of *byti* in the present, aorist, and imperfectum tenses in Old Church Slavonic.

#### 1.3.3.5.2.1 Tense

Chart (51) gives the paradigm of the verb ‘to be’ in the present tense.

(51) The paradigm of *byti* in the present tense

	singular	dual	plural
1	jesmь	jesvě	jesmь
2	jesi	jesta	jeste
3	jestь (je)	jeste	sōtь (sō)

(OCS, cf. Schmalstieg 1983: 138)

As marked in the chart, the 3<sup>rd</sup> singular form in the present tense *jestь* has a reduced variant *je*, whereas the 3<sup>rd</sup> plural form *sōtь* can be reduced into *sō*. These variants were enclitic, which paved the way for further impoverishment of the forms in contemporary Slavic languages (Vaillant: 1966: 441-442). The reduction was particularly important for the construction of the paradigm of the copula in Polish and Serbo-Croatian, which will be described in section 1.3.4.2.2, and in chapters 2 and 5.

The present forms have negated counterparts, which are constructed by addition of the particle *ne*. The 3<sup>rd</sup> singular reduced variant *je* has the negated form *ně*.

(52) The paradigm of the negated form of *byti* in the present tense

	singular	dual	plural
1	něsmь	něsvě	nesmь
2	něsi	něsta	neste
3	něstь (ně)	něste	nesōtь

(OCS, cf. Schmalstieg 1983: 138)

The paradigms below represent the simple past tenses: aorist and imperfectum. According to some grammarians (e.g. Lunt 1974: 121), the bracketed forms in the paradigm of the imperfectum represent the imperfective aorist variants, but some other researchers (e.g. Vaillant 1948: 298) argue that these are imperfectum forms.

<sup>15</sup> It seems that in contemporary Slavic languages the ambiguity of the *l*-participle with respect to voice specification tends to be resolved, and that *l*-adjectives usually acquire an active meaning. The contemporary Polish variants of the *l*-adjectives with the passive meaning mentioned above have passive participle morphology: *ukradziony* ‘stolen’ and *dowiedziony* ‘proven’.

(53) The paradigm of the aorist form of ‘byti’

	singular	dual	plural
1	бухъ	буховѣ	бухомъ
2	бустъ (by)	bysta	byste
3	бустъ (by)	byste	byše

(OCS, cf. Schmalstieg 1983: 140)

(54) The paradigm of the imperfectum form of ‘byti’

	singular	dual	plural
1	бѣхъ	бѣховѣ	бухомъ
2	бѣаše (bě)	bĕašeta (bĕsta)	bĕašete (bĕste)
3	бѣаše (bě)	bĕašete (bĕste)	bĕaxę (bĕše)

(OCS, cf. Schmalstieg 1983: 139)

#### 1.3.3.5.2.2 Aspect

The preceding sections have demonstrated that the forms of the verb ‘to be’ differ in their temporal and aspectual specification in all the compound tenses. In the present perfect the verb ‘to be’ occurs in the imperfective form, in the future tense it is perfective, whereas in the pluperfect it appears either in the imperfectum or in the aorist. The survey of the forms in (55) indicates that the verb ‘to be’ forms aspectual pairs like most other verbs in Slavic.

(55) The aspectual forms of the verb ‘to be’ in the simple tenses

tense/aspect	imperfective	perfective
3sg present	jestъ	bōdetъ
3sg imperfectum	bĕaše	bōdĕaše
3sg aorist	bĕ	bystъ

(OCS, cf. Dostál 1954: 146; Van Schooneveld 1951: 103)

Whaley (2000a: 21) investigates the diachrony of the perfective form of the verb *byti* used in the constructions with a future meaning. She points out that *bōdetъ* contains the nasal vowel *ō*, which is a descendant of the nasal consonant found in the Late Proto-Indo-European stem *\*bhū-n-d* ‘to be<sub>PERF</sub>’. The nasal consonant was a perfectivizing infix. In Old Church Slavonic the nasal vowel *ō* occurs in a small group of verbs expressing ingressivity or inchoativity (i.e. the beginning of a process), such as *sedō* ‘sit (down)’, *legō* ‘lie (down)’, *stanō* ‘stand (up)’, ‘become’ (cf. Meillet 1958: 169). The presence of the nasal vowel proves that *bōdetъ* is perfective and implies a change of state. Possibly, it could have the meaning of ‘become’ (cf. section 1.3.4.4 for more details). As can be expected, the perfectivizing nasal vowel is absent in the imperfective form, *jestъ*.

#### 1.3.3.5.2.3 Auxiliary vs copula

Morphologically, the paradigm of the verb ‘to be’ in Old Church Slavonic is the same regardless of whether it is used as a copula or as an auxiliary. However, its distribution may differ. For example, Van Schooneveld (1959: 142) points out that whereas the auxiliary in Old Russian was an enclitic and had to occur in the second position, the



copula was not. Therefore, the copula could occur at the beginning of a clause and precede adjectives and present active participles.<sup>16 17</sup>

- (56) I by obladja Olegъ Poljany  
 and be<sub>AOR,3SG</sub> rule<sub>PAP3SG</sub> Oleg Poljane  
 “And Oleg was ruling over the Poljane”  
 (Old Russian, *Povest'*, Van Schooneveld 1959: 143)

Moreover, the copula and the auxiliary behaved differently with respect to ellipsis. For example, Růžička (1963: 202) argues that the finite forms of the verb *byti* ‘to be’ were optional in copula constructions (‘be + NP’) in Old Slavic texts, but the perfect auxiliary could never be dropped when it occurred with *l*-participles. Therefore, Růžička concludes that there were two homophonous forms of *byti*, one for the perfect tense, the other for copulas. However, there seems to be some disagreement among researchers, because Van Schooneveld (1959: 107) claims that Old Russian could either drop or retain both the auxiliary and the copula.

At any rate, it is evident that the copula and the auxiliary had the same morphological forms in Old Church Slavonic. The next section will show that in the languages that have lost the aspectual past tenses, the auxiliary has lost its tense specification as well, becomes phonologically and morphologically weaker and is eventually reanalyzed as a person and number marker. Conversely, in the languages that retained the aspectual past tenses, there is no morphological distinction between the auxiliary and the copula.

This concludes the presentation of the ways of expressing tense and aspect distinctions in Old Church Slavonic. In the next section I will demonstrate how the markings of tense and aspect developed in contemporary Slavic languages.

### 1.3.4 Development of the tenses in Modern Slavic languages

Section 1.3.3 showed that Old Church Slavonic expressed temporal relations through intricate tense and aspect markings. As can be expected, the tense system developed in various directions in particular Slavic languages. Before I illustrate the modifications in more detail, let me point out the triggers of the changes.

According to Hewson & Bubenik (1997: 285), the tense/aspect systems of late Common Slavic and Old Church Slavonic were imbalanced in two respects. First of all, as was already discussed in section 1.3.3.2, verbs could express three types of aspect: retrospective, perfective, and imperfective. The retrospective aspect was marked by the present perfect tense formed with the *l*-participle, whereas the (im)perfectivity was signified by aspectual morphemes. The two types of aspect could be represented simultaneously on one verbal form. For instance, both of the examples in (57) represent retrospective aspect. In addition, (57a) renders imperfective aspect, whereas (57b) marks perfective aspect by the prefix *pri-* on the *l*-participle.

<sup>16</sup> The same holds for contemporary Czech, as will be shown in section 1.3.4.2.2.

<sup>17</sup> Conjunctions were not potential clitic hosts in Old Russian or in Old Church Slavonic.

- (57) a. Neslъ                      jesmь                      **retrospective+imperfective**  
 carry<sub>PART,IMPF,MSG</sub>      be<sub>AUX,1SG</sub>  
 “I have been carrying<sub>IMPF</sub>”
- b. Pri-neslъ                      jesmь                      **retrospective+perfective**  
 carry<sub>PART,PRF,MSG</sub>      be<sub>AUX,1SG</sub>  
 “I have carried<sub>PRF</sub>” (OCS)

The problem is that the difference between retrospective and perfective aspect is rather minute. Figure (23), repeated below as (58), shows that perfective aspect situates the agent at the very last moment of the action, but internally to the event. Retrospective aspect locates the agent immediately after the end of the event.

- (58)
- |             |   |                        |
|-------------|---|------------------------|
| Event time  |   |                        |
| -----x----- |   | (imperfective aspect)  |
| -----x----- |   | (perfective aspect)    |
| -----x----- | x | (retrospective aspect) |

Given the semantic proximity of the two types of aspect, the natural expectation is that the retrospective meaning might become too insignificant to maintain, so that the major distinction will be drawn between the perfective and the imperfective.

Another weak point of the Old Church Slavonic tense/aspect system was the coexistence of the aspectual tenses, the aorist and the imperfectum, with the perfective and imperfective aspectual forms. Either of the aspectual tenses could be used with both imperfective and perfective verbs, so the tense and aspect markings were in principle independent of each other. However, in most cases the aspectual tenses semantically coincided with the specifications of aspect. Since the most common variants were the imperfective imperfectum and the perfective aorist, it was unnecessary to mark the same aspectual distinction twice.

As an illustration, the Old Church Slavonic tense/aspect system is presented in chart (59). The functionally overlapping aspectual forms are marked in bold. The retrospective aspect is semantically redundant, because it expresses very similar meanings to the perfective and imperfective aspects. Correspondingly, (im)perfectivity is rendered in a morphologically uneconomical way, because it is marked both via perfective prefixes (e.g. *na-*) and the aspectual tenses.

- (59) The overlapping aspectual forms in Old Church Slavonic

			Retrospective
Perfective	Future	-	na-pъsa-lъ bōd-ō
	Present	na-pъš-ō (Fut)	<b>na-pъsa-lъ jesmь</b>
	Aorist	<b>na-pъš-axъ</b>	na-pъsa-lъ bē-xъ
Imperfective	Future	xošt-ō pis-ati	pisa-lъ bōd-ō
	Present	pis-aj-ō	<b>pisa-lъ jesmь</b>
	Imperfectum	<b>pīš-āxъ</b>	pisa-lъ bē-xъ

(Hewson & Bubenik 1997: 286)

The most plausible solution to enhance the tense/aspect system was to remove or reanalyze the isofunctional categories. Thus, some of the South Slavic languages retained the aspectual tenses, but at the same time have altered the semantics of the compound tense formed with the auxiliary ‘be’ and the *l*-participle. In these languages

the construction usually does not express retrospective aspect any more, but has acquired a new meaning and is used to characterize events that have not been witnessed by the speaker (cf. the discussion of the renarrated mood in section 1.3.4.5.1). By contrast, most of the West and East Slavic languages have lost the aspectual tenses,<sup>18</sup> and have reanalyzed the compound formation constructed with the *l*-participle and the auxiliary 'be' as the default past tense. The distinction between the perfective and imperfective meanings is now rendered only by aspectual affixes.

The details of the modifications of the tense/aspect system in contemporary Slavic languages will be fleshed out in the subsequent sections.

### 1.3.4.1 Simple past tenses

This section will describe the development of aorist and imperfectum in contemporary Slavic languages. A division will be made between East and West Slavic, where the tenses have been lost, and South Slavic, where the tenses have been preserved to various degrees.

#### 1.3.4.1.1 East and West Slavic

With the exception of Upper Sorbian, the aspectual past tenses have completely disappeared from West and East Slavic languages. The former contrast between the aorist and the imperfectum is currently marked only by aspectual morphemes. In Old Russian the decline of the imperfectum in the 13<sup>th</sup> century preceded the decline of the aorist in the 15<sup>th</sup>-16<sup>th</sup> century. In Old Czech the simple past tenses disappeared during the 14<sup>th</sup> century, while in Polabian (the western-most Slavic language spoken in the area of the Elbe River in Germany) they existed until the death of the language at the beginning of the 18<sup>th</sup> century (cf. Stieber 1973: 45-46; 53).

The earliest written Polish texts contain examples of the aorist and the imperfectum, but they are very rare. For example, Klemensiewicz et al (1964: 369) claim that there were 8 examples of the aspectual tenses in *Kazania Świętokrzyskie*, which is the oldest Polish literary relic from the 14<sup>th</sup> century and 13 instances in *Psalterz Floriański* from the 14<sup>th</sup>-15<sup>th</sup> century. Later texts include infrequent usages of the aorist forms, but only of the verb 'to be'. Because of some phonological processes, the person endings of the aorist and the imperfectum blurred in Old Polish and became difficult to distinguish. Eventually, the past tenses vanished in the 14<sup>th</sup> century.

#### 1.3.4.1.2 South Slavic

In contrast to East and West Slavic, the South Slavic languages have retained the aspectual simple past tenses, albeit to different degrees. A possible reason for their preservation could be the fact that the South Slavic languages are members of the Balkan Sprachbund and thus stay in intensive cross-cultural contacts with 'alien', non-Slavic languages, which have retained similar tense distinctions (cf. Tomić 1984).

The simple past tenses are most widely used in Bulgarian, where just as in Old Church Slavonic, tense and aspect form two independent systems. Hence, the values of the aspectual tenses need not correspond to the aspect marking. For instance, the example in (60) shows that imperfective verbs may occur in the aorist.

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<sup>18</sup> Sorbian (a Western Slavic language spoken in eastern parts of Germany) is an exception, because it has retained them.

- (60) Toj caruva trijset godini  
 he reign<sub>IMPF.AOR.3SG</sub> thirty years  
 “He reigned for thirty years”

**Imperfective Aorist**  
 (Bg, Comrie 1988: 73)

According to Scatton (1984: 321-322) the imperfective aorist is used when there is no concrete, definite end-result of an event, or when the occurrence of a major event is the main issue in the narration, rather than its termination. In the case at hand, the verb *caruva* ‘reign<sub>IMPF.AOR.3SG</sub>’ inherently specifies an unbounded activity, which in Bulgarian is expressed by means of imperfective aspect. However, the sentence contains the adverbial ‘for thirty years’, which adds a terminal point to the situation characterized by the aorist. The combination of the imperfective aspect with the aorist renders the meaning of an atelic event that becomes terminated after a long period of time.

It is also possible for perfective verbs to carry the morphology of the imperfectum tense. This is demonstrated in (61).

- (61) Vseki püt, kogato izlezexme na poljana  
 every time when come-OUT<sub>PRF.IM.1PL</sub> to meadow  
 “Every time that we came out onto the meadow...”

**Perfective Imperfectum**  
 (Bg, Comrie 1988: 73)

Here, the combination of the perfective aspect with an imperfectum describes an unbounded repetitive or habitual situation. Each of the individual occurrences of the situation is regarded as bounded, which can be attributed to perfective aspect, but the whole situation does not have to be bounded, which might be attributed to the imperfectum form of the verb.

Undoubtedly, the semantically “contradictory” combinations of tense and aspect forms require rather unusual contexts, which do not occur very often.<sup>19</sup> Therefore, the system that allows them is prone to simplifications.

In comparison to Bulgarian, the tense/aspect system of Macedonian is quite reduced. The imperfectum is used as the default past tense, whereas the aorist is becoming obsolete and can be found only in a limited set of expressions (Tomić 1989: 366). One reason for the loss of the aorist is morphological. The majority of verbs in Macedonian have distinct forms of the aorist and the imperfectum endings only in the 2<sup>nd</sup> and the 3<sup>rd</sup> person singular. The forms are identical in all the other persons (Lunt 1952: 90).

- (62) The morphological endings of the Macedonian aspectual tenses

	aorist		imperfectum	
	singular	plural	singular	plural
1	-v	-vme	-v	-vme
2	-	-vte	-še	-vte
3	-	-a	-še	-a

(Mac, Friedman 1977: 8)

<sup>19</sup> See Lindstedt (1985) for an extensive analysis of interactions between tense and aspect in Bulgarian.

Hewson & Bubenik (1997: 288) attribute the decline of the aorist in Macedonian to the fact that the imperfectum can be formed only from imperfective verbs, while the aorist can be constructed only from the verbs marked for perfective aspect.<sup>20</sup> The lack of the distinction between the perfective and the imperfective aorist makes it redundant as a separate tense. It is enough to mark perfectivity via aspect.

Other South Slavic languages have only remnants of the aspectual tenses. The aorist and the imperfectum have completely vanished from Slovene, where the compound tense formed with the *l*-participle has been adopted as the general past tense. In Serbo-Croatian, the usage of the past tenses is restricted to certain dialectal areas, even though they are still “taught” at schools. It seems that the aorist and the perfect are more common in Serbian than in Croatian. Gradually, the present perfect is taking over the old role of the aorist as the “narrative” tense in Serbo-Croatian. The only exceptions are some Montenegrin dialects, where the aorist is still used as the main narrative system by some modern fiction writers from this area (cf. Lindstedt 1994: 39).

Summarizing, it has been shown that the Old Church Slavonic aspectual tenses have been preserved in Bulgarian, and (to a lesser extent) in Macedonian. All the other Slavic languages have lost them, and make a distinction between perfective and imperfective events by using aspectual morphology.

### 1.3.4.2 Present perfect

The present perfect has undergone the most profound changes in all Slavic languages, which are related both to its semantics and grammatical form. In East and West Slavic, as well as in Serbo-Croatian it was reanalyzed as the default tense for describing past events. In some of these languages, especially in the East Slavic group, the process was accompanied by morphological reduction of the auxiliary (cf. section 1.3.4.2.1 for East Slavic and 1.3.4.2.2 for West Slavic). In Bulgarian and Macedonian the morphological form of the present perfect remained largely the same, but the tense has acquired a new modal meaning and is used for characterizing events that have not been witnessed by the speaker. This type of usage is referred to as the “renarrated mood” and will be discussed in section 1.3.4.5.1.

The modifications of the present perfect cross-cut the aerial boundaries between the East, West, and South Slavic subgroups, which is evident in the discussion of Serbo-Croatian (cf. 1.3.4.2.3.) versus Bulgarian and Macedonian (cf. 1.3.4.5.1). Likewise, a number of geographically unrelated Slavic languages have developed new forms of present perfect, with the verb ‘have’ acting as the auxiliary, which will be described in section 1.3.4.5.2.

#### 1.3.4.2.1 East Slavic

With the loss of the aorist and the imperfectum, the present perfect became the only construction available to characterize past events in East Slavic. It is not clear why the aspectual tenses disappeared from these languages, but it is certain that the usage of the present perfect increased in Old Church Russian earlier than in Old Church Slavonic (cf. Stieber 1973: 53), which indicates that the present perfect started to assume the role of the default past events before Old Russian split into dialects.

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<sup>20</sup> Friedman (2002: 267) remarks that imperfective aorist had been found in the literature till the middle of the 20<sup>th</sup> century, but now they are completely obsolete.

The decline of the aspectual tenses coincided with the loss of the auxiliary ‘be’ in the present perfect. Unlike in South and West Slavic (cf. section 1.3.4.2.2.1 for a discussion of Polish), it was lost without any prior morpho-phonological reduction into a clitic or an affix. The auxiliary started to be left out already in the 11<sup>th</sup> century, while in the 12<sup>th</sup>-13<sup>th</sup> century dropping the auxiliary became the norm. This development was peculiar to the East Slavic group and Old Church Russian, because the auxiliary drop was uncommon in Old Church Slavonic. The only Old Church Slavonic relic in which the auxiliary was occasionally missing was *Codex Suprasliensis*, but the omission was limited to the 3<sup>rd</sup> person singular form (Van Schooneveld 1959 ch. 4). In the 16<sup>th</sup> and the 17<sup>th</sup> century the present perfect auxiliaries were still occasionally found in the 1<sup>st</sup> and the 2<sup>nd</sup> person in the singular and in the plural, but afterwards, they fell out of use completely. As a result, in the contemporary East Slavic compound tenses the *l*-participle occurs without a perfect auxiliary, as shown for Russian in (63).

- (63) Ana napisala pis'mo  
 Ana write<sub>PART.F.SG</sub> letter  
 ‘Ana wrote a/the letter’ (Rus)

The disappearance of the auxiliaries had a clear syntactic effect: the East Slavonic languages became non-pro-drop, and pronouns can be omitted only when they are topics (cf. Franks 1995 ch. 7). Otherwise, it is impossible to mark person-number distinctions.

As a result of the loss of the present perfect, the only compound forms available in contemporary East Slavic are the future tense (cf. section 1.3.4.4.2) and the conditional form (cf. 64), which consists of the invariant auxiliary *by* and the *l*-participle. Since the auxiliary does not show person-number distinctions, the subject is always present.

- (64) Ja čital by  
 I read<sub>PART.MSG+COND</sub>  
 ‘I would read’ (Rus)

With the decline of the perfect auxiliaries, the contemporary East Slavic group has lost most of its compound tenses. Therefore, little attention will be given to these languages in this thesis.

### 1.3.4.2.2 West Slavic

Just as the East Slavic languages, the West Slavic languages have lost the aorist and the imperfectum as well. Semantically, they have also lost the present perfect, but unlike the East Slavic languages, they have retained the auxiliaries in an impoverished form. I will present the change using Polish data, with some examples of the auxiliary/copula distinction in Czech added in section 1.3.4.2.2.3 for comparison.

#### 1.3.4.2.2.1 Changes to the auxiliary in Polish

As was noted in section 1.3.3.5.2.1, Old Church Slavonic had two forms of the verb ‘to be’ in the 3<sup>rd</sup> person: the strong (orthotonic) form *jestъ* in the singular, and *sъtъ* in the plural, as well as the reduced variants, *je* and *sъ*, respectively. The placement of the orthotonic forms was relatively free, whereas the reduced ones were enclitic and had to occur in the second position. In the languages that emerged from Old Church Slavonic, the reduced forms were extended to the whole paradigm. The chart in (65) presents the

development of the verb ‘to be’ in the history of Polish (Decaux 1955: 126ff; Andersen 1987: 24); the orthotonic variants are taken from Old Polish, whereas the reduced ones in the last two columns are taken from 16<sup>th</sup> century and Modern Polish. The dual forms were lost in the 16<sup>th</sup> century (Długosz-Kurczabowa & Dubisz 2001: 308), but can still be found in some dialects.

(65) Diachronic development of the Polish verb ‘to be’

	ORTHOTONIC FORM (Old Polish)	REDUCED FORMS	
		16 <sup>th</sup> century Polish	Modern Polish
1SG	jeśm	-(e)śm/-(e)m	-(e)m
2SG	jeś	-(e)ś	-(e)ś
3SG	jest/jeść/je	-	-
1PL	jesm(y)	-(e)smy	-(e)śmy
2PL	jeście	-(e)ście	-(e)ście
3PL	są	-	-
1DUAL	jeswa	-(e)swa	-
2DUAL	jesta	-(e)sta	-
3DUAL	jesta	-(e)sta/-0	-

(cf. Andersen 1987:24)

Decaux (1955: 127-128) observes that in Old Polish the orthotonic 3<sup>rd</sup> person auxiliaries *jest*, *je*, and *są* were found only in emphatic predication structures. This restriction may account for the fact that these forms already disappeared between the 15<sup>th</sup> and the 17<sup>th</sup> century. The singular variant *jest* fell out of use first, and the plural form *są* was lost later.

The sentences in (66) exemplify the use of Old Polish orthotonic auxiliary forms. They may co-occur with the enclitic variants, and their position in the clause is largely unrestricted.

- (66) a. Wiem ze stworzyciela wszego luda porodziła jeś  
 know<sub>1SG</sub> that creator all<sub>GEN</sub> mankind<sub>GEN</sub> bear<sub>PART.F.SG</sub> 2SG  
 “I know you bore the creator of all mankind”
- b. Tom jest oglądała  
 That+<sub>1SG</sub> 3SG.EMPH see<sub>PART.F.SG</sub>  
 “That I did see”
- c. Jest ja ciebie zepchnął albo uczynił-em  
 3SG.EMPH I you<sub>ACC</sub> repulse<sub>PART.M.SG</sub> or do<sub>PART.M.SG</sub>+<sub>1SG</sub>  
 tobie co złego?  
 you any harm  
 “Did I repulse thee or do thee any harm?” (Old Polish, Andersen 1987:28)

The examples in (67) illustrate the use of the reduced auxiliaries, which must encliticize on the first element in the clause, and thus appear in the second position.

- (67) a. Ani-ś mię zepchnął, ani rzucił, ani-ś  
 not+2SG me repulse<sub>PART.M.SG</sub> nor desert<sub>PART.M.SG</sub> nor+2SG  
 niektóre złości uczynił  
 any harm do<sub>PART.M.SG</sub>  
 b. Bo-cie-*m* się cała darowała  
 for-you+1SG REFL entire give<sub>PART.F.SG</sub>  
 “For I gave myself wholly to thee” (Old Polish, Andersen 1987:28)

A Modern Polish example is given in (68). It will be shown in chapter 5 that the auxiliary following the *l*-participle has been largely reanalyzed as an affix.

- (68) Wczoraj pojechał-em do Szczyrku na narty  
 yesterday go<sub>PART.M.SG</sub>+AUX.1SG to Szczyrk on skis  
 “Yesterday I went skiing in Szczyrk” (Modern Polish)

With the decline of the orthotonic forms, the emphatic distinction had to be rendered by other means, such as word order or sentence stress. However, the orthotonic forms did not disappear from the language entirely. They were reanalysed as copula stems, to which the reduced auxiliaries were added as person-number markers. The paradigm of the copula in contemporary Polish is given in (69), with the person-number affixes marked in italics.

- (69) Paradigm of the copula in Modern Polish

	Modern dialects	Standard Polish
1SG	jest- <i>em</i>	jest- <i>em</i>
2SG	jest- <i>eś</i>	jest- <i>eś</i>
3SG	jest	jest
1PL	są- <i>śmy</i>	jest- <i>śmy</i>
2PL	są- <i>ście</i>	jest- <i>ście</i>
3PL	są	są

(cf. Andersen 1987)

#### 1.3.4.2.2.2 Changes to the present perfect in Polish

The previous section has shown that the modification of the present perfect in Polish consisted in a gradual reanalysis of the auxiliary ‘to be’ as a person-number affix attached to the *l*-participle. In other words, it involved a change from analytic to synthetic verbal structures.

The loss of the aspectual tenses in the East and West Slavic languages increased usage of the present perfect, which became the default past tense. Kowalska (1976: 42) argues that because of this increase, the forms of the auxiliary became morphologically and phonologically weaker. As a result, two different forms arose.

- a) The analytic form: the auxiliary occurs in the Wackernagel position, that is, after the first stress-bearing word in the clause. This is usually a conjunct, pronoun, *wh*-word or a particle. This strategy is especially common in subordinate clauses.



- (70) a. A teraz-eś mi tę robotę náznaczył  
and now+AUX.2SG me<sub>DAT</sub> this work assign<sub>PART.M.SG</sub>  
“And now you have assigned this work to me”  
(*Zwiciadło duchowej łaski* 1645)
- b. Ju-że-ście się go dośytz namęczyli  
already+FOC+AUX.2PL REFL him<sub>ACC</sub> enough tire<sub>PART.PL</sub>  
“You have tired him enough already”  
(Pl, *Żywot Pana Jezua Krysta* 1522; Kowalska 1976: 43)

b) The synthetic form: the auxiliary does not appear in the Wackernagel position but immediately follows the *l*-participle, and is on the way to become an affix.

- (71) a. Egypci podáli-śmy ręce  
Egypt<sub>DAT</sub> give<sub>PART.PL+1PL</sub> hands  
“We gave our hands to Egypt”  
(Wereszczyński 1592 *Exciataz do podniesienia wojny...*)
- b. Y zdrowie swoje położyli-ście dla mnie  
and health your give<sub>PART.PL+2PL</sub> for me  
“And you gave your health for me”  
(Pl, Grzegorz z Żarnowca 1582 *Postylle część wtora*; Kowalska 1976: 43)

Tableau (72) shows that the synthetic form steadily prevails over time: it is found most often in clauses that contain verbs, nouns, adjectives or numerals in the initial position.

(72) The position of auxiliary verbs in Polish

Century	analytic forms	synthetic forms
14th-1520 (religious texts)	1153 (53%)	1007 (47%)
14-1520 (judicial texts)	3651 (91%)	341 (9%)
1st half 16 <sup>th</sup>	746 (71%)	301 (29%)
2nd half 16 <sup>th</sup>	293 (67%)	145 (33%)
1st half 17 <sup>th</sup>	296 (67%)	146 (33%)
2nd half 17 <sup>th</sup>	487 (55%)	394 (45%)
1st half 18 <sup>th</sup>	188 (45%)	234 (55%)
2nd half 18 <sup>th</sup>	260 (27%)	710 (73%)
1st half 19 <sup>th</sup>	117 (18%)	538 (82%)
2nd half 19 <sup>th</sup>	204 (16%)	1106 (84%)
1st half 20 <sup>th</sup>	56 (3%)	2009 (97%)

(adapted from Kowalska 1976: 63)

Analogous estimates concerning the possible auxiliary positions are provided by Rittel (1975: 91), who also indicates the ratio of the second (Wackernagel) position violations.<sup>21</sup> I recalculate Rittel's data into percentage terms in tableau (73).

<sup>21</sup> A similar chart is to be found in Andersen (1988: 29); however, I have recalculated Rittel's data in greater detail.

## (73) The position of auxiliary verbs in Polish

Century	Aux preceding V	Aux (immediately following V)	2 <sup>nd</sup> position violations
14-15th	89%	10%	3%
14-15th Bible	34%	65%	12%
16th	77%	22%	2%
17th	50%	49%	5%
18th	31%	69%	4%
19th (prose)	27.5%	72%	13%
20th (prose)	15%	85%	15%

(cf. Rittel 1975: 91)

Two patterns of development can be observed here. First, Rittel's calculations indicate an increase in the ratio of the Wackernagel position deviations. The deviations were considerably more prominent in the 14-15<sup>th</sup> century Bible translations than in the non-religious (mostly legal) texts from the period. Since legal texts represent spoken language more faithfully than religious writings, Kowalska (1976: 37) concludes that the difference reflects the fact that in spoken language the Wackernagel law was observed more diligently. Still, the rise in the second position violations had been rather insignificant.

What is more telling is an increasing tendency for the auxiliary to appear adjacent to the participle. This tendency most likely indicates a morphological change from a clitic into a verbal affix, which continues in Modern Polish. It must be noted, however, that the development of synthetic forms in Polish varies within the verbal paradigm. The 1<sup>st</sup> person singular form of the auxiliary was the first one to fuse with the participle. According to Kowalska's (1976: 48) estimates, 86 % of the 1<sup>st</sup> person singular forms attested in the corpus from the period between the 2<sup>nd</sup> half of the 18<sup>th</sup> and the 20<sup>th</sup> century are synthetic. Bajerowa (1964: 17) claims that this is due to the fact that the 1<sup>st</sup> person auxiliary *-(e)m* is homophonous with the instrumental case morpheme of a nominal paradigms (cf. 74a), and also resembles a plural nominal ending *-e* (cf. 74c). The examples in (74a and b) show that this may lead to ambiguity. However, when the auxiliary is placed immediately after the *l*-participle *rzucił* (cf. 74d), the sentence is disambiguated, as only the meaning in (74b) is available.

- (74) a. Kamieni-em rzucił  
stone<sub>INSTR</sub> throw<sub>PART.MSG</sub>  
'It was a stone that he threw'
- b. Kamieni-em rzucił  
stone+AUX.ISG throw<sub>PART.MSG</sub>  
'It was a stone that I threw'
- c. Kamienie-m rzucił  
stones+AUX.ISG throw<sub>PART.MSG</sub>  
'It was the stones that I threw'
- d. Rzucił-em kamieniem  
throw<sub>PART.MSG</sub>+AUX.ISG stone<sub>INSTR</sub>  
'I threw a stone'

(Pl, Kowalska 1976: 55)

The spread and the reanalysis of the present perfect as the default past tense were not the only reasons for the auxiliary impoverishment. It seems that a change in the word stress played a major role as well. The rhythm patterns of medieval relics reveal that

there was no regular lexical stress in Old Polish. In the 14<sup>th</sup>-15<sup>th</sup> century the main stress was established on the first syllable of a word, which according to Długosz-Kurczabowa & Dubisz (2001: 307-308), fostered the encliticization of the auxiliary ‘to be’. Along with the initial stress, some words received a secondary stress on the penultimate syllable, which eventually prevailed as the main stress at the beginning of the 18<sup>th</sup> century. It may be hypothesized that the penultimate stress pattern led to further morphological impoverishment of post-verbal auxiliaries. The hypothesis is supported by Czech, which has retained the initial word stress. As will be shown in the subsequent section, the auxiliary clitics in Czech enjoy a far greater independence from the *l*-participle than in Polish.

The reanalysis of the auxiliary clitic as a verbal affix on the *l*-participle continues in Modern Polish, but the process has not yet been completed. A detailed analysis of the compound tense forms in Modern Polish is presented in chapter 5.

#### 1.3.4.2.2.3 *The auxiliary versus copula distinction in Czech*

I conclude my survey of the present perfect in the West Slavic languages with a discussion of the impoverishment of the auxiliary ‘to be’ in Czech. I already mentioned that in the South Slavic languages the copula and the auxiliary have the same forms and distribution. In comparison with the South Slavic languages and Polish, Czech represents an intermediate stage. As in South Slavic, the forms of the auxiliary ‘to be’ and the copula are morphologically almost the same. However, their distribution differs. I investigate the distinctions using data from Toman (1980). See also Veselovská (2004) for a more recent overview.

The chart in (75) presents the paradigm of the copula and the auxiliary forms in Czech. It shows that the 3<sup>rd</sup> person forms must be omitted in compound tenses but preserved in copula constructions.

(75) Forms of the copula and the auxiliary in Czech

	SG		PL	
	auxiliary	copula	auxiliary	copula
1	jsem	jsem	jsme	jsme
2	jsi	jsi	jste	jste
3	-	je	-	jsou

(cf. Toman 1980)

The contrast is exemplified in (76a) for the copula structure and in (76b) for the present perfect.

(76) a. On \*(je) učitel  
 he be<sub>3SG</sub> teacher  
 “He is a teacher”

b. On přišel  
 He come<sub>PART.MSG</sub>  
 “He came”

(Czech, Toman 1980)

Another distinction between the two forms concerns ellipsis. As shown in (77a), the 1<sup>st</sup> person singular auxiliary may be deleted. The copula may not (cf. 77b).

- (77) a. Já (jsem) už spal  
 I be<sub>AUX.1SG</sub> already sleep<sub>PART.M.SG</sub>  
 “I was already asleep”  
 b. Já \*(jsem) už pět let učitel  
 I be<sub>1SG</sub> already five years teacher  
 “I have been a teacher for five years” (Czech, Toman 1980)

Furthermore, the auxiliary ‘to be’ may be reduced in the 2<sup>nd</sup> person singular (cf. 78), while the copula may not (cf. 79).

- (78) a. Ty jsi přišel  
 you be<sub>AUX.2SG</sub> come<sub>PART.M.SG</sub>  
 “You came”  
 b. Ty-s přišel  
 you +be<sub>AUX.2SG</sub> come<sub>PART.M.SG</sub> (Czech, Toman 1980)

- (79) a. Ty jsi učitel  
 you be<sub>2SG</sub> teacher  
 “You are a teacher”  
 b. \*Ty-s učitel  
 you +be<sub>2SG</sub> teacher (Czech, Toman 1980)

These distributional differences suggest that the reduction of the auxiliary has gone further than the impoverishment of the copula. The conclusion is supported by the fact that in spite of the morphological identity of the two elements, only the copula may appear in the sentence initial position.

- (80) a. \*Jste viděli?  
 be<sub>AUX.2PL</sub> see<sub>PART.PL</sub>  
 b. Viděli jste?  
 see<sub>PART.PL</sub> be<sub>2PL</sub>  
 “Did you see?”  
 c. Jste dnes na řadě?  
 be<sub>2PL</sub> today on row  
 “Is it your turn today?” (Czech, Toman 1980)

Moreover, the two forms of the verb ‘to be’ behave differently with respect to negation. As indicated in (81) and (82), the negative prefix *ne* attaches either to the *l*-participle or to the copula. It may not be attached to the auxiliary.

- (81) a. Přišel jsi  
 come<sub>PART.M.SG</sub> be<sub>AUX.2.SG</sub>  
 “You have come”  
 b. Nepřišel jsi  
 NEG+come<sub>PART.M.SG</sub> be<sub>AUX.2.SG</sub>  
 “You haven’t come”  
 c. \*Nejsi přišel  
 NEG+be<sub>AUX.2.SG</sub> come<sub>PART.M.SG</sub> (Czech, Toman 1980)

- (82) a. Jsi hlupák / zdrav / na řadě  
 be<sub>2SG</sub> idiot / healthy / on row  
 “You are an idiot/healthy/... it’s your turn”  
 b. Nejsi hlupák / zdrav / na řadě  
 NEG+be<sub>2SG</sub> idiot / healthy / on row  
 “You’re not an idiot/healthy/... it’s not your turn”  
 c. \*Jsi nehlupák/nezdrav/nena řadě (Czech, Toman 1980)

The gradual differentiation between the paradigms of the copula and the auxiliary is a common pattern in the history of the Slavic languages. Chapter 4 will show that a similar phenomenon occurs in Macedonian. I would like to relate the observed distinction to the decline of the aspectual tenses in most of the West Slavic languages. After the disappearance of the simple past tenses, the original present tense forms of the verb ‘to be’ did not have any simplex counterparts. In other words, Polish and Czech lost the discrimination of the *is* versus *was*-type in English. Once the tense contrast is lost, the auxiliaries represent only  $\varphi$ -feature distinctions, and eventually are reanalysed as person and number markers. The semantic impoverishment corresponds to their morphological reduction, when they are finally reinterpreted as affixes.

#### 1.3.4.2.3 A reanalysis of the present perfect in Serbo-Croatian

As was noted in section 1.3.4.2, the present perfect in Bulgarian and Macedonian may express the renarrated mood. This is a type of modal meaning which was not available in Old Church Slavonic. For this reason, the analysis of the present perfect in these languages is given in section 1.3.4.5.1, and the present subsection discusses Serbo-Croatian as the only representative of the South Slavic group.

The morphological form of the present perfect in Serbo-Croatian has remained the same, since it is still constructed with the *l*-participle and the auxiliary ‘to be’. However, its meaning has changed, and the construction is now used as the general narrative past tense, which does not have to render resultativity or retrospective aspect. This is demonstrated in the translation of the sentence in (83).

- (83) Ana je napisala pismo  
 Ana be<sub>PRES.3SG</sub> write<sub>PART.F.SG</sub> letter  
 “Ana wrote/has written a letter” (S-C, Tomić 1989: 364)

According to Lindstedt (2000: 372), the change was triggered by the fact that the opposition between perfectivity versus imperfectivity can be suitably rendered via verbal prefixes, which are independent of tense specifications. Consequently, the present perfect became available for expressing past tense.

To summarize, it has been shown that as a result of the decline of the simple past tenses in the languages described in section 1.3.4.2, the present perfect began to be used more often and took over the temporal meanings expressed by the aorist and the imperfectum. Moreover, in East and West Slavic the forms of the auxiliary verb ‘to be’ were simplified and started to differ from the copula. The process of the auxiliary impoverishment has gone further in Polish than in Czech. In Polish the auxiliary has been largely reanalyzed as a suffix on the *l*-participle, whereas in Czech the auxiliary ‘to be’ is still a free form. In Serbo-Croatian the morphological make-up of the present perfect has remained the same, but its meaning has been shifted, on a par with the East and West Slavic languages.

### 1.3.4.3 The pluperfect

The following section will characterize the form of the pluperfect in contemporary Slavic. It will be shown that this tense has undergone different morphological modifications in each of the Slavic groups.

#### 1.3.4.3.1 South Slavic

Section 1.3.3.4.2 reported that in Old Church Slavonic the pluperfect was formed with the *l*-participle accompanied by the auxiliary ‘to be’ in the imperfectum or in the imperfective form of the aorist. Currently, the tense is commonly used only in Bulgarian, where it is composed of the past tense (imperfectum) form of the auxiliary *beše* and the *l*-participle (cf. chapter 2 for details).

- (84) Beše pročel knjigata  
 be<sub>PAST.3SG</sub> read<sub>PART.MSG</sub> book-the  
 “He had read the book” (Bg)

In Macedonian, there exists a related construction that makes use of a form of the auxiliary *beše*. However, it is rather uncommon and expresses a meaning that is not directly related to temporal distinctions. It emphasizes that an event has taken place (cf. Stieber 1973: 56).

- (85) Toj beše izlegol koga dojdov jas kaj nego  
 he be<sub>PAST.3SG</sub> leave<sub>PART.MSG</sub> when arrive<sub>IMP.1SG</sub> I to him  
 “He had gone out when I came to his place” (Mac, Friedman 1977: 100)

The pluperfect meanings are more commonly rendered through a type of *have*-perfects, with the auxiliary ‘have’ in a past tense form (cf. section 1.3.4.5.2). This variant is given in (86a), and is contrasted with the *beše*-construction in (86b).

- (86) a. Žiži mi ja pokaža Keti, no jas  
 Žiži me<sub>DAT</sub> her<sub>ACC</sub> show<sub>PAST.3SG</sub> Keti but I  
 veće ja imav videno  
 already her<sub>ACC</sub> have<sub>AOR.1SG</sub> see<sub>PASS.N</sub>  
 b. Žiži mi ja pokaža Keti, no jas  
 Žiži me<sub>DAT</sub> her<sub>ACC</sub> show<sub>PAST.3SG</sub> Keti but I  
 veće ja bev videl  
 already her<sub>ACC</sub> be<sub>AOR.1SG</sub> see<sub>PART.MSG</sub>  
 “Žiži pointed Keti out to me, but I had already seen her”  
 (Mac, Friedman 1977: 105)

In Serbo-Croatian, the pluperfect is usually formed with the present tense form of the auxiliary ‘to be’ and the *l*-participle (cf. 87a). The auxiliary may also appear in the imperfectum (cf. 87b), but this is rather uncommon.

- (87) a. Mi smo bili vidjeli Mariju  
 we be<sub>PRES.IPL</sub> be<sub>PART.M.PL</sub> see<sub>PART.PL</sub> Mary<sub>ACC</sub>  
 “We had seen Marija”
- b. Mi bijasmo vidjeli Mariju  
 we be<sub>IMP.IPL</sub> see<sub>PART.PL</sub> Mary<sub>ACC</sub>  
 “We had seen Marija” (S-C, cf. Browne 2002: 331-332)

#### 1.3.4.3.2 West and East Slavic

In the contemporary East and West Slavic languages, the pluperfect has largely disappeared. However, when it still existed, it was constructed in a different way than in South Slavic. Namely, since the imperfectum had been lost in the East and the South Slavic languages, it was impossible to follow the South Slavic pattern and form the pluperfect with the auxiliary ‘to be’ in the imperfectum. Therefore, a new way of constructing the pluperfect was adopted, with the *l*-participle of the main verb, the auxiliary ‘to be’ in the present tense, and the *l*-participle of the verb ‘to be’. This is illustrated for Old Polish in (88).

- (88) Pisał jeśm był  
 write<sub>PART.M.SG</sub> be<sub>PRES.ISG</sub> be<sub>PART.M.SG</sub>  
 “I had written” (Old Polish, Kowalska 1976: 64)

The pluperfect is largely gone from contemporary Polish, although it may occasionally be used for stylistic reasons.

In Old Russian manuscripts the pluperfect occurs very rarely, and certainly had been lost by the 17<sup>th</sup> century. However, in some Russian dialects, especially in the North, there are quasi-pluperfect structures. They are constructed with the *l*-participle form of the auxiliary and the *l*-participle form of the main verb. They are not real pluperfects, because they do not always relate a more remote past event to some other occurrence that took place in the past. They signify very distant past events.<sup>22</sup>

- (89) Jagody rosly byly  
 berries grow<sub>PART.PL</sub> be<sub>PART.PL</sub>  
 “Berries used to grow” (dialectal Russian, Stieber 1973: 58)

Summarizing, we have seen that the decline of the compound tenses in East and West Slavic affects both the present perfect and the pluperfect. Conversely, the pluperfect is still used in South Slavic.

### 1.3.4.4 Ways of expressing the future

As was noted in section 1.3.3.4.1, there were two future tenses in Old Church Slavonic: Future I and Future II. The Future I usually consisted of an infinitive preceded by the auxiliary *bōdō* ‘be<sub>PREF</sub>’, a modal verb like *xotěti* ‘to want’ or *imati* ‘have, be destined to’, or a phrase verbs like *načēnōti* and *včēnōti* ‘to begin’ accompanied by the infinitive.

Future II was formed with *bōdō* followed by the *l*-participle. It was used very rarely and disappeared rather early in most of the Slavic languages, although it is still found in the literary variants of Serbo-Croatian (cf. 90).

<sup>22</sup> Maaïke Schoorlemmer (p.c.) remarks that this structure is also used in set phrases and storytelling.

- (90) Kad budemo govorili s Marijom,  
 when be<sub>PRF.1PL</sub> speak<sub>PART.PL</sub> with Marija  
 sve će biti jasno  
 everything want<sub>3SG</sub> be<sub>INF</sub> clear  
 “When/if we speak with Marija, everything will be clear”  
 (S-C, Browne 2002: 331)

The subsequent subsections will discuss the Future I. In most of the Slavic languages it is constructed with a contemporary variants of the auxiliary *bōdō*, which is followed by the *l*-participle (Slovene), the *l*-participle or the infinitive (Polish), or exclusively the infinitive (Czech, Slovak, Kashubian, Belarusian, Ukrainian, and Russian). Bulgarian, Macedonian and some variants of Serbo-Croatian do not have the *bōdō*-type of future at all. Instead, they selected the modal verb ‘to want’ as the future auxiliary, which is followed by a lexical verb in the form of the *l*-participle or the subjunctive.

#### 1.3.4.4.1 South Slavic

A detailed syntactic analysis of the Slavic Future Tenses in the Balkan area is offered in Tomić (2004), from which all examples in this section are taken, unless indicated otherwise. She convincingly shows that the South Slavic languages represent a continuum in the grammaticalization of the future tense formed with the modal verb ‘to want’.

In Old Macedonian and Old Bulgarian the Future tense was constructed with a finite form of the verb *xotěti* ‘want/will’ followed by the infinitive.

- (91) Xoščet počiti moj brat  
 will<sub>3SG</sub> die<sub>INF</sub> my brother  
 “My brother will die” (14<sup>th</sup> c. Mac, *Trojanska prica*, Tomić 2004: 534)

Gradually, the forms of the modal verbs were reduced, as can be observed in the Old Macedonian example in (92a) and the Old Bulgarian example in (92b). Both sentences come from the 18<sup>th</sup> century.

- (92) a. Koi ket mislit, koi ket iskat  
 who will<sub>3SG</sub> think<sub>INF</sub> who will<sub>3SG</sub> want<sub>INF</sub>  
 “Who will think, who will want” (18<sup>th</sup> Mac)
- b. Štem ostavi  
 will<sub>1PL</sub> leave<sub>INF</sub>  
 “You shall leave” (18<sup>th</sup> Bg, Tomić 2004: 535)

In the 15<sup>th</sup> century the Balkan languages started to lose the infinitive, which was replaced by subjunctive formations (cf. 93a). Around the 17<sup>th</sup>-18<sup>th</sup> century the future auxiliaries in Bulgarian and Macedonian turned into clitics, and eventually lost their person-number distinctions. In Bulgarian the person-number marking was lost later than in Macedonian (late 19<sup>th</sup>-early 20<sup>th</sup> century) and nowadays the auxiliary *šće* is the only uninflected auxiliary in this language.



- (93) a. Jas će go storam toa utre  
 I will<sub>CL</sub> it<sub>CL,ACC</sub> do<sub>PRES,1SG</sub> that tomorrow  
 “I will do that tomorrow” (18/19<sup>th</sup> c. Mac, Tomić 2004: 524)
- b. Az šte napravja tova utre  
 I will<sub>CL</sub> do<sub>1SG</sub> that tomorrow  
 “I will do that tomorrow” (Bg, Tomić 2004: 523)

The future auxiliary can be complemented by a subjunctive also in South-Eastern Serbian dialects (cf. 94a). However, in the northern parts of Serbia and in Croatia it is more common to find future tense auxiliary clitic *će* followed by the infinitive (cf. 94b).

- (94) a. Tvoj prijatelj će (da) stigne jutre  
 your friend will<sub>1SG</sub> SUBJ.COMP arrives<sub>SUBJ</sub> tomorrow  
 “Your friend will arrive tomorrow” (South-Eastern Serbian, Tomić 2004: 521)
- b. Petar će doći sutra  
 Peter will<sub>1SG</sub> come<sub>INF</sub> tomorrow  
 “Peter will come tomorrow” (S-C, Tomić 2004: 520)

Apart from the clitic forms, Serbo-Croatian has lexical, non-clitic counterparts of the future auxiliary. Both of them are presented in the tableau in (95).

- (95) Paradigm of the future auxiliary in Serbo-Croatian

	clitic		non-clitic	
	SG	PL	SG	PL
1	ću	ćemo	hoću	hoćemo
2	ćeš	ćete	hoćeš	hoćete
3	će	će	hoće	hoće

(S-C, Tomić 2004: 520)

Analogously with the clitic forms, the lexical forms can be complemented by either an infinitive or a subjunctive form. Only the lexical forms, however, distinguish between aorist and perfect variants. The construction characterizes future events that are relative to a past moment.

- (96) a. Petar ht(j)ede doći / da dođe sutradan  
 Petar want<sub>AOR,3SG</sub> come<sub>INF</sub> / SUBJ.COMP comes<sub>SUBJ</sub> tomorrow  
 “Peter wanted to come the next day”
- b. Petar je ht(j)eo doći / da dođe sutradan  
 Petar be<sub>PRES,3SG</sub> want<sub>PART,MSG</sub> come<sub>INF</sub>/SUBJ.COMP comes<sub>SUBJ</sub> tomorrow  
 “Peter wanted to come the next day” (S-C, Tomić 2004: 521)

Outside the Balkan Slavic group, the future tenses are formed with a perfective form of the verb ‘to be’ as the auxiliary. In Slovene and Kajkavian Croatian the auxiliary tends to stay in the second position and is complemented by the *l*-participle, either in the imperfective or perfective form. Most likely, the construction is a direct descendant of the Future II, whose meaning has been generalized and now covers all future events.

- (97) Vsi bodo dosegli svoj cilj  
 everyone be<sub>PRF.1SG</sub> reach<sub>PART.PL</sub> self's goal  
 “Everyone will reach his/her goal” (Slovene, Franks & King 2000: 33)

#### 1.3.4.4.2 West and East Slavic

There are two ways of constructing future tenses in West and East Slavic. If the main verb is imperfective, it is preceded by the perfective form of the auxiliary ‘to be’ (cf. section 1.3.4.4.2.1). Perfective verbs, however, may not be preceded by this auxiliary, and are interpreted as expressing the future meaning when they appear in the present tense without any accompanying auxiliary (cf. section 1.3.4.4.2.2).

##### 1.3.4.4.2.1 Compound future tense forms

In most of the West and East Slavic languages the future tense is constructed with the perfective form of the verb ‘to be’ as the auxiliary, which is followed by the infinitive. In Polish the auxiliary may also be complemented by the *l*-participle (cf. 98a). Only the imperfective forms of the main verb are permitted (cf. 98b).

- (98) a. Jan będzie pisać/pisał list  
 Jan be<sub>PRF.1SG</sub> write<sub>INF.IMPV/writePART.IMPV.MSG</sub> letter<sub>ACC</sub>  
 “Jan will be writing a letter”  
 b. \*Jan będzie napisać/napisal list  
 Jan be<sub>PRF.1SG</sub> write<sub>INF.PRF/writePART.PRF.MSG</sub> letter<sub>ACC</sub> (Pl)

There have been some attempts in the literature to attribute the restriction concerning the aspectual marking of the main verb to the fact that in Proto-Slavic/Old Church Slavonic the future could be expressed with phase verbs (e.g. *načnōtŭ* and *vbčnōtŭ* ‘to begin’), which imposed aspectual constraints on the main verb in this construction (cf. Křížková 1960: 82-108). However, this does not explain the lack of this restriction in the South Slavic languages, including Slovene. Whaley (2000a: 137ff.) proposes that in the Northern Slavic languages, the descendant of the Old Church Slavonic verb *bōdō* shifted its meaning from a ‘change of state’ verb, which expressed the meaning ‘become’, into an inceptive verb, which denotes the meaning ‘begin’. She points out that in East Slavic a similar shift has occurred to the change-of-state verb *stat’* (Russian). The verb has now two meanings, ‘become’ and ‘begin’, but only the form with the meaning ‘become’ has the imperfective variant, *stanovit’sja*.

- (99) Ja xoču stat’ vračom  
 I want<sub>PRF.1SG</sub> become<sub>INF</sub> doctor  
 “I want to become a doctor” (Rus, Whaley 2000a: 141)

Whaley observes that the Russian verb *stat’* developed in the same way as the Old Church Slavonic *bōdō*. It became polysemous over time, with the two distinct meanings mentioned above. The form which took on the inceptive meaning of ‘begin’ could be complemented by infinitives, but only in the imperfective forms. Currently, *stati* can be used as an alternative form of a future tense auxiliary in all East Slavic languages, as in the Russian example from a poem by Lermontov.

- (100) Stanu skazyvat' ja skazku  
 begin<sub>PRES.ISG</sub> tell<sub>INF</sub> I story  
 "I will (begin to) tell a story" (Rus, Whaley 2000a: 62)

I mentioned above that in Slovene the future auxiliary 'to be' is complemented by the *l*-participle, whereas in most of the North Slavic languages the auxiliary occurs with an infinitive. A striking fact about Polish, as well as some eastern dialects of Slovak (Stieber 1973: 62-64), is that the future auxiliary can occur with both *l*-participles and infinitives (cf. 98a). The selection of either variant does not change the meaning of the clause. In the other North Slavic languages only the infinitive may complement the auxiliary, as shown for Russian in (101).

- (101) On budet čitat'/\*čital  
 he be<sub>PRF.ISG</sub> write<sub>INF</sub>/write<sub>PART.MSG</sub>  
 "He will be reading" (Rus)

The origin of the *l*-participial form in this construction is subject to much controversy. According to some researchers (e.g. Stieber 1973: 64), the participle is a descendant of the Future II form. However, in Old Church Slavonic the Future II was compatible with both perfective and imperfective forms of the *l*-participle (cf. section 1.3.3.4.1), whereas in Polish only the imperfective variants are found. If Future II were the source of the *l*-participle future constructions in Polish, this aspectual restriction would not be observed.

Górecka and Śmiech (1972: 13) show that the combinations of the future auxiliary with the *l*-participle are very rare in the oldest Polish texts; therefore this construction seems to be a more recent innovation, rather than a continuation of the Future II. Andersen (1988: 26-27) arrives at the same conclusion. Hence, it seems that the construction is a recent development, whose source remains unclear.

#### 1.3.4.4.2.2 *Expressing the future with perfective verbs*

In addition to the compound constructions mentioned above, Northern Slavic languages (including Slovene) may also express future meanings with perfective forms of present tense verbs. The use of the perfective form implies that the activity will be completed.

- (102) Napiszę list  
 write<sub>PERF.ISG</sub> letter  
 "I will write the letter" (Pl)

The strategy is not available in South Slavic languages, although it is certain that it was present in Old Church Slavonic and in older variants of South Slavic languages (cf. Whaley 2000a: 95). Due to the influence of neighboring languages of the Balkan Sprachbund, which characterize future events with the verb 'want', the old way of expressing the future was lost.

To summarize, it has been shown that both the Balkan Slavic and the Northern Slavic languages use compound tenses to describe future events. The major distinction between the two language groups concerns the selection of the auxiliary. Balkan Slavic uses a descendant of the verb 'want', while the North Slavic languages opt for the perfective form of the verb 'to be'.

### 1.3.4.5 New types of compound tenses in Slavic

The following subsections will discuss compound structures which did not exist in Old Church Slavonic and are recent innovations that have arisen under the influence of non-Slavic languages. The newly developed forms include the renarrated mood (cf. section 1.3.4.5.1) and the ‘have’-perfect (cf. section 1.3.4.5.2). The renarrated mood is constructed in the same way as the present perfect in Old Church Slavonic, but it expresses the meaning of “non-evidentiality”, which is not grammaticalized in any other Slavic language apart from Bulgarian and Macedonian. The ‘have’-perfect renders the meaning of resultativity, which in Old Church Slavonic was characterized by the present perfect. In some Slavic languages it is now expressed by a compound tense formed with the auxiliary ‘have’ and an invariant form of the passive participle.

#### 1.3.4.5.1 The renarrated mood

As has been noted above, the renarrated mood has been grammaticalized in Bulgarian and Macedonian, which are described in section 1.3.4.5.1.1. Constructions that express a similar meaning are found in a few other languages mentioned in subsection 1.3.4.5.1.2.

##### 1.3.4.5.1.1 *Bulgarian and Macedonian*

In Bulgarian and Macedonian the compound tense formed with the *l*-participle may still function as a resultative perfect, but is increasingly being used to render the renarrated mood.<sup>23</sup> The construction developed on the basis of a Turkish model in the 15<sup>th</sup> century. Its grammaticalization is more advanced in Macedonian than in Bulgarian.

The renarrated mood implies that the situation described in the clause has not been personally witnessed by the speaker, but is only inferred or has been reported by someone else; therefore the speaker is not responsible for the veracity of the statement. The renarrated mood contrasts with the “narrated” (“non-reported”) mood, which is characterized by a verb in the past tense (the aorist or the imperfectum) and indicates that the event described is known to the speaker from his/her own experience.

The contrast between the two types of mood is illustrated in (103) for Bulgarian. The sentence in (103a) contains a verb in the past tense, because the speaker’s information about the event described in the clause comes from his/her own experience. In sentence (103b) a past tense form would be ungrammatical, because the speaker reports the information s/he has heard about from other people or inferred through some other kind of indirect evidence.

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<sup>23</sup> The renarrated mood is also commonly termed ‘evidential’ or ‘reported’. The modal meaning it expresses is referred to as ‘evidentiality’.

- (103) a. Kogato bjax mlad horata ne pušexa po ulicite  
 when be<sub>PAST.ISG</sub> young<sub>M</sub> people NEG smoke<sub>PAST.3PL</sub> on street  
 “When I was young, people did not smoke on the streets”
- b. Kogato bašta mi bil mlad horata  
 when father me<sub>DAT</sub> be<sub>PART.MSG</sub> young<sub>M</sub> people  
 ne pušeli po ulicite  
 NEG smoke<sub>PART.PL</sub> on street  
 “When my father was young, people did not smoke on the streets”  
 (Bg, P. Vitkova, p.c.)

In renarrated constructions in Bulgarian the 3<sup>rd</sup> person singular and plural auxiliaries tend to be deleted (cf. 103b). Some researchers (e.g. Andrejczin 1938 and Friedman 1978) have tried to establish a semantic contrast on the basis of the presence or absence of the auxiliary, and argued that the paradigm with all forms of the auxiliaries present has the “past indefinite” meaning, whereas the absence of the 3<sup>rd</sup> person auxiliaries triggers the “past reporting” meaning. This claim has been challenged by Tomić (1983, 1989) and Lindstedt (1994: 44ff), who show that the auxiliary drop cannot be consistently correlated with the semantics of non-witnessed events. In fact, the auxiliary may be frequently present in renarrated contexts in Bulgarian, as indicated in (104).

- (104) Čux će ošte nesa došli  
 hear<sub>PAST.ISG</sub> that still not be<sub>PRES.3PL</sub> come<sub>PART.PL</sub>  
 “I have heard that they haven’t come yet” (Bg, Tomić 1989: 369)

Moreover, the loss of the auxiliary in the 3<sup>rd</sup> person is a general feature of many Slavic languages, not necessarily related to the renarrated mood. For example, in Czech and Macedonian the 3<sup>rd</sup> person auxiliary is always missing (cf. section 1.3.4.2.2.3). It is also possible to drop the 3<sup>rd</sup> person auxiliary in Serbo-Croatian, even though evidentiality is not grammaticalized in this language.

- (105) a. Bio je u žurbi  
 be<sub>PART.MSG</sub> be<sub>PRES.3SG</sub> in haste  
 “He was in a hurry”
- b. Bio, veli, u žurbi  
 be<sub>PART.MSG</sub> says in haste  
 “He was in a hurry, he says” (S-C, Tomić 1989: 369)

The example in (105a) contains only one compound verbal form, and the auxiliary is present. The auxiliary is dropped in the sentence in (105b), where the reference is made to two different points in time. One of them is the speech time, the other one occurs before it.

#### 1.3.4.5.1.2 Beyond Bulgarian and Macedonian

Stieber (1973: 66-67) shows that some forms of the renarrated mood can also be found in Czech, Polish, and Upper Sorbian, although they have a completely different origin and are clearly not grammaticalized. For instance, in order to express the idea of non-evidentiality, Czech uses the morpheme *prý*, which derives from the verb *pravi* ‘s/he says’. The morpheme does not decline and cannot be used without a main verb, as illustrated in (107).

- (106) On prý je v Praze  
 he prý be<sub>3SG</sub> in Prague  
 “Reportedly, he is in Prague now”
- (107) A. Byl Jan v Praze?  
 be<sub>PART.MSG</sub> Jan in Prague  
 “Has Jan been to Prague?”  
 B. Prý \*(byl)  
 Prý be<sub>PART.MSG</sub>  
 “He probably was” (Czech, cf. Stieber 1973: 66-67)

In Polish, a related meaning can be expressed with the verb ‘to have’ or ‘have to’, followed by an infinitive (cf. Świdarska-Koneczna 1930 for more data).

- (108) To miał/musiał być wielki pisarz  
 it have/must<sub>PART.MSG</sub> be<sub>INF</sub> great writer  
 “Reportedly, he was supposed to be a great writer”  
 (Pl, Stieber 1973: 66-67)

Likewise, in Upper Sorbian evidentiality can be rendered with a perfective form of the verb ‘have’ in the present tense.<sup>24</sup>

- (109) Ně wón drje z-mě-je je hižo hotowe  
 no he sure PFV-have<sub>3SG</sub> them<sub>ACC</sub> already ready<sub>PL</sub>  
 “No, he’ll have finished it [them] already”  
 (Upper Sorbian, Tommola 2000: 453)

However, these are only indirect means of characterizing the meaning of evidentiality. The renarrated mood cannot be expressed in a regular manner in other Slavic languages than Bulgarian and Macedonian.

### 1.3.4.5.2 ‘Have’-perfects

The preceding section analyzed the construction formed with the auxiliary ‘to be’ and the *l*-participle, which in Bulgarian and Macedonian expresses the renarrated mood. The same form rendered resultativity in Old Church Slavonic. Macedonian and Kashubian have developed a new structure in order to characterize the result of a past action, which is composed of the auxiliary ‘have’ and an invariant form the passive participle as the main verb. I will refer to it as the ‘have’-perfect, and I will describe it in detail in chapter 3.

Apart from Macedonian, some other Slavic languages use a construction that resembles the ‘have’-perfect. It will be discussed in section 1.3.4.5.2.2.

#### 1.3.4.5.2.1 Macedonian

‘Have’ perfects will be analyzed in detail in chapter 3. Here I will present only a few properties of the construction. It is formed with the auxiliary ‘have’, which is complemented by the passive participle in the singular neuter form.

<sup>24</sup> Recall from section 1.3.4.4.2 that in West and East Slavic perfective forms of the present tense verbs have a future meaning.

- (110) a. I<sub>have</sub><sub>1PL</sub> kupeno knigi  
 have<sub>1PL</sub> buy<sub>PASS.N</sub> books  
 “We have bought books” (Mac, cf. Tomić 1996a)

The morphological form of the passive participle is invariant, and does not depend on the feature specification of the subject of the clause. In this way the ‘have’-perfect differs from the ‘be’-perfect, in which the *l*-participle obligatory agrees with the subject in  $\varphi$ -features.

Similar forms involving the auxiliary ‘have’ are found in the neighbouring languages in the area close to Macedonia. However, they differ in the gender of the invariant passive participle. For example, it is feminine in Arumanian (cf. 111) and masculine in Megleno-Romanian (cf. 112).<sup>25</sup>

- (111) Am vidzută/vinită  
 have<sub>1SG</sub> seen<sub>PASS.F</sub>/come<sub>PASS.F</sub>  
 “I have seen/come” (Arumanian, Gallis 1960: 180)

- (112) Nu l- am vizut di lunj  
 NEG him<sub>CL</sub> have<sub>1SG</sub> see<sub>PASS.MSG</sub> from Monday  
 “I haven’t seen him since last Monday” (Tomić, 2006: 378)

A striking property of the construction in Macedonian is the fact that the auxiliary *have* can be complemented by both transitive and unaccusative passive participles. This is remarkable, because unaccusative verbs cannot be passivized. Thus, the form *dojdeno* in (113) may appear exclusively as complement of the auxiliary *have*. It is never found as an independent passive participle.

- (113) Imam dojdno  
 have<sub>1SG</sub> come<sub>PASS.N</sub>  
 “I have come” (Mac, Gołąb 1959)

The construction was acquired from non-Slavic languages of the area, most probably from Arumanian, and was influenced by similar forms in Albanian and Greek (Gołąb 1959). It was registered for the first time in a manuscript from the monastery of Krnino in 1706. The form is rarely used in literature, possibly because it is perceived as colloquial. The spread of its usage varies across the country. The form is the least common in the eastern areas, and it is the most widely used in south-western dialects, particularly in the South-Western Macedonian dialects of Ohrid and Struga, where *have* perfects can be formed even with the verbs ‘to be’ or ‘to have’ as participles.

<sup>25</sup> Arumanian (or Macedoromanian) is a language spoken by the Vlach minority mainly in Macedonia, but also Albania, Serbia, Bulgaria, and Greece. It is closely related to Romanian. Megleno-Romanian is a Romanian dialect spoken in the Greek province of Meglen. It is more closely related to Romanian than Arumanian, and is on the verge of extinction.

- (114) a. Imam bideno vo ovoj grad  
 have<sub>1SG</sub> be<sub>PASS,N</sub> in this<sub>M,SG</sub> town  
 “I have been to this town”  
 b. Imam imano vakov fustan  
 have<sub>1SG</sub> have<sub>PASS,N</sub> such<sub>M,SG</sub> dress  
 “I have had a dress like this one”  
 (Ohrid and Struga dialects of Mac; Tomić 2006: 342)

As far as their meaning is concerned, ‘have’-perfects emphasize the result of an event for the current state of affairs (Graves 2000: 483, Tomić 1989: 366). Thus, the example in (113) carries the implicature of “I have arrived so I am present here”. Correspondingly, the example in (115) carries the meaning of the perfect of experience; that is, it indicates an event that occurred at least once until the moment of speaking.

- (115) a. Dosega nemam jadeno vakva riba  
 until-now not+have<sub>1SG</sub> eat<sub>PASS,N</sub> such fish  
 “So far, I haven’t eaten such a fish”  
 (Tomić 1989: 366)

The grammatical properties of the construction will be examined in chapter 3, where I will also provide and analyze new data exemplifying ‘have’-perfects in Kashubian. In the next section I will discuss properties of the ‘have’-perfects that have not been grammaticalized yet.

#### 1.3.4.5.2.2 *Beyond Macedonian*

The forms that resemble the ‘have’-perfect are common in a number of Slavic languages, such as Polish (cf. 116a) and Czech (cf. 116b). However, these languages never use ‘have’ as a true auxiliary, and the passive participle always agrees with the object.

- (116) a. Mam już upieczone ciasto  
 have<sub>PRES,1SG</sub> already bake<sub>PASS,N,SG</sub> cake<sub>N,SG</sub>  
 “My cake is already baked” (Pl)  
 b. Mám úlohu napsanou  
 have<sub>PRES,1SG</sub> task<sub>ACC,F</sub> write<sub>PASS,F,SG</sub>  
 “I have my task written” (Czech, Maslov 1988: 80)

However, some researchers argue that these structures are slowly becoming reanalyzed as compound tense forms. For instance, Pisarkowa (1984: 58) notices that initial traces of the grammaticalization of *have*-perfects in Polish can be observed in the innovation of non-obligatory case agreement between the passive participle and the complement of the verb. Consider the dialogue in (117), with both variants of the answers equally acceptable.



- (117) A Slodzil-eś herbatę?  
 Sweeten<sub>PART.M.SG+AUX.2SG</sub> tea<sub>ACC</sub>  
 “Have you put sugar in your tea?”
- B Mam już posłodzona (herbatę)  
 have<sub>1SG</sub> already sweeten<sub>PASS.ACC.F.SG</sub> tea<sub>ACC.F.SG</sub>
- B’ Mam już posłodzone (\*herbatę)  
 have<sub>1SG</sub> already sweeten<sub>PASS.NOM/ACC.F.PL</sub> tea<sub>ACC.F.SG</sub> (Pl)

In the answer in (117B), the passive participle agrees with an elided object in case and  $\varphi$ -features. In (117B’) there is an agreement mismatch, and an overt realization of the object results in ungrammaticality.

## 1.4 Conclusions

This chapter has overviewed the diachronic evolution of aspectual and temporal distinctions in the Slavic languages. It has been shown that Proto Slavic inherited from Proto-Indo-European a rather conservative way of rendering these distinctions morphologically, further developed aspectual tenses, and in addition created a uniform system of aspectual pairs of verbs. As a result, aspect was often “doubly marked”: via aspectual past tenses and aspectual morphology on all verbal forms. The overlap in aspect marking was the impetus for syntactic and semantic simplification of the system of tenses.

All compound tenses in Old Church Slavonic except for *Future I* were constructed with the *l*-participle as the main verb and the auxiliary ‘to be’. Both of them occurred in aspectual pairs. Since all forms of the *l*-participle could appear in virtually all tenses, the temporal interpretation of an event described by a compound tense depended entirely on the aspect or tense of the auxiliary. For instance, when the auxiliary ‘to be’ was specified for imperfective aspect, the tense was analyzed as pluperfect. When the auxiliary ‘to be’ occurred in the perfective variant, it gave rise to a future perfect interpretation.

The languages that evolved from Proto Slavic and Old Church Slavonic resorted to different grammatical solutions in order to eliminate the excess of aspectual forms. The South Slavic languages have largely retained the aspectual tenses, and kept the structure of the compound tense formed with the auxiliary ‘to be’ and the *l*-participle intact. The North Slavic languages have lost the aspectual tenses, and have reinterpreted the present perfect as the default past tense. This process has been accompanied by a morphological reduction of the auxiliary ‘to be’, which ranges from a diversification of the copula and auxiliary paradigms in Czech, through a reanalysis of the auxiliary clitic as an affix on the *l*-participle in Polish, to its complete disappearance in East Slavic. Moreover, new structures have arisen: the “renarrated mood” in Bulgarian and Macedonian, and the ‘have’-perfect in Macedonian and Kashubian. The subsequent chapters will demonstrate that the development has syntactic consequences, which are related to  $X^0$  versus XP-movement of the *l*-participle, and the emergence of a new type of VP headed by the auxiliary ‘have’.



# Chapter 2 The syntax of 'be'-perfects and the *l*-participle

## 2.1 Introduction

This chapter develops an account of the syntax of the compound tense formed with the *l*-participle. It has been mentioned that this is a structure peculiar to Slavic, which exhibits a number of properties that are not often found among other Indo-European languages. It is formed with the verb 'to be' used as the auxiliary in all contexts, regardless of the transitivity of the *l*-participle. The *l*-participle is used exclusively in this construction, so in contrast to the past participle in Germanic and Romance languages, it never occurs as the passive participle. Moreover, it may appear in perfective and imperfective variants, but it does not express any temporal specification on its own, as it can be used in both past and future tenses. Morphologically, it always shows agreement in number and gender with the subject of the clause.

The research questions that this chapter will deal with will include a comparison of properties of the *l*-participle with the past participle in Germanic and Romance languages, especially in relation to case and theta role assignment. The analysis will determine the functions performed by the auxiliary 'to be' and the *l*-participle, and show how they influence the structure of the VP in Slavic. Special attention will be paid to the syntactic configuration that makes agreement between the *l*-participle and the subject possible. The assumptions concerning the VP architecture will be used in an alternative account of a widely-discussed *l*-participle movement across the auxiliary, which is the main topic of this chapter.

The outline of the chapter is as follows. Section 2.2 examines some earlier approaches to *l*-participle fronting, according to which the operation occurs via head movement. Section 2.3 argues that the fronting should be treated as an instance of locative inversion, and that the *l*-participle XP-moves into Spec, TP in order to check the  $\varphi$ -features of T. The subsequent sections provide more support for this claim, which comes from the behaviour of the *l*-participle in double participle constructions, and the way it patterns with negation and the future auxiliary *šte* in Bulgarian.

The analysis focuses on Bulgarian and Serbo-Croatian. It was noted in chapter 1 that Macedonian also has a compound tense constructed with the auxiliary 'be' and the *l*-participle. However, due to different patterns of cliticization, the *l*-participle undergoes head movement in this language. I will address the issue in chapter 4, where I will also show that although Macedonian lacks fronting of the *l*-participle, it exhibits a similar process of inversion with passive participles, predicative nouns and adjectives.

Likewise, an analysis of compound tenses in Polish is postponed to chapter 5 for the reasons mentioned in chapter 1. Namely, Polish has largely reanalyzed the *l*-participle as a verbal root, whereas the forms of the auxiliary verb 'be' have been morphologically reduced and are on the way to become affixes. This precludes the possibility of *l*-participle fronting via locative inversion.

## 2.2 Head-movement accounts of participle fronting in Bulgarian and Serbo-Croatian

Chapter 1 showed that Slavic languages have developed a compound tense that does not occur in any other Indo-European languages apart from the Tocharian and Armenian groups. The tense is constructed with the auxiliary 'be' and the so-called (resultative) *l*-participle. The *l*-participle can be formed from all types of perfective and imperfective verbs, irrespectively of the fact whether they are unergative or unaccusative. It always agrees in gender and number with the subject of a clause. For instance, the *l*-participle of the verb *stati* 'to stand' in Serbo-Croatian has six possible forms (cf. 1).

(1) Forms of the *l*-participle in Serbo-Croatian

	SG	PL
MASC	stao	stali
FEM	stala	stale
NEUT	stalo	stala

(S-C, Spencer 1991: 352)

The *l*-participle in Bulgarian has more variants than in Serbo-Croatian, because it additionally distinguishes between the aorist and the imperfectum forms, which are exemplified for the verb *četa* 'read' in (2).

(2) Forms of the *l*-participle in Bulgarian

	aorist		imperfectum	
	SG	PL	SG	PL
MASC	čel	čeli	četjal	četjali
FEM	čela	čeli	četjala	četjali
NEUT	čelo	čeli	četjalo	četjali

(Bg, Tomić 2006: 351)

Moreover, both in Bulgarian and Serbo-Croatian the *l*-participle forms aspectual pairs. For example, the imperfective variant of the aorist form of the verb *četa* 'read' in Bulgarian is *čel*, while the perfective aorist is *pročel*.

The *l*-participle can be fronted across the auxiliary to the clause initial position. This is shown for Bulgarian in (3) and for Serbo-Croatian in (4).

- (3) a. Az sŭm čel knigata  
 I be<sub>AUX.PRES.1SG</sub> read<sub>PART.F.SG</sub> book-the  
 b. Čel sŭm knigata  
 read<sub>PART.F.SG</sub> be<sub>AUX.PRES.1SG</sub> book-the  
 "I have read the book"

(Bg)

- (4) a. Ja sam čitao knjigu  
 I be<sub>AUX.PRES.1SG</sub> read<sub>PART.M.SG</sub> book  
 b. Čitao sam knjigu  
 read<sub>PART.M.SG</sub> be<sub>AUX.PRES.1SG</sub> book  
 “I have read the book” (S-C)

The movement has been extensively discussed in the literature, but so far it has always been analyzed as head raising, either as Long Head Movement from V to C (Lema & Rivero 1989) or as head adjunction of the participle to C (Wilder & Ćavar 1994), to Aux (Bošković 1997), or to a discourse-related focus projection Delta (Lambova 2003). I have argued in previous work (Broekhuis & Migdalski 2003, Migdalski 2005) that the head movement accounts face a number of empirical and theoretical problems and that the fronting is in fact a case of remnant XP-movement. Before I elaborate on the XP-movement proposal, I will first provide a brief evaluation of the previous accounts in sections 2.2.1 and 2.2.2, which will also give me the opportunity to present the relevant data.

## 2.2.1 Participle fronting as long head movement

Lema and Rivero (1989) offer the first generative analysis of the participle-auxiliary reorderings in Slavic. They argue that the operation consists in long head movement (LHM) of the participle located in V across the auxiliary in I to the complementizer projection C, as schematized in (5).<sup>26</sup>

- (5) [CP [CPart<sub>i</sub>] [IP Aux [VP [v t<sub>i</sub>] DP]]]

Lema and Rivero claim that the Part-Aux order is a result of head movement rather than of XP-movement because the participle may be fronted only entirely on its own. Thus, movement of a VP together with its complement is unacceptable.

- (6) a. \*Čel knjigata e (Ivan)  
 read<sub>PART.F.SG</sub> book-the be<sub>AUX.3SG</sub> Ivan (Bg)  
 b. \*Čitao knjigu je (Jovan)  
 read<sub>PART.M.SG</sub> book be<sub>AUX.3SG</sub> Jovan (S-C, cf. Rivero 1991: 322-323)

However, the analysis implies that the head movement crosses the head position occupied by the intervening auxiliary head. Consequently, it violates the Head Movement Constraint (Travis 1984, Baker 1988, Chomsky 1986), so it should be illicit. Lema and Rivero try to solve this problem by deriving the HMC-restrictions from a slightly complicated version of the ECP.

<sup>26</sup> In her subsequent work, Rivero (1991, 1994) has extended the LHM analysis of verb raising to other Southern and Western Slavic languages, as well as to Old Romance and Celtic languages (see e.g. Borsley, Rivero, and Stephens 1996 for a discussion of Breton, as well as Roberts 1992, 1994). A detailed overview of head movement accounts of the participle-auxiliary structures in Slavic can be found in Wilder & Ćavar (1994), Phillips (1996), Embick & Izvorski (1995, 1997), and Lambova (2003).

Apart from the theoretical shortcoming, the LHM proposal also faces empirical problems. First of all, the analysis wrongly predicts that the construction is restricted to main clauses. This is what Lema and Rivero claim to be the case; however, Embick and Izvorski (1995, 1997) report that the restriction is not valid, and mark the Bulgarian example in (7a) as acceptable. The judgments are confirmed by Lambova (2003), who provides the output in (7b).

- (7) a. Rasbrax           če   pročel       e       knigata  
 understand<sub>PAST.1SG</sub> that read<sub>PART.MSG</sub> be<sub>AUX.3SG</sub> book-the  
 "I understood you have read the book"  
 (Bg, Embick and Izvorski 1997: 216)
- b. Decata   kazvat   če   gledali       sa       filma  
 kids-the say<sub>3PL</sub> that watch<sub>PART.PL</sub> be<sub>3PL</sub> movie-the  
 "The kids say that they have seen the movie" (Bg, Lambova 2003)

Likewise, Embick and Izvorski (1997) notice that the restriction does not hold for Serbo-Croatian either,<sup>27</sup> because the *l*-participle may be fronted across the past tense auxiliaries in this language.

- (8) On tvrdi da istukao bejaše Jovan Petrovog prijatelja  
 he claims that beat<sub>PART.MSG</sub> be<sub>PAST.3SG</sub> Jovan Peter's friend  
 "He claims that Jovan had beaten Peter's friend"  
 (S-C, Embick and Izvorski 1997: 216)

Secondly, the LHM approach wrongly predicts that the subject may be inserted between the participle in C and the auxiliary in I. However, this is never the case, as has been observed by Wilder & Ćavar (1994: 19-20) for Serbo-Croatian and Embick & Izvorski (1995: 111) for Bulgarian.

- (9) a. \*[<sub>CP</sub> Čel [<sub>IP</sub> Ivan [<sub>I'</sub> e [... knjigata]]]  
 read<sub>PART.MS</sub> Ivan be<sub>3SG</sub> book-the (Bg, cf. Embick & Izvorski 1995)
- b. \*[<sub>CP</sub> Čitao [<sub>IP</sub> Jovan [<sub>I'</sub> je [... knjigu]]]  
 read<sub>PART.MSG</sub> Jovan be<sub>3SG</sub> book<sub>ACC</sub> (S-C, cf. Wilder & Ćavar 1994)

To sum up, this section has shown that there are both theoretical and empirical problems with the Long Head Movement analysis of participle fronting. They have led

<sup>27</sup> Participle movement is impossible across the present tense auxiliaries in embedded clauses in Serbo-Croatian, because they are clitics that must occur in the second position (see chapter 4 for details). This means that the auxiliary *je* in (i) must be right-adjacent to the complementizer *da*. The presence of the subject or the participle after the complementizer violates the second position requirement, so such constructions are ruled out for independent reasons.

- (i) a. Ivan kaže da je (Marija) čitala Krležu  
 Ivan says that be<sub>PRES.3SG</sub> Marija read<sub>PART.FSG</sub> Krleža<sub>ACC</sub>  
 "Ivan says that Mary has read Krleža"  
 b. \*Ivan kaže da čitala je (Marija) Krležu  
 c. \*Ivan kaže da Marija je čitala Krležu (S-C, Wilder & Ćavar 1994: 8)

Bulgarian does not exhibit second position requirements on the clitic auxiliaries; therefore the examples comparable to (ia, b) are permitted.

to alternative head movement accounts involving adjunction, which will be addressed in the next section.

## 2.2.2 Participle fronting as head adjunction

According to Wilder & Ćavar (1994), the main problem with the LHM account of participle fronting is the fact that it is not able to predict that the preposed participle must always be adjacent to the auxiliary that follows it. The adjacency requirement holds for both Bulgarian and Serbo-Croatian, as shown in (10a and b), respectively.

- (10) a. Pročel (\*toj/pravilno) e knjigata  
 read<sub>PART.M.SG</sub> he/correctly be<sub>PRES.3SG</sub> book-the (Bg, Caink 1999)
- b. Čitao (\*Ivan/ rado) je knjigu  
 read<sub>PART.M.SG</sub> Ivan/ gladly be<sub>PRES.3SG</sub> book  
 (S-C, Wilder & Ćavar 1994)

Moreover, Wilder & Ćavar observe that in embedded clauses in Serbo-Croatian the auxiliary clitic must be adjacent to the complementizer (cf. footnote 27). To account for this they suggest that it is right-adjoined to C. Given that the fronted participle occurs immediately to the left of the auxiliary, they conclude that it is also adjoined to C. The derivation they propose is presented in (11b).

- (11) a. Pio je Jovan pivo  
 drink<sub>PART.M.SG</sub> be<sub>PRES.3SG</sub> Jovan beer  
 “Jovan drank beer”
- b. [C [C pio<sub>i</sub> je [AGRP Jovan t<sub>j</sub> pivo]]] (S-C, Wilder & Ćavar 1994)

Bošković (1995, 1997)<sup>28</sup> adopts the adjunction analysis, but claims that the participle cannot move as high as to C in Serbo-Croatian. For example, he observes that it is impossible to raise the participle in front of the interrogative complementizer *li*, which is standardly assumed to be in C across Slavic (cf. section 2.3.6.3.3 and chapter 4 for details). By contrast, finite verbs may precede *li*, which means that this site is accessible for finite verbs.

- (12) a. [C Ljubi li] nju?  
 kiss<sub>PRES.3SG</sub> Q her  
 “Does he kiss her?”
- b. \*[C Poljubio li] je nju?  
 kiss<sub>PART.M.SG</sub> Q be<sub>PRES.3SG</sub> her  
 “Did he kiss her?” (S-C, Bošković 1995: 251)

Furthermore, Bošković (1995, 1997) investigates the positions taken by the *l*-participle in the presence of different types of adverbs. He notices that although the participle may precede VP-adverbs, such as *juče* ‘yesterday’ in (13a and b), it may not move across sentential adverbs, such as *nesumnjivo* ‘undoubtedly’ in (13c).

<sup>28</sup> Lambova (2003) extends the adjunction account to Bulgarian. I discuss her analysis in section 2.3.4.1.

- (13) a. Vi ste mu je nesumnjivo  
 you be<sub>AUX.3PL</sub> him<sub>CL.DAT</sub> her<sub>CL.ACC</sub> undoubtedly  
 predstavili juče  
 introduce<sub>PART.M.PL</sub> yesterday  
 “You undoubtedly introduced her to him yesterday”
- b. Predstavili<sub>i</sub> ste mu je t<sub>i</sub> juče  
 introduce<sub>PART.M.PL</sub> be<sub>AUX.3PL</sub> him<sub>CL.DAT</sub> her<sub>CL.ACC</sub> yesterday
- c. \*Predstavili<sub>i</sub> ste mu je nesumnjivo t<sub>i</sub> juče  
 introduce<sub>PART.M.PL</sub> be<sub>AUX.3PL</sub> him<sub>CL.DAT</sub> her<sub>CL.ACC</sub> undoubtedly yesterday  
 (S-C, Bošković 1997: 148-149)

Following Watanabe (1993), Bošković assumes that sentential adverbs are universally TP-adjoined. Since the *l*-participle may not cross sentential adverbs, he concludes that the participle is not adjoined to C, but rather head-adjoined to the auxiliary, which resides in Aux<sup>0</sup> (cf. 14).

- (14) [<sub>AuxP</sub> Poljubio<sub>i</sub> je]<sub>[VP t<sub>i</sub> Mariju]</sub>  
 kiss<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> Maria<sub>ACC</sub>  
 “He kissed Maria” (S-C, Bošković 1997: 156)

In contrast to the Long Head Movement hypothesis, the adjunction analyses avoid the theoretical problems related to the HMC violation. They also correctly predict that the reordering is possible in embedded clauses (cf. the examples in 7 and 8), and that the subject may not intervene between the fronted participle and the auxiliary (cf. the sentences in 9). However, the adjunction accounts are unable to preclude the option of locating the subject in Spec, IP, that is in front of the preposed participle. As (15) indicates, this type of ordering is ungrammatical.

- (15) \*<sub>[IP</sub> Jovan [<sub>AuxP</sub> poljubio<sub>i</sub> je]<sub>[VP t<sub>i</sub> Mariju]</sub>]  
 Jovan kiss<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> Maria (S-C)

In fact, it seems that the fronted participle must normally be the left-most constituent in its clauses and may not be preceded by other elements. The only elements that may exceptionally appear in front of it are topics, which reside in the left periphery of the clause above TP (cf. section 2.3.4.3).

- (16) Filma gledali bjaxa decata  
 movie-the<sub>TOP</sub> watch<sub>FOC.PART.M.SG</sub> be<sub>PAST.3PL</sub> kids-the  
 “As for the movie, the kids had seen it” (Bg, cf. Lambova 2003)

The restriction in (15) in Serbo-Croatian could be explained via the requirements of clitics, which must appear in the second position in this language. However, the explanation does not hold for Bulgarian, where clitics are not subject to the second position constraint.

In sum, I have established that neither the LHM nor the adjunction account offer a satisfactory explanation of the properties of participle preposing in Bulgarian and Serbo-Croatian. In the next section I will propose an alternative analysis, which will show that participle fronting occurs as XP-movement.



## 2.3 Towards an alternative analysis

This section will develop an XP-movement account of participle fronting in Bulgarian and Serbo-Croatian. It will begin with a description of some core properties of the compound tenses in South Slavic of a general nature that the analysis will rest on in section 2.3.1. Section 2.3.2 will provide an analysis of participle movement in terms of locative inversion. Section 2.3.3 will explain why the *l*-participle must move entirely on its own and may never pied-pipe any lexical material. Finally, section 2.3.4 will investigate discourse effects created by movement of the *l*-participle and other elements to the left periphery.

### 2.3.1 Properties of the *l*-participle

A remarkable property of the *l*-participle is the fact that it always agrees in  $\varphi$ -features with the subject of the clause. This happens irrespectively of whether the participle is unaccusative or unergative. The examples in (17) illustrate this for the unergative participle *čel*, whose gender and number specification depends on the subject of the clause.

- (17) a. Ivan e čel knjigata  
       Ivan be<sub>PRES.3SG</sub> read<sub>PART.M.SG</sub> book-the  
       b. Polja e čela knjigata  
       Polja be<sub>PRES.3SG</sub> read<sub>PART.F.SG</sub> book-the (Bg)

I take the obligatory agreement between the subject and the participle to be a crucial property of the construction. It makes the Slavic languages significantly different from the Romance languages, where the agreement obtains only in unaccusative and passive structures; that is, when the subject is an internal argument of the verb. I would like to propose that the contrast reflects a difference in the syntactic composition of compound tenses that contain unergative participles. In the case of unergative constructions in Slavic, which are formed with the auxiliary ‘be’, the subject is the external argument of the *l*-participle. In the case of unergative constructions in Germanic and Romance, which are formed with the auxiliary ‘have’, the subject is generated as the external argument of the auxiliary verb. The templates representing the compound tenses formed with the auxiliaries ‘be’ and ‘have’ are given in (18a) and (18b), respectively.

- (18) a. ...[ **be** [<sub>VP</sub> DP<sub>agent</sub> v [<sub>VP/PartP</sub> V<sub>PART</sub> DP<sub>theme</sub>]]] **Slavic**  
       b. ...[<sub>VP</sub> DP<sub>agent</sub> v [<sub>VP</sub> **have** [<sub>VP</sub> V<sub>PART</sub> DP<sub>theme</sub>]]] **Romance and Germanic**

The assumption I make here is related to the proposals by Hoekstra (1984, 1986), Roberts (1987), and Broekhuis and Van Dijk (1995), who postulate that only the auxiliary ‘have’ is able to introduce an agent and assign accusative case to the object. The verb ‘be’ is an unaccusative auxiliary, so it may not perform these functions.

The structure in (18b) implies that the past and passive participles in Germanic and Romance languages must be conflated, that is, analyzed as categories of the same type<sup>29</sup> (cf. Hoekstra 1994; Emonds 2000). Hence, it is argued that the idea that passive participle morphology suppresses the external theta role and absorbs structural case (cf. Den Besten 1981; Jaegli 1986, and Roberts 1987) should be extended to past participles as well. In this scenario, the function of the auxiliary 'have' is the reintroduction of the agent and assignment of accusative case.

The *l*-participle is always accompanied by the verb 'to be'. Since this is an unaccusative auxiliary, it is unable to assign accusative case or project an external theta role. This means that these functions are performed by the *l*-participle. The assumption is reflected in the structure in (18a). It implies that in constructions with the auxiliary 'be' the subject is the external argument of the *l*-participle, rather than of the auxiliary.

The fact that the *l*-participle is a case assigner indicates that it has rather different properties from past participles in Germanic and Romance languages. It also means that the *l*-participle in Slavic cannot be conflated with the passive participle, and that the two categories may not receive a uniform analysis. Recall from chapter 1, section 1.3.3.5 that this is *a priori* confirmed by the fact that the two types of participles are morphologically different in the Slavic languages. Thus, the passive participle form of the verb 'read' in Bulgarian is *četan*+<sub>AGR</sub>, as exemplified in (19).

- (19) Knigata e četana ot Ivan  
 book-the be<sub>PRES.3SG</sub> read<sub>PASS.F.SG</sub> by Ivan  
 "The book is being read by Ivan" (Bg)

Summarizing, this section has shown that the *l*-participle has different properties from the past participles in the Germanic and the Romance languages. Even though it always occurs with the auxiliary 'be', it is a case assigner, and is able to project an external theta role. In the next section I will demonstrate that these properties have direct repercussions for participle fronting.

## 2.3.2 Participle fronting as locative inversion

In chapter 1, section 1.3.3.5.1.2 I claimed that the *l*-participle in Slavic derives from a class of Proto-Indo-European *\*l*-adjectives, which denoted propensity for performing certain actions. Even though in the contemporary Slavic languages *l*-participles are never used as adjectives, they still exhibit some adjectival properties. Most notably, they show agreement in gender and number with the subject, and in South Slavic they appear with the auxiliary that has the same form as the copula 'be'. This suggests that the subject and the participle phrase (VP) in (18a) are in a canonical Small Clause configuration (cf. Hale & Keyser 1993). The configuration is overtly manifested through agreement on the *l*-participle. Since there is no Small Clause relation in (18b), the agreement between the subject and the past participle is impossible.

I would like to argue that *l*-participle fronting is contingent on subject-participle agreement. Since in the minimalist framework syntactic movement is conceived of as a "last resort" procedure, the operation may only apply if it results in feature checking. Given that both the subject and the *l*-participle are marked for  $\varphi$ -features, they are both

<sup>29</sup> This view will be discussed in more detail in chapter 3, where I develop an analysis of 'have'-perfects in Slavic.

eligible candidates for checking the  $\varphi$ -features of T by movement to Spec, TP. They raise to a specifier position, which means that both of them undergo phrasal movement.

- (20) a. [TP Ivan<sub>[+ $\varphi$ ]</sub> [T<sub>[+ $\varphi$ ]</sub> e [ ... pročel<sub>[+ $\varphi$ ]</sub> knjigata]]  
 b. [TP Pročel<sub>[+ $\varphi$ ]</sub> [T<sub>[+ $\varphi$ ]</sub> e [ ... knjigata ...]]

The proposal adopted here is closely related to the analysis of locative inversion in English pursued by Hoekstra and Mulder (1990). The construction is exemplified in (21). Following the standard assumptions of the 1980's, Hoekstra and Mulder assume that movement of the subject to Spec, IP in (21a) is motivated by the Case Filter, because I assigns nominative case to the subject hosted in its specifier. It is, however, less clear what triggers the fronting of the PP in (21b). In fact, the output should be ungrammatical, given that the subject follows the verb, so it cannot be directly assigned nominative case by I.

- (21) a. The baby carriage<sub>i</sub> rolled [<sub>SC</sub> t<sub>i</sub> down the hill]  
 b. Down the hill<sub>i</sub> rolled [<sub>SC</sub> the baby carriage t<sub>i</sub>]

Hoekstra and Mulder solve this problem by proposing that locative inversion makes it possible for I to assign case to the subject of the clause in its base position. Their solution relies on the assumption that the fronted PP and the subject are in a predicative Small Clause relationship, and that this enables transmission of nominative case. Case assignment to the subject in (21b) occurs in the following way: I assigns nominative case in the normal way to Spec, IP so that the fronted PP is assigned nominative case by I. This case is then transmitted via the movement chain to the trace of the preposed PP. Finally, nominative case is transmitted to the subject of the clause, which is the external argument of the Small Clause.

Hoekstra and Mulder claim that the transmission of case from the locative PP in Spec, TP to the subject in postverbal position is possible, because all relevant relations (case assignment, movement and predication) involve co-indexing. Given that each element can have a single index at most, it follows that I is also co-indexed with the postverbal subject, and thus can assign case to it: I is co-indexed with the fronted PP under case assignment, the PP is co-indexed with its trace, and the PP trace is co-indexed with the DP under predication.

- (22) a. Down the hill rolled the baby carriage  
 b. [IP PP<sub>i</sub> [I [VP V [<sub>SC</sub> DP<sub>i</sub> t<sub>i</sub> ]]]]

Even though co-indexing does not play a role in the current syntactic theory, I will follow some of Hoekstra and Mulder's assumptions and propose that *l*-participle movement is an instance of locative inversion.<sup>30</sup> However, in the case at hand, the movement is not conditioned by case assignment, but rather by agreement.<sup>31</sup> Since both the subject and the *l*-participle carry the appropriate  $\varphi$ -features, either of them may check the  $\varphi$ -features of T by XP-raising to Spec, TP.

<sup>30</sup> There are some other accounts of verb movement in terms of locative inversion available in the literature. See, for example, Massam (2001a and b) for a study of Niuean.

<sup>31</sup> See Broekhuis (2005) for a reanalysis of Hoekstra and Mulder's proposal in terms of agreement feature sharing.

One of the properties of locative inversion is the fact that it is possible only across the verb 'be' and a few other unaccusative verbs (cf. 23a and b). It is incompatible with verbs assigning external theta-roles (cf. 23c).

- (23) a. On that table was put a valuable book  
 b. Crashing through the woods came a wild boar  
 c. \*Down the street walked the old nanny her dog (cf. Bresnan 1994: 77-79)

I suggest that in Bulgarian and Serbo-Croatian *l*-participle movement may occur via locative inversion because the auxiliary is always the verb 'to be'. More evidence for this claim will be given in chapter 5, where I will show, taking the structure of compound tenses in Polish as an example, that once the auxiliary is impoverished and starts to morphologically differentiate from the verb/copula 'to be', the *l*-participle may not raise via locative inversion any more.

There are two empirical arguments that directly support the XP-movement analysis of participle fronting (more will follow later in this chapter). First, this proposal predicts that the fronted participle and the subject are in complementary distribution, as they compete for the same position. The examples in (24) show that the prediction is borne out. This fact makes the new analysis superior to the head movement proposals, because they are unable to explain the exclusive distribution of these elements.

- (24) a. \*Čel Ivan e knjigata  
 read<sub>PART.MSG</sub> Ivan be<sub>PRES.3SG</sub> book-the  
 b. \*Ivan čel e knjigata  
 Ivan read<sub>PART.MSG</sub> be<sub>PRES.3SG</sub> book-the (Bg)

Secondly, the analysis accounts for the fact that the fronted participle must be rigidly left-adjacent to the auxiliary, as shown in (25).

- (25) a. Pročel (\*ne /pravilno/kūde) sūm/ bjax knjigata  
 read<sub>PART.MSG</sub> NEG/correctly/where be<sub>PRES.1SG</sub> be<sub>PAST.1SG</sub> book-the  
 (Bg, cf. Caink 1999)  
 b. Čitao (\*ne/ rado) sam knjigu  
 read<sub>PART.MSG</sub> NEG/gladly be<sub>PRES.1SG</sub> book  
 (S-C, cf. Wilder & Čavar 1994)

The adjacency requirement follows straightforwardly on the assumption that the auxiliary verb must raise to T in order to check Tense. Since the *l*-participle lands in Spec, TP, it must be left-adjacent to the auxiliary.

To summarize, it has been argued that the *l*-participle undergoes XP movement to Spec, TP in order to check the  $\varphi$ -features of T<sup>0</sup>. The operation was claimed to be an instance of locative inversion. The analysis is supported by the complementary distribution between the subject and the fronted *l*-participle, and the adjacency between the fronted participle and the auxiliary. More empirical arguments for the idea of *l*-participle raising via XP-movement will be provided later in this chapter. In the meantime I will explain how the operation proceeds in more detail.

### 2.3.3 Details of the present analysis

It has been established that the *l*-participle is able to assign accusative case and project the external theta role. This means that the subject is underlyingly the external argument of the *l*-participle and resides in Spec, vP, whereas the auxiliary ‘to be’ is located above the subject. For convenience, I assume that the auxiliary is generated as the Aux head (cf. 26). More specific assumptions concerning the position of the auxiliary will be presented in chapter 4.

$$(26) \quad [TP \dots T_{[+q]} \dots [Aux \text{ BE } [vP \text{ subject}_{[+q]} v [PartP \text{ Part}_{[+q]} \text{ object}]]]]$$

The participle moves into Spec, TP, which means that the movement is phrasal. This raises the important question of why the participle is not able to pied-pipe the object, prepositional phrases, or any other material to Spec, TP. This is certainly not a trivial issue, because it was the main reason why participle fronting was analyzed as head movement in all the previous accounts. The next subsections will address this problem in detail. The motivation for the lack of the movement of adjuncts will be provided in section 2.3.3.1, whereas the impossibility of the pied-piping of the internal arguments will be investigated in section 2.3.3.2.

#### 2.3.3.1 Movement of adjuncts

The examples in (27) show that the participle may not pied-pipe adjuncts when it moves to the clause-initial position. Placement of the locative PP *v Plovdiv* ‘in Plovdiv’ in front of the *l*-participle or to its right results in ungrammaticality.

- (27) a. Učil e v Plovdiv  
           study<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> in Plovdiv  
           ‘He studied in Plovdiv’  
       b. \*Učil v Plovdiv e  
       c. \*V Plovdiv učil e (Bg, S. Marinov, p.c.)

I would like to suggest that the restriction is related to the size of the moved constituent. The template in (26) indicates that the PartP is generated very low in the structure, so that the only elements that it contains apart from the participle are its internal arguments. Consequently, the participle is not able to pied-pipe any adjuncts, because all of them are generated above PartP. Thus, the adverbial PP in (27) is located too high in the clause structure to be affected by the movement of the PartP. As an illustration, the derivation of the sentence in (27a) is given in (28). The sentence contains a *pro* subject, which is marked in the template accordingly.

- (28) a. [TP [T<sub>[+q]</sub>] ... [Aux e [AdvP v Plovdiv [vP *pro*<sub>[+q]</sub> v [PartP učil<sub>[+q]</sub>]]]]]  
       b. [TP [PartP učil] [T e<sub>j</sub> [Aux t<sub>j</sub> [AdvP v Plovdiv [vP *pro*<sub>[+q]</sub> v [t<sub>PartP</sub>]]]]]]]

As the scheme in (28a) shows, the auxiliary *e* raises as a head from Aux to T, where it checks Tense.<sup>32</sup> Subsequently, the *l*-participle undergoes phrasal movement from PartP to Spec, TP, where it checks the  $\varphi$ -features of T. As expected, the adverbial *v Plovdiv* is left stranded at the end of the clause.

### 2.3.3.2 Movement of internal arguments

The situation is more complicated when the PartP contains an object, which can never be pied-piped by the *l*-participle, either. I propose that the restriction is related to the accessibility of the  $\varphi$ -features, which are carried by the *l*-participle, for checking the  $\varphi$ -features of T. Thus, if we assume the clause structure in (26), it is evident that movement of a constituent that is larger than PartP is precluded, because otherwise the features on the *l*-participle would be too deeply embedded to check the  $\varphi$ -features of T. Percolation of the  $\varphi$ -features from Part would not solve the problem, either, because they are blocked by the lexical head *v*.

Furthermore, the participle may undergo movement to Spec, TP only if the object has been moved out of PartP. I suggest that movement of the whole PartP is barred, because this would raise the direct object across its case checking position and thus leave the uninterpretable case feature unchecked. In order to avoid this, the object must first be evacuated out of PartP and check its case, which results in the requirement of the remnant movement of PartP to Spec, TP. Hence, the sentence in (29a) must be derived in the way depicted in (29b-c).

- (29) a. Gledali            sa            filma            decata  
 watch<sub>PART.MSG</sub> be<sub>PRES.3PL</sub> movie-the children-the  
 "The kids have watched the movie"
- b. [TP [T<sub>[+ $\varphi$ ]] ... [Aux sa [AgrO [<sub>vP</sub> decata [<sub>+ $\varphi$ ]] v [PartP gledali [<sub>+ $\varphi$ ]] filma]]]]]]</sub></sub></sub>
- c. [TP [PartP gledali t<sub>k</sub>] [T sa<sub>j</sub> ... [Aux t<sub>j</sub> [AgrO filma<sub>k</sub> [<sub>vP</sub> decata [<sub>+ $\varphi$ ]] v [t<sub>PartP</sub> t<sub>k</sub>]]]]]]</sub>

The head T in (29b) contains uninterpretable  $\varphi$ -features, which can be checked by the elements that have them if they raise to Spec, TP. The only candidates available are the subject *decata* and the *l*-participle *gledali*. They agree with each other in  $\varphi$ -features, which as was argued earlier signifies that they form a Small Clause. Suppose that the *l*-participle is selected as the element to be moved. Observe that we cannot move the whole PartP to Spec, TP because that would raise the direct object *filma* across the position where its case is checked, that is, Spec, AgrOP. Hence, it is necessary to raise the object out of PartP into Spec, AgrOP first. Subsequently, the auxiliary clitic *sa* moves to T and checks Tense. Finally, the remnant PartP raises to Spec, TP and checks the  $\varphi$ -features of T.

Undoubtedly, there are more issues that need to be explained in some detail. First of all, since I claim that the object shift occurs for case checking, it is necessary to prove that the object undergoes A-movement, rather than A'-movement. Moreover, it is desirable to find independent evidence of object shift in Bulgarian and Serbo-Croatian also in other syntactic contexts.

Secondly, it has already been explained that PP adverbials cannot be fronted together with the *l*-participle, because they are generated above PartP, so they are

<sup>32</sup> Alternatively, the auxiliary may be generated directly in T. Neither of the options has any bearing on the analysis developed here. The placement of the auxiliary and pronominal clitics in the clause structure will be discussed in chapter 4.

outside the domain of the movement. However, the situation is more complicated with indirect objects that are preceded by prepositions. It might be difficult to maintain that they are evacuated out of the PartP for case checking on a par with direct objects, because their case can be checked by the preposition. Note though that this is an issue only for Bulgarian, which does not have case distinctions on non-pronominal forms, therefore it has to introduce the indirect object with a preposition. Serbo-Croatian overtly marks indirect objects with dative case, so it does not use prepositions in this context.

These issues are complex enough to deserve an independent treatment; therefore I will address them separately. Sections 2.3.3.2.1.2 and 2.3.3.2.1.3 will analyze direct and indirect object shift, respectively. Section 2.3.3.2.1.4 will be devoted to movement of the indirect object that is preceded by a preposition in Bulgarian. Section 2.3.3.2.1.5 will discuss the evacuation of PP and small clause complements out of the PartP.

#### 2.3.3.2.1.1 Object shift requirement

There is a lot of independent evidence for object shift in Bulgarian and Serbo-Croatian. The examples in (30) and (31) indicate that both languages permit scrambling, and that the objects may be moved in order to reflect different information structure relations. The Bulgarian data in (30) show that both the direct and the indirect objects are able to raise out of the VP, because they may move across the temporal adverb *včera*. Likewise, the direct object *knjigu* in the Serbo-Croatian examples in (31) may be placed in front of the participle, or even preposed into the clause initial position.

- (30) a. Ivan e podaril včera kartina(ta) na Maria  
 Ivan be<sub>PRES.3SG</sub> give<sub>PART.MSG</sub> yesterday painting(-the) to Maria  
 “Ivan has given a/the painting to Maria yesterday”  
 b. Ivan e podaril kartina(ta) včera na Maria  
 c. Ivan e podaril na Maria včera kartina(ta) (Bg, Lambova 2003)
- (31) a. Petar je kupio knjigu  
 Petar be<sub>PRES.3SG</sub> buy<sub>PART.MSG</sub> book<sub>ACC</sub>  
 “Petar bought a book”  
 b. Petar je knjigu kupio  
 c. Knjigu je kupio Petar (S-C, Stjepanović 1999)

However, it is necessary to establish whether the object shifts occurs as A or A<sup>2</sup>-movement. Since I assume that the object is evacuated from the Participle Phrase for case checking, it is expected that this be done by A-movement.<sup>33</sup>

#### 2.3.3.2.1.2 Direct object shift

Bošković (1997: 121ff) provides evidence for object shift in Serbo-Croatian. He claims that the object must raise out of VP, and that the movement is followed by raising of the participle into AgrO<sup>0</sup>.

<sup>33</sup> A-movement can normally be followed by A<sup>2</sup>-movement, so this does not imply that the word orders in (30) and (31) are all derived by A-movement. It is, however, important to determine that the object moves out of the PartP/VP via A-movement.

- (32) Jovan je poljubio<sub>i</sub> [AgrOP Mariju<sub>i</sub> t<sub>i</sub> [VP t<sub>i</sub> t<sub>j</sub> ]]  
 Jovan be<sub>AUX.3SG</sub> kiss<sub>PART.MSG</sub> Marija  
 "Jovan kissed Maria" (S-C, Bošković 1997: 121)

Following Pesetsky (1989), Bošković draws evidence in favour of the object shift from the interpretation of adverb scope. He argues that the scope of adverbs is sensitive to the direction of their adjunction to the verb. Given the standard assumptions, scope is calculated hierarchically, so a higher adverb should c-command a lower adverb. In (33a) *twice* takes scope over *intentionally*, which means that there were two instances of intentional knocking, and that the adverbs are right adjoined to the VP. In (33b) *intentionally* takes scope over *twice*, and the sentence describes a single intention of knocking twice. This suggests that the adverbs are left-adjoined to the VP.

- (33) a. John [intentionally [twice [knocked on the door ]]]  
 twice > intentionally  
 b. (?)John [intentionally [twice [knocked on the door ]]]  
 intentionally > twice

Bošković points out that the judgments concerning the relative scope interpretation of adverbs give some clues for determining whether the elements that are base-generated within VP have been evacuated out of the VP. He provides the following examples.

- (34) a. Jovan je namerno dva put oborio Petra  
 Jovan be<sub>AUX.3SG</sub> deliberately twice fail<sub>PART.MSG</sub> Peter  
 namerno > dva put  
 b. Jovan je oborio Petra namerno dva put  
 Jovan be<sub>AUX.3SG</sub> fail<sub>PART.MSG</sub> Peter deliberately twice  
 namerno > < dva put (S-C, Bošković 1997: 122)

In sentence (34a) the first adverb takes scope over the second. By contrast, (34b) is ambiguous in terms of the adverb scope, because both the reading on which the first adverb *dva put* 'twice' takes scope over the second adverb *namerno* 'deliberately', as well as the reading on which *namerno* takes scope over *dva put* are available. Bošković submits that on the latter interpretation, both the participle and the object must have raised across the adverbs.

As far as the landing site of the moved object is concerned, Bošković (1997: 123) claims that it must be an A-position. He concludes this on the basis of quantifier float data. If Sportiche (1988) and Déprez (1989) are correct when suggesting that only A-movement can float quantifiers, then the object must target an A-position. Bošković proposes that it is Spec, AgrOP.

- (35) a. Jovan je oborio studente sve  
 Jovan be<sub>AUX.3SG</sub> fail<sub>PART.MSG</sub> students all  
 "Jovan failed all the students"  
 b. Jovan je oborio sve studente (S-C, cf. Bošković 1997: 123)

Correspondingly, Stjepanović (1999: 81) remarks that binding facts also indicate that the object may move out of the VP. This is shown in (36), where the direct object *Gorana i Petra* 'Goran<sub>ACC</sub> and Petar<sub>ACC</sub>' is able to bind the anaphor *jednog drugom* 'each other' inside the VP temporal adverbial.



- (36) Slikao je Gorana i Petra za vrijeme  
 photograph<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> Goran and Petar during  
 sudjenja jednog drugom  
 trials one<sub>GEN</sub> another<sub>DAT</sub>  
 ‘‘He photographed Goran and Petar during each other’s trials’’  
 (S-C, Stjepanović (1999: 81))

Assuming the standard idea that adverbs are base-generated higher than objects, and following Lasnik’s (1995) proposal that feature movement does not feed binding, Stjepanović argues that this indicates that the object has A-moved overtly out of the VP.

Summarizing, this section has shown that direct objects must raise out of the VP via A-movement. The next section will discuss indirect object shift.

### 2.3.3.2.1.3 Indirect object shift

We have established that the direct object undergoes movement out of VP in Serbo-Croatian. The same seems to be true of indirect objects as well. Stjepanović (1999) uses the familiar tests related to adverb scope and shows that indirect objects may raise above VP adjuncts together with direct objects in ditransitive constructions.

- (37) a. Marija je namjerno dva put pokazala Vesnu Igoru  
 Marija be<sub>AUX.3SG</sub> intentionally twice show<sub>PART.F.SG</sub> Vesna<sub>ACC</sub> Igor<sub>DAT</sub>  
 ‘‘Marija intentionally twice showed Vesna to Igor’’  
 namjerno > dva put  
 b. Marija je pokazala Vesnu Igoru namjerno dva put  
 Marija be<sub>AUX.3SG</sub> show<sub>PART.F.SG</sub> Vesna<sub>ACC</sub> Igor<sub>DAT</sub> intentionally twice  
 ‘‘Marija showed Vesna to Igor intentionally twice’’  
 namjerno > < dva put (S-C, Stjepanović 1999: 84)

As the examples illustrate, the first adverb *namjerno* in (37a) has scope over the second adverbial *dva put*. However, example (37b) is ambiguous with respect to adverb scope, because both the reading with *dva put* having scope over *namjerno*, as well as the reading with *namjerno* having scope over *dva put* are available. This indicates that both the *I*-participle and the two objects have moved out of the VP. Thus, the results of scope interactions for constructions with two objects are the same as for the structures with just a direct object in (34).

Likewise, the distribution of quantifier float with double objects matches the behaviour of quantifier float in the single object constructions. As Stjepanović shows, indirect objects can float quantifiers as well (cf. 38). This indicates that they also target an A-position.

- (38) a. Marija je podijelila kolace prijateljima svim  
 Marija be<sub>AUX.3SG</sub> give<sub>PART.F.SG</sub> cookies<sub>ACC</sub> friends<sub>DAT</sub> all<sub>DAT</sub>  
 ‘‘Marija gave cookies to all friends’’  
 b. Marija je podijelila kolace sve prijateljima  
 Marija be<sub>AUX.3SG</sub> give<sub>PART.F.SG</sub> cookies<sub>ACC</sub> all<sub>ACC</sub> friends<sub>DAT</sub>  
 ‘‘Marija gave all cookies to her friends’’ (S-C, Stjepanović 1999: 85)

Furthermore, Stjepanović demonstrates that the indirect object can also bind an anaphor in an adverbial phrase, matching the behaviour of the direct object in (36).

This suggests that the indirect object may raise to an A-position above the PartP as well.

- (39) Marija je predstavila Vesni Petra i Marka;  
 Marija be<sub>AUX.3SG</sub> introduce<sub>PART.F.SG</sub> Vesna<sub>DAT</sub> Petar<sub>ACC</sub> and Marko<sub>ACC</sub>  
 za vrijeme sudjenja jednog drugom;  
 during trial one<sub>GEN</sub> another<sub>DAT</sub>  
 ‘Marija introduced Vesna to Petar and Marko during each other’s trials’  
 (S-C, Stjepanović 1999: 85)

To sum up, it has been demonstrated that both the direct and the indirect objects raise out of their VPs in Serbo-Croatian via A-movement. However, it is still necessary to find evidence for the movement in Bulgarian, which is different from Serbo-Croatian, because it does not exhibit case distinctions on non-pronominal objects and requires that indirect objects be introduced by a preposition. Since prepositions can be case assigners, the movement of indirect objects might be excluded, because potentially there is no need for it.

#### 2.3.3.2.1.4 Movement of the indirect object PPs in Bulgarian

This section will provide arguments for the idea that the indirect object in Bulgarian moves out of the PartP for case checking. At first sight this is unexpected, because the indirect object is introduced by the preposition *na* from which potentially it should receive case. However, on the basis of data from other Slavic languages I will show that *na* is not a preposition, but a dative case realization.

According to Arnaudova (2003), both objects must move from their base positions in Bulgarian. She analyzes clauses with subjects in the final position, such as the one in (40).

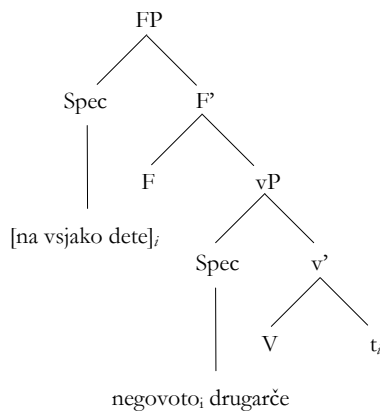
- (40) Včera pročete knjigata Marija  
 yesterday read<sub>PAST.3SG</sub> book-the Marija  
 ‘MARIJA read the book yesterday’ (Bg, Arnaudova 2003: 115-116)

Arnaudova assumes that the low subject is in Spec,vP, and that the object must move across it. Following Ordóñez’s (1998) observations for Spanish, she argues that the requirement is confirmed by quantifier binding facts. Recall that a pronoun may be interpreted as a variable bound by a quantifier only if it is in the c-command domain of that quantifier (cf. Reinhart 1983: 122). Accordingly, the sentence in (41a) is ill-formed, because the indirect object quantified phrase *na vsjako dete* ‘every child’ does not bind the possessive pronoun *negovoto* of the subject. However, once the quantified PP moves into a position preceding the subject, the sentence becomes grammatical, which argues in favour of A-movement of the indirect object.

- (41) a. ??Kakvo zanese negovoto<sub>i</sub> drugarče [na vsjako dete]<sub>i</sub>?  
 what bring<sub>PAST.3SG</sub> POSS.PRON friend<sub>DEF</sub> to every child  
 ‘What did his friend bring for every child?’  
 b. Kakvo zanese [na vsjako dete]<sub>i</sub> negovoto<sub>i</sub> drugarče?  
 what bring<sub>PAST.3SG</sub> to every child POSS.PRON friend<sub>DEF</sub>  
 (Bg, Arnaudova 2003: 115-116)

The binding facts suggest that the object quantifier in FP c-commands the subject in Spec,vP, as indicated in the phrase structure in (42); cf. Ordóñez (1998: 320). However, the binding requirements may be satisfied only if the object moves across the subject in Spec, vP (cf. 41b).

(42)



Embedded clauses exhibit the same type of asymmetry. The sentence in (43a) is ungrammatical, because the indirect object quantifier *vseki* does not c-command the subject *bašta mu* 'his father'. The sentence in (43b), by contrast, is well-formed, because *vseki* binds the subject.

- (43) a. \*Mislja če [bašta mu] na vseki e dal  
 think<sub>1SG</sub> that father him<sub>DAT</sub> to everybody be<sub>PRES.3SG</sub> give<sub>PART.MSG</sub>  
 po nešto  
 PARTIT something  
 "I think that his father has given something to everybody"
- b. Mislja če na vseki [bašta mu] e dal  
 think<sub>1SG</sub> that to everybody father him<sub>DAT</sub> be<sub>PRES.3SG</sub> give<sub>PART.MSG</sub>  
 po nešto  
 PARTIT something (Bg, Arnaudova 2003: 115-116)

Note that when the relationship between the binder and the bindee is reversed, so that the object contains the possessive pronoun and the subject is a quantifier binder, there is no asymmetry of the type depicted in (41) and (43).

- (44) a. Kakvo podari [vsjaka majka]i [na nejnoto dete]i?  
 what give<sub>PAST.3SG</sub> every mother to her child  
 "What did every mother give to her child?"
- b. Kakvo podari [na nejnoto dete]i [vsjaka majka]i?  
 what give<sub>PAST.3SG</sub> to her child every mother  
 (Bg, Arnaudova 2003: 115-116)

Thus, the subject may bind the possessive pronoun of the object whether it follows or precedes the subject binder. Ordóñez (1998) accommodates all the cases that do not show the asymmetry by reconstruction. In (41a) and (43a) the binding conditions

concerning the occurrence of possessive pronouns are not met, and they cannot be repaired by reconstruction. Conversely, when the subject c-commands the object *and* contains the quantifier in the initial stage of the derivation (cf. 44b), reconstruction takes place, because even when the indirect object raises, the tail of the chain is c-commanded by the subject.

Recall that reconstruction is associated with A<sup>2</sup>-movement. Since there is no reconstruction taking place in the examples in (41) and (43), the data indicate that the indirect object raises via A-movement in Bulgarian.<sup>34</sup>

Summarizing, I have shown that both indirect and indirect objects are evacuated out of the PartP in Bulgarian and Serbo-Croatian via A-movement. I have suggested that the evacuation takes place for case checking in the Agr projections above PartP. Surprisingly enough, the generalization holds even for indirect objects in Bulgarian, which are introduced by the preposition *na*. They are not expected to raise out of PartP, because their case can be checked by the preposition. However, they show the same type of movement as the preposition-less indirect objects in Serbo-Croatian. In view of this, I propose that *na* is not a true preposition, but rather it is an alternative realization of dative case.<sup>35</sup> The idea receives more support from clitic doubling in the presence of *na* in Macedonian, which is a language very closely related to Bulgarian.<sup>36</sup>

In Macedonian definite direct objects and specific indirect objects are doubled by clitics. This is exemplified in (45): the direct object *pismoto* 'the letter' is doubled by the accusative clitic *go*, whereas the indirect object PP is doubled by the dative clitic *mu*.

- (45) Jana mu go dade pismoto na deteto  
 Jana him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PAST.3SG</sub> letter+the to child+the  
 "Jana gave the letter to the child" (Mac, Tomić forthcoming)

*Na* is a preposition that always introduces dative objects. It is also the only preposition in Macedonian that is compatible with clitic doubling (cf. 46a). The elements that are introduced by other prepositions, such as *za* in (46b) may not be doubled by clitics.

- (46) a. *Im* zboruvav na decata  
 them<sub>CL.DAT</sub> talk<sub>PAST.1SG</sub> to children-the  
 "I was talking to the children"  
 b. (\**Im*) zboruvav za decata  
 them<sub>CL.DAT</sub> talk<sub>PAST.1SG</sub> about children-the  
 "I was talking about the children" (Mac, Berent 1980: 152; 174)

It is standardly assumed in the literature that clitic doubling is a means of case checking for the objects that are associated with the clitics (cf. chapter 4 for details). In this scenario, the fact that the dative PPs are clitic-doubled in Macedonian implies that they require case checking by doubling, and that they may not receive case from the preposition *na*. This indicates that *na* is not a preposition, but the realization of dative case.

<sup>34</sup> Note that it has also been observed that A-movement need not destroy binding possibilities, as there are instances of reconstruction associated with A-movement (cf. Hoekstra 1991, Fox 1999). However, it is necessary to assume that movement of arguments in Bulgarian is subject to reconstruction, as otherwise the contrast between (41) and (44) cannot be maintained.

<sup>35</sup> See Asbury (2005) for a similar proposal for Hungarian.

<sup>36</sup> Clitic doubling will be analyzed in detail in chapter 4. Here I only make a brief reference to the phenomenon.

## 2.3.3.2.1.5 Movement of PP- and small clause complements

The preceding sections discussed raising of direct and indirect objects out of the PartP. It has been demonstrated that these elements always undergo A-movement, even when the indirect object is introduced by the preposition *na*. However, it is still necessary to account for the evacuation of PP complements, such as *na vlaka* ‘for a train’ and *na riba* ‘for a fish’ (cf. 47 and 48), as they may not be pied-piped by the *l*-participle when it moves to Spec, TP.

- (47) a. Ivan e čakal na vlaka  
 Ivan be<sub>PRES,3SG</sub> wait<sub>PART,M,SG</sub> on train  
 “Ivan has waited for the train”  
 b. \*Čakal na vlaka e Ivan  
 wait<sub>PART,M,SG</sub> on train be<sub>PRES,3SG</sub> Ivan (Bg, P. Vitkova, p.c.)
- (48) a. Otišul beše na riba  
 go<sub>PART,M,SG</sub> be<sub>PAST,3SG</sub> on fishing  
 “He had gone fishing”  
 b. \*Otišul na riba beše  
 go<sub>PART,M,SG</sub> on fishing be<sub>PAST,3SG</sub> (Bg, cf. Lambova 2004: 239)

In principle, since the PP complements are introduced by the same preposition as the indirect object, it might be possible to claim that here *na* is not a preposition, but a case realization. The problem with this assumption is that PP complements do not have to be doubled by clitics in standard Macedonian (cf. 49a), or they are doubled when they are not introduced by a preposition (cf. 49b). Therefore, it is difficult to determine whether *na* in (47) and (48) represents a case realization, or whether it is a true preposition.

- (49) a. Otidov na odmor/odmorot  
 go<sub>PAST,1SG</sub> on holiday/holiday-the  
 “I went on holiday”  
 b. Go čekav vozot/devojčeto  
 him<sub>CL,ACC</sub> wait<sub>PAST,1SG</sub> train-the/girl-the  
 “I waited for the train / the girl” (Mac, L. Grujoska; O. Tomić p.c.)

Olga Tomić (p.c.) informs me that the distribution of the Macedonian equivalents of the PP complements found in other languages is further complicated by the fact that in general they are DPs used without any preposition. In some dialects, though, PP complements are available. They are compatible with clitic doubling, which suggests that in these contexts *na* is a case realization as well.<sup>37</sup>

- (50) Go čekav na devojčeto  
 him<sub>CL,ACC</sub> wait<sub>PAST,1SG</sub> on girl-the  
 “I waited for the girl” (South-Eastern Mac, O. Tomić p.c.)

<sup>37</sup> *Devojčeto* ‘the girl’ is a diminutive, and as such it is doubled by the masculine singular clitic *go*, even though its natural gender is feminine. See chapter 4, section 4.4.2.4.2.1 for a detailed explanation of this phenomenon.

More research is required in order to conclusively establish the nature of PP-complements in South Slavic. However, irrespectively of the future findings, it is worth pointing out that according to some recent proposals PP complements are always generated outside the VP (PartP), so there is no need for movement of these elements out of the PartP, because they are never inside it. For instance, Barbiers (1995) argues that PP complements are base-generated external to the VP in Dutch, and that the thematic relation between the verb (phrase) and the PP is established via overt or covert movement of the VP into the specifier of the PP. One of the arguments for this proposal is that it provides a natural explanation of PP extraposition.

- (51) a. Jan heeft [PP op vader] [VP gewacht]  
 John has for father waited  
 b. Jan heeft [PP [VP gewacht] [PP op vader]] (Dutch, Barbiers 1995)

Another option would be to generalize Kayne's (2004) suggestion that at least some prepositions are merged as probes external to VP to all prepositions of PP-complements. These prepositions would then be generated external to PP and attract the DP-complement of the verb into their specifier. The movement would be obligatorily followed by raising of P to the head of a WP.

- (52) [WP ... W+P [PP DP t<sub>P</sub> [VP V t<sub>DP</sub>]]]

The discussion of these two alternative proposals is clearly beyond the scope of this thesis. The remarks above are made to show that the assumption that PPs are generated VP-internally and do not undergo A-movement is not as uncontroversial as it is often believed. For the time being, I assume that one of the alternative proposals is on the right track, and that as far (parts of) PP complements are generated PartP (VP)-internally, they must be moved to a PartP-external position.

Apart from the PP-complements, small clause predicates such as *žuto* 'yellow' in (53) must raise out of the PartP as well, as they may not be pied-piped by the *l*-participle when it moves to Spec, TP.

- (53) a. Ofarbao je zid žuto  
 paint<sub>PART,MSG</sub> be<sub>PRES,3SG</sub> wall<sub>MSG</sub> yellow<sub>N,SG</sub>  
 "He painted the wall yellow"  
 b. \*Ofarbao žuto je zid (S-C, N. Milićević, p.c.)

I am not in the position to provide a motivation for this movement. A potential solution might be to follow Broekhuis (2005), who suggests that in similar cases in Dutch the Small Clause complement raises in order to check the  $\varphi$ -features of V. A serious problem with this idea is the fact that in Slavic these complements do not agree with any other elements in the clause, and are often introduced by prepositions. For instance, the adjective *žuto* in (53) always occurs in the singular neuter form. It is also possible to have adverbial Small Clause complements, without any  $\varphi$ -feature specification whatsoever. I leave the explanation of this issue for future research.

Summarizing, on the basis of crosslinguistic evidence from the South Slavic languages I have shown that both direct and indirect objects must raise out of the PartP for case checking via A-movement. The movement occurs in all contexts, even when indirect objects are introduced by prepositions. Moreover, it has been demonstrated

that PP complements and small clause complements are evacuated out of the PartP as well. However, the trigger for this operation is unknown.

## 2.3.4 Word order in the Slavic left periphery

The preceding parts of this chapter have outlined the analysis of participle fronting across the auxiliary ‘to be’ in terms XP-movement. However, this is not the only type of movement that may take place across the auxiliary. As is well-known, the Slavic languages have a very lax word order, and different categories may be preposed in order to reflect the ways information is structured in discourse. As a rule, elements that carry old information appear clause-initially, while the ones that express new information occur towards the right periphery of the sentence. This relative freedom of word placement may potentially bear on the analysis developed in this chapter. It has been argued that participle fronting is an instance of locative inversion, which is contingent on the subject agreement marking on the *I*-participle. Since the auxiliary may be preceded by different categories, it is necessary to demonstrate that only the *I*-participle may raise via locative inversion, while the displacement of other elements involves different operations. This will be done in sections 2.3.4.1 through 2.3.4.4, whereas the remaining parts of the chapter will give more support for the XP-movement approach to participle fronting by providing more relevant data.

Section 2.3.4 is organized as follows. Section 2.3.4.1 discusses discourse effects associated with participle movement across clitic and non-clitic auxiliaries. Section 2.3.4.2 examines syntactic and semantic effects triggered by the placement of elements other than the *I*-participle in the clause initial position. Section 2.3.4.3 addresses the question of whether all constituents that precede the auxiliary target the same position as the fronted *I*-participle. Section 2.3.4.4 demonstrates that this is not the case and discusses different types of focus movement.

### 2.3.4.1 Two types of *I*-participle fronting

The examples in (54) and (55) present minimal pairs exemplifying two types of participle fronting in Bulgarian and Serbo-Croatian, respectively. The sentences in (54a) and (55a) contain the present tense auxiliaries, while the ones in (54b) and (55b) are formed with an auxiliary in the past tense.

- (54) a. Gledali sa filma  
 watch<sub>PART.PL</sub> be<sub>PRES.3PL</sub> movie-the  
 “They have watched the movie”  
 a’. \*Sa gledali filma  
 b. Gledali bjaxa filma  
 watch<sub>PART.PL</sub> be<sub>PAST.3PL</sub> movie-the  
 “They had WATCHED the movie”  
 b’. Bjaxa gledali filma  
 “They had watched the movie”
- (Bg, Lambova 2003)

- (55) a. Sreo je Petra  
 meet<sub>PART.MSG</sub> be<sub>PRES.ISG</sub> Peter  
 "He (has) met Peter"
- a'. \*Je sreo Petra
- b. Sreo bejaše Petra  
 meet<sub>PART.MSG</sub> be<sub>PAST.ISG</sub> Peter  
 "He had MET Peter"
- b'. Bejaše sreo Petra  
 "He had met Peter" (S-C, Embick & Izvorski 1997)

As can be inferred from the data in (54a') and (55a'), the present tense auxiliaries are enclitics, so they need a phonological support to the left. The movement of the *l*-participle fulfils this requirement. By contrast, the past tense auxiliaries in (54b) and (55b) are not enclitic, and they need not be preceded by any overt material.

Some previous analyses have argued for a relationship between the clitic status of the auxiliary and participle fronting. For instance, Lema and Rivero (1989), Rivero (1991), and Wilder and Čavar (1994) have claimed that the movement is motivated by the need to provide a phonological host for the auxiliary enclitic. However, this view has been proved to be inadequate on both theoretical and empirical grounds (cf. Bošković 1995).

From a theoretical perspective this claim is problematic, because it presupposes a "look-ahead" in the derivation. It suggests that the displacement does not occur in the interest of the moved element, but rather for altruistic reasons, to circumvent the phonological deficiency of another constituent. Moreover, the assumption cannot be on the right track for empirical reasons. It will be shown in section 2.3.4.4 (cf. also footnote 42), that a number of different categories, such as adverbs and DP objects can be preposed to the position in front of the auxiliary clitic for semantic reasons, such as focus or topicalization. The same type of semantic interpretation is observed when the raising occurs across a clitic and a non-clitic auxiliary. The fact that they may provide phonological support for the auxiliary is thus only a side-effect of their movement.

Crucially, Bošković (1995: 250ff) explicitly shows that providing a host for an enclitic is not sufficient to trigger participle movement, even if it means that the clitic remains otherwise stranded in the clause initial position. The case in question is the interrogative particle *li*, which is an enclitic, and is commonly argued to be in C (cf. section 2.3.6.3.3 and chapter 4). As demonstrated in (56a) for Serbo-Croatian, *li* may not appear sentence initially, and must be supported by another element, such as the finite verb *ljubi*, which undergoes head movement in (56b). However, the verb needs to be finite to be able to raise to this position. As shown in (56c), the movement of the *l*-participle *poljubio* is barred, which is unexpected if it occurs in order to provide support for the enclitic. If this were the case, example (56c) should be as grammatical as (56b).<sup>38</sup>

<sup>38</sup> Observe that the Bulgarian variant of (56c) is grammatical.

- (i) Celunal li ja e?  
 kiss<sub>PART.MSG</sub> Q her<sub>CL.ACC</sub> be<sub>3SG</sub>  
 "Did he kiss her?" (Bg. S. Marinov, p.c.)

This indicates that from a crosslinguistic point of view *li* does not have any inherent property that blocks participle fronting. It is rather a feature of Serbo-Croatian, which disallows movement of the *l*-participle to a position higher than Spec, TP.



- (56) a. \*Li ljubi nju?  
           Q kiss<sub>PRES,3SG</sub> her  
 b. [C Ljubi li] nju?  
           kiss<sub>PRES,3SG</sub> Q her  
       “Does he kiss her?”  
 c. \*[CP Poljubio li] je nju?  
           kiss<sub>PART,MSG</sub> Q be<sub>AUX,3SG</sub> her  
       “Did he kiss her?” (S-C, Bošković 1995: 251)

This conclusively shows the clitic status of the auxiliary is not a sufficient condition to drive participle movement. Bošković (1995: 251) argues that it is also not a necessary condition. This is demonstrated by the examples containing the non-clitic, past tense auxiliary *bjaxa/bejaše* in (54) and (55), which are partly repeated as (57).

- (57) a. Gledali bjaxa filma  
           watch<sub>PART,PL</sub> be<sub>PAST,3PL</sub> movie-the  
       “They had WATCHED the movie”  
 a’. Bjaxa gledali filma  
       “They had watched the movie” (Bg, Lambova 2003)  
 b. Sreo bejaše Petra  
           meet<sub>PART,MSG</sub> be<sub>PAST,1SG</sub> Peter  
       “He had MET Peter”  
 b’. Bejaše sreo Petra  
       “He had met Peter” (S-C, Embick & Izvorski 1997)

The *l*-participle in (57a) and (57b) is preposed across the past tense auxiliaries, even though they are not enclitic and do not need to be prosodically supported. Still, although the movement is not required in (57), it does not mean that it is “optional”. Embick and Izvorski (1995), as well as Lambova (2003), observe that the reordering across *bjaxa/bejaše* gives rise to a contrastively focused, or ‘non-neutral’ interpretation of the predicate. This is also marked in the translations of examples (57a and b).

It is evident that the participle movement across the non-clitic auxiliary cannot be driven only by the need to check the  $\varphi$ -features of T. It always results in a “non-neutral” interpretation, which in general is not associated with the TP layer. Following Lambova (2003), I will assume that the *l*-participle lands higher when it is preposed across the non-clitic auxiliary, and the movement is triggered by a focus feature. However, since the *l*-participle shows subject agreement, it must move via Spec, TP, the way it does in the case fronting across the clitic auxiliary.

The derivation of (57a) is given in (58b-c). As suggested by Lambova (2003), I will term the focus projection that is the target of *l*-participle movement  $\Delta$ P (“Delta Phrase”).

- (58) a. Gledali bjaxa filma decata  
           watch<sub>PART,MSG</sub> be<sub>PAST,3PL</sub> movie-the children-the  
       “The kids have watched the movie”  
 b. [ $\Delta$ P [TP [T<sub>+</sub> $\varphi$ ] ... [Aux bjaxa ... [AgrO [PartP gledali<sub>+</sub> $\varphi$ ] filma]]]]]  
 c. [ $\Delta$ P [PartP gledali t<sub>k</sub>] [TP t<sub>i</sub>’ [T bjaxa<sub>j</sub> ... [Aux t<sub>j</sub> ... [AgrO filma<sub>k</sub> [t<sub>PartP</sub> t<sub>k</sub>]]]]]]]

As in the case of participle fronting across the enclitic auxiliary, it is necessary to raise the object *filma* ‘movie’ out of PartP into Spec, AgrO for case checking. Subsequently, the auxiliary *bjaxa* moves to T and checks Tense. Next, the remnant PartP raises to

Spec, TP and checks the  $\varphi$ -features of T. It still needs to check the focus feature, and it does so by landing in Spec,  $\Delta$ P.

Summarizing, it has been demonstrated that Bulgarian and Serbo-Croatian have two types of participle fronting: across the clitic and non-clitic forms of the auxiliary. The latter type gives rise to a focus interpretation of the *l*-participle, and hence is triggered by a focus feature. In spite of the different semantic effects associated with the two types of participle movement, it was shown that the clitic form of the auxiliary is neither a sufficient nor a necessary condition for the operation.

### 2.3.4.2 Constituents in the left periphery

It has been remarked that the word order in Slavic languages is often determined by the information structure of the clause or a desire to focus or topicalize a certain constituent. As a result, the auxiliary may be preceded not only by the subject or by the *l*-participle, but also by a number of other constituents. Yet, since the basic word order is SVO, the sentence in (59) represents the most neutral pattern, with the subject preceding the auxiliary.

- (59) Mislja će Ivan/toj e kupil knjigata  
 think<sub>1SG</sub> that Ivan/he be<sub>AUX.3SG</sub> buy<sub>PART.MSG</sub> book-the  
 “I think that Ivan/he bought the book” (Bg, Rudin 1986: 24-25)

Section 2.2.1 showed that the *l*-participle may be moved to the position in front of the auxiliary as well.

- (60) Mislja će kupil e knjigata  
 think<sub>1SG</sub> that buy<sub>PART.MSG</sub> be<sub>AUX.3SG</sub> book-the  
 “I think that he has bought the book” (Bg)

However, the auxiliary, as well as other types of clitics that cluster together with it, may also be preceded by a direct object (cf. 61a), an adverb (cf. 61b and c), as well as the subject accompanied by the object (cf. 61d) or a *wh*-word (cf. 61e).

- (61) a. Mislja će **knjigata** e kupil Ivan **object**  
 think<sub>1SG</sub> that book-the be<sub>AUX.3SG</sub> buy<sub>PART.MSG</sub> Ivan  
 “I think it’s the book that Ivan has bought” (Bg, Rudin 1986: 24)
- b. Mislja će **pravilno** e odgovoril **adverb**  
 think<sub>1SG</sub> that correctly be<sub>AUX.3SG</sub> answer<sub>PART.MSG</sub>  
 na vüprosa im  
 to question their  
 “I think that he has answered their question correctly” (Bg, Caink 1999)
- c. Mislja će **mnogo** süm dovolen **adverbial modifier**  
 think<sub>1SG</sub> that very be<sub>1SG</sub> glad<sub>M</sub>  
 “I think that I’m very glad” (Bg, M. Lambova, p.c.)
- d. Razbrax će **knjigata (Ivan)** ja **object+subject**  
 find-out<sub>PAST.1SG</sub> that book Ivan CL<sub>ACC.F</sub>  
 beše pročel (Ivan)  
 be<sub>PAST.3SG</sub> read<sub>PART.MSG</sub> Ivan  
 “I had found out that Ivan had read the book indeed”  
 (Bg, Dimitrova-Vulchanova 1998: 17)

- e. Čudja se (Ivan) na kogo e **subject+wh-word**  
 wonder<sub>PRES.1SG</sub> CL.REFL Ivan to whom be<sub>PRES.3SG</sub>  
 kupil podaruk (Ivan)  
 buy<sub>PART.MSG</sub> present Ivan  
 “I wonder for whom Ivan has bought a present”  
 (Bg, Dimitrova-Vulchanova 1998: 17)

The same observations hold for main clauses, where the clitic auxiliary may be preceded by many different types of categories as well. In most cases these constituents can be premodified by another element, which clearly shows that they are XPs.

- (62) a. Mnogo brzo e pročel knjigata **AdvP**  
 very quickly be<sub>PRES.3SG</sub> read<sub>PART.MSG</sub> book-the  
 “He has read the book very quickly” (Bg, S. Marinov p.c.)  
 b. Počti vsičko sme vzejeli ot xladilnika **AdvP**  
 almost everything be<sub>PRES.1PL</sub> take<sub>PART.PL</sub> from fridge  
 “We took almost everything from the fridge” (Bg, V. Tchonova, p.c.)  
 c. Dovoleno sam **Adjective**  
 glad<sub>M</sub> be<sub>PRES.1SG</sub>  
 “I am glad”  
 d. Mnogo sam dovolen<sup>39</sup> **modifier of a predicative adjective**  
 very be<sub>PRES.1SG</sub> glad<sub>M</sub>  
 “I am very glad” (Bg, Caink: 1999; P. Vitkova p.c.)

In embedded clauses in Serbo-Croatian the auxiliary clitic must be in the second position, so it always follows the complementizer (cf. the example in footnote 27, repeated as 63).

- (63) a. \*Ivan kaže da čitala je (Marija) Krležu  
 Ivan says that read<sub>PART.F.SG</sub> be<sub>PRES.3SG</sub> Marija Krleža<sub>ACC</sub>  
 b. Ivan kaže da je (Marija) čitala Krležu  
 Ivan says that be<sub>PRES.3SG</sub> Marija read<sub>PART.F.SG</sub> Krleža<sub>ACC</sub>  
 “Ivan says that Mary/she has read Krleža” (S-C, Wilder & Čavar 1994: 8)

However, just as in Bulgarian, in main clauses in Serbo-Croatian the auxiliary clitic may also be preceded by constituents of many different types. This is shown in (64) for the equivalents of the Bulgarian sentences in (62).

- (64) a. Veoma brzo je pročitao knjigu  
 very quickly be<sub>PRES.3SG</sub> read<sub>PART.MSG</sub> book<sub>ACC</sub>  
 “He has read the book very quickly”

<sup>39</sup> It is impossible to front the adjective together with its adverbial modifier, as *\*Mnogo dovolen sam* is ungrammatical. I suggest that this is due to a requirement that movement carries as little material as possible (cf. Chomsky 1995: 264-265). A comparable restriction seems to hold for preposition stranding in English, in which it is preferred to strand a preposition and raise just a *wh*-word (H. Broekhuis, p.c.).

- (i) a. Who did you talk to?  
 b. To whom did you talk?

- b. (Skoro) sve smo uzeli iz frižidera  
 almost all be<sub>PRES.1PL</sub> take<sub>PART.PL</sub> from fridge  
 “We took almost everything from the fridge”
- c. (\*Mnogo) zadovoljan sam  
 very glad<sub>M</sub> be<sub>PRES.1SG</sub>  
 “I am glad”
- d. Mnogo sam zadovoljan  
 very be<sub>PRES.1SG</sub> glad<sub>M</sub>  
 “I am very glad” (S-C, N. Milićević, p.c.)

Summarizing, this section has enumerated a number of categorially unrelated elements that may be placed in the clause initial position in front of the auxiliary. In the next section I will investigate whether this means that they all land in the same position as the *l*-participle.

### 2.3.4.3 Is it a case of stylistic fronting?

In principle, it might be possible to argue that all the elements preceding the auxiliaries in (61) and (62) target Spec, TP, just as the subject or the *l*-participle. In fact, this is an assumption made by Holmberg (2000) in his analysis of stylistic fronting in Icelandic and Faeroese.

The relevant data are given in (65) through (68). Holmberg argues that each of the italicized elements in the examples below, such as negation in (65), the sentence adverb in (66), the PP in (67) and the DP in (68) targets Spec, TP, and that their displacement does not change the meaning of the clauses in any way.

- (65) a. Þetta er tilboð [sem er ekki hægt að hafna]  
 this is offer that is not possible to reject  
 “This is an offer that cannot be rejected”  
 b. Þetta er tilboð [sem *ekki* er t<sub>i</sub> hægt að hafna]
- (66) a. Hver sagðir þu' [að hefði sennilega skrifað þessa bók]?  
 who said you that has probably written this book  
 “Who did you say has probably written this book?”  
 b. Hver sagðir þu' að *sennilega* hefði t<sub>i</sub> skrifað þessa bók?
- (67) a. Þeir sem hafa verið í Ósló segja að...  
 those that have been in Oslo say that  
 “Those who have been to Oslo say that...”  
 b. Þeir sem í *Ósló* hafa verið t<sub>i</sub> segja að...
- (68) a. Þeir sem verða að taka þessa erfiðu ákvörðun  
 those that have to take this difficult decision  
 “Those who have to take this difficult decision...”  
 b. Þeir sem *þessa erfiðu ákvörðun* verða t<sub>i</sub> að taka  
 (Icelandic, Holmberg 2000: 448-449)

The movement is assumed by Holmberg to be triggered by a variant of the EPP feature, which requires that Spec, TP be filled by some phonological material. The exact grammatical category of the element that undergoes movement is irrelevant, because it functions as a pure expletive, and only the phonological feature matrix lands in this

position, whereas the semantic and formal features can be left in situ. In most cases it is the subject that raises to Spec, TP. If for some reason the subject is not available for the movement, the closest phonologically overt category must raise. In this way any element may function as an expletive, whose sole role is to fill in Spec, TP.

Holmberg (2006) suggests that this analysis might potentially be extended to participle fronting in the Slavic languages, given that the constructions have several properties in common, such as clause boundedness and lack of semantic effects on the sentence interpretation. In spite of these similarities, I reject this option, and I argue that only those elements that have the appropriate  $\varphi$ -features, that is the subject or the  $\lambda$ -participle, can target Spec, TP. Even though all the preposed elements in examples (61) through (64) uniformly precede the auxiliary, they will be argued to be located higher than Spec, TP. Let me consider some motivations for this claim.

In the Bulgarian examples in (61) and (62) the auxiliary verb is immediately preceded by adverbials, prepositional phrases, and other categories. Their placement with respect to the auxiliary does not necessarily imply that they are hosted in Spec, TP, though. First of all, they do not agree with the subject, so they are not eligible candidates for checking the  $\varphi$ -features of T. Secondly, in certain marked contexts they can precede the subject (cf. 69a) or the fronted participle (cf. 69b and c), which indicates that they are located higher than Spec, TP.<sup>40</sup>

- (69) a. (Bŭrzo) Ivan e pročel knjigata  
 quickly Ivan be<sub>PRES.3SG</sub> read<sub>PART.MSG</sub> book-the  
 “Ivan has read the book (really) quickly” (Bg, S. Marinov p.c.)
- b. Tŭkmo polučil beše izvestieto  
 just-then receive<sub>PART.MSG</sub> be<sub>PAST.AUX.3PL</sub> letter-the  
 “Just then he had received the letter” (Bg, Lambova 2004: 254)
- c. Za izpita čel e bil Ivan  
 for exam read<sub>PART.MSG</sub> be<sub>AUX.3SG</sub> be<sub>PART.MSG</sub> Ivan  
 “Concerning the exam, Ivan has supposedly studied for it”  
 (Bg, M. Lambova p.c.)

In Serbo-Croatian, the evidence is harder to find, because the present tense auxiliary is a Wackernagel clitic, which can be preceded by at most one constituent (cf. 70a). However, the past tense auxiliary is not a clitic, so it does not have to appear in the second position. In this context either the subject (cf. 70b) or the  $\lambda$ -participle (cf. 70c) may be preposed over the auxiliary.

- (70) a. \*Brzo Jovan je čitao knjigu  
 quickly Jovan be<sub>AUX.3SG</sub> read<sub>PART.MSG</sub> book<sub>ACC</sub>  
 “Jovan read the book quickly”
- b. Brzo Jovan bješe čitao knjigu  
 quickly Jovan be<sub>PAST.AUX.3SG</sub> read<sub>PART.MSG</sub> book<sub>ACC</sub>  
 “Jovan had read the book (really) quickly”
- c. Brzo čitao bješe Jovan knjigu (S-C, N. Milićević p.c.)

The items that occur in front of the  $\lambda$ -participle or the subject always receive a focused or topicalized interpretation. This type of interpretation is not associated with the TP layer, but is rather typical of the left periphery. Therefore, it is likely that these elements

<sup>40</sup> The sentence in (69c) exemplifies a double participle construction. See section 2.3.5.2 for an analysis.

are in a Topic or Focus projection above TP. The issue will be addressed more thoroughly in the subsequent section, where I describe types of foci associated with different word orders in Slavic.

### 2.3.4.4 Focus and word order

Stjepanović (1999 ch. 3) provides a detailed account of focus effects triggered by placement of different constituents in front of the auxiliary in Serbo-Croatian.<sup>41</sup> She distinguishes among three types of foci: new information, contrastive and emphatic foci.

New information focus obtains in out-of-the-blue contexts. For instance, in an answer to the question *What happened? – John saw Mary* the whole clause is new information. Example (71) shows that new information focus (given in capitals) may also constitute the answer to a *wh*-question.<sup>42</sup>

- (71) A: Ko je kupio knjigu?  
 who be<sub>AUX.3SG</sub> buy<sub>PART.MSG</sub> book<sub>ACC</sub>  
 “Who bought a book?”  
 B: Knjigu je kupio PETAR  
 book<sub>ACC</sub> be<sub>AUX.3SG</sub> buy<sub>PART.MSG</sub> Petar  
 “The book was bought by Petar” (S-C, N. Milićević p.c.)

New information focus is always in the clause final position. Stjepanović argues that it is assigned prosodically and that it is not the result of syntactic movement.

Contrastive focus is related to the negation of a presupposition (as in *PETER bought a pen, not Mary*), whereas emphatic focus is associated with an assertion of a

<sup>41</sup> I will discuss only Serbo-Croatian here, because Bulgarian seems to pattern in a very similar way (cf. Arnaudova 2003 ch. 7). I extend Stjepanović’s analysis by studying discourse effects triggered by placement of manner, sentential, and temporal adverbs in front of the auxiliaries. For a detailed investigation of topic and focus in South Slavic see Arnaudova (2003) and Lambova (2001, 2003) on Bulgarian; Čamdžić (1999) on Serbo-Croatian; and Tomić (1996b) on Bulgarian, Macedonian, and Serbo-Croatian.

<sup>42</sup> All the examples in this section contain clitic auxiliaries. However, with the exception of the *l*-participle, the interpretation of the elements preceding the auxiliary does not depend on its clitic or non-clitic status. This is illustrated for (i), which is the equivalent of (71) in the pluperfect, and contains the non-clitic form *bješe*.

- (i) A: Ko bješe kupio knjigu?  
 who be<sub>PAST.AUX.3SG</sub> buy<sub>PART.MSG</sub> book<sub>ACC</sub>  
 “Who had bought a book?”  
 B: Knjigu bješe kupio PETAR  
 book<sub>ACC</sub> be<sub>PAST.AUX.3SG</sub> buy<sub>PART.MSG</sub> Petar  
 “The book had been bought by Petar” (S-C, N. Milićević p.c.)

The ordering of all the constituents in (i) is the same as in (71), and the subject *Petar* has the new information focus reading. The only semantic difference between (i) and (71) is temporal: the former is in the pluperfect, whereas the latter is in the past tense. This is to be expected, and shows once again that the movement of constituents in the structure is related only to the semantic interpretation of the clause, and never occurs in order to provide phonological support for the auxiliary clitic. Since the choice of the clitic versus non-clitic auxiliary does not have any bearing on the clause information structure, all the examples discussed in this section will contain the clitic forms.

presupposition (as in *Yes, JOHN did it*). According to Stjepanović, in Serbo-Croatian contrastive focus is licensed in a preverbal position. For instance, the direct object *Mariju* may be interpreted as contrastively focused in (72a), where it precedes the auxiliary; as well as in (72b), where it precedes the *l*-participle. However, this reading is unavailable when the object is located at the end of the clause (cf. 72c), because this position is associated with new information focus. Stjepanović claims that the elements that are contrastively focused move to one of the Focus projections (cf. Stjepanović 1999: 188ff), but since they also carry heavy stress, they are licensed prosodically as well. In the examples below new information focus is capitalized; contrastive/emphatic focus is bold-faced.

- (72) a. **Mariju** je Petar zagrlio  
 Marija<sub>ACC</sub> be<sub>AUX.3SG</sub> Petar hug<sub>PART.MSG</sub>  
 “It was Marija that Petar hugged”  
 b. Petar je **Mariju** zagrlio  
 Petar be<sub>AUX.3SG</sub> Marija hug<sub>PART.MSG</sub>  
 c. ??Petar je zagrlio **Mariju**  
 Petar be<sub>AUX.3SG</sub> hug<sub>PART.MSG</sub> Marija (S-C, Stjepanović 1999:73)

With these generalizations in mind, let me consider sentences that contain categories other than the *l*-participle or the subject in front of the auxiliary. The canonical pattern for transitive sentences in Serbo-Croatian, as well as all other Slavic languages is SVO. Hence, the sentence in (73b) is the most natural answer to the question in (73a).

- (73) a. Šta se desilo?  
 what REFL happen<sub>PART.N.SG</sub>  
 “What happened?”  
 b. Mačka je uhvatila miša  
 cat be<sub>AUX.3SG</sub> catch<sub>PART.F.SG</sub> mouse  
 “A cat caught a mouse”  
 c. #Miša je uhvatila mačka (S-C, N. Milićević p.c.)

The SVO order is felicitous when the whole sentence is a new information focus. Recall, though, that since Bulgarian and Serbo-Croatian are pro-drop languages, the subject is preferably omitted. However, Stjepanović (1999: 94) claims that the subject must appear clause-initially when it is presupposed. Therefore, the sentence in (73b) is also the most felicitous reply to the question *What has the cat done?*

The OVS order is found less often and always occurs in semantically marked contexts. According to Stjepanović (1999: 92, 97), it may arise when both the verb and the object are presupposed, and when the subject receives the main sentence stress. This is exemplified in (74b), where the subject *Marko* appears at the end of the clause, because it constitutes new information focus.

- (74) a. Ko je udario Petra?  
 who be<sub>AUX.3SG</sub> hit<sub>PART.MSG</sub> Peter<sub>ACC</sub>  
 “Who hit Peter?”  
 b. Petra je udario MARKO  
 Peter<sub>ACC</sub> be<sub>AUX.3SG</sub> hit<sub>PART.MSG</sub> Marko  
 “Marko hit Peter” (S-C, Stjepanović 1999: 97)

Furthermore, the OVS order may also correlate with the contexts in which only the object, such as *Peter* in (75b), is presupposed, and the remaining part of the sentence represents new information focus.

- (75) a. Šta se desilo Petru?  
 what REFL happen<sub>PART.N.SG</sub> Peter<sub>DAT</sub>  
 “What happened to Peter?”  
 b. Petra JE UDARIO AUTO  
 Peter<sub>ACC</sub> be<sub>AUX.3SG</sub> hit<sub>PART.M.SG</sub> car  
 “A car hit Peter” (S-C, Stjepanović 1999: 98)

Let us turn to examples with clause-initial adverbs. Just as the other elements that are placed at the beginning of a sentence, they represent old information. Thus, the sentence in (76b) is a felicitous reply to the question *What happened yesterday?*

- (76) a. Šta se desilo juče?  
 what REFL happen<sub>PART.N.SG</sub> yesterday  
 “What happened yesterday?”  
 b. Juče JE PETAR KUPIO KNJIGU  
 yesterday be<sub>AUX.3SG</sub> Peter buy<sub>PART.M.SG</sub> book  
 “Yesterday Peter bought a book” (S-C, N. Milićević p.c.)

The event time of the predicate in (76b) is presupposed, so the temporal adverb *juče* ‘yesterday’ appears at the beginning of the clause. However, the string that follows it constitutes “new information” and correspondingly receives new information focus.

As far as manner (cf. 77b, c) and sentential adverbs (cf. 77d) are concerned, native speakers report that they are usually positioned at the beginning of a clause. The remaining parts of the sentences following the adverbials in (77) are new information foci.

- (77) a. Šta se desilo?  
 what REFL happen<sub>PART.N.SG</sub>  
 “What happened?”  
 b. Brzo je Petar bacio knjigu  
 quickly be<sub>AUX.3SG</sub> Peter packed<sub>PART.M.SG</sub> book  
 “Peter packed the book quickly”  
 c. Potpuno smo ispraznili frižider  
 completely be<sub>AUX.1PL</sub> empty<sub>PART.M.PL</sub> refrigerator  
 “We emptied the refrigerator completely”  
 d. Neočekivano smo dobili pismo  
 unexpectedly be<sub>AUX.1PL</sub> receive<sub>PART.M.PL</sub> letter  
 “We received a letter unexpectedly” (S-C, N. Milićević p.c.)

Hence, a clause containing a manner or a sentential adverb in which a subject or an *l*-participle occurs in the initial position will not be the most felicitous answer to the question *What happened?*, because it will put the adverb in the new information focus position.



- (78)            Petar je            bacio            knjigu BRZO  
                   Peter be<sub>AUX.3SG</sub> packed<sub>PART.MSG</sub> book quickly  
                   “Peter packed the book really quickly”            (S-C, N. Milićević p.c.)

To summarize, we have seen that in Serbo-Croatian the constituents whose referents are presupposed are placed at the beginning of a clause, while the new information foci are located in the right periphery. This pattern is not surprising, because it has been known since Mathesius’ work in the early 20<sup>th</sup> century (see Mathesius 1975 for an English version of his publications) that the ordering of sentence constituents in Slavic generally reflects the theme-rheme distinction: the elements representing old information are followed by those carrying new information.

Finally, consider the contexts in which the *l*-participle or the subject occurs at the beginning of the clause. They involve the most neutral word orders, but it is the discourse information structure that decides whether the subject or the *l*-participle is preposed. For example, (79a) is the most felicitous reply to the question *What happened?*, that is, in the context when the whole sentence constitutes new information focus. If the subject *Petar* has been previously mentioned and hence its referent is presupposed, there is no need to repeat it, which may result in fronting of the participle to the initial position, as in (79b). Placement of the subject towards the right periphery of the clause gives rise to special discourse effects. For instance, in the VSO pattern in (79c) the fronted participle is understood as emphatically focused: the event of buying the book has been presupposed and is reasserted.

- (79)    a.    Petar    je            kupio            knjigu  
                   Peter    be<sub>AUX.3SG</sub> buy<sub>PART.MSG</sub> book<sub>ACC</sub>  
                   “Peter has bought a book”  
       b.    Kupio            je            knjigu    (juče)  
                   buy<sub>PART.MSG</sub> be<sub>AUX.3SG</sub> book    (yesterday)  
                   “He bought the book (yesterday)”  
       c.    Kupio            je            Petar    knjigu<sub>ACC</sub>  
                   buy<sub>PART.MSG</sub> be<sub>AUX.3SG</sub> Peter book<sub>ACC</sub>  
                   “Oh yes, Peter did buy the book”            (S-C, N. Milićević, p.c.)

Stjepanović (1999) does not discuss transitive examples like the ones in (79). However, she mentions sentences with unaccusative participles, such as *umro* ‘die’, and argues that the sentence in (80a), with the subject *Truman* in the initial position would be uttered in a situation where people had been aware of Truman and his illness before his death. In this way his death is interpreted as new information. Conversely, if Johnson’s death came unexpectedly, the only way to express the information under neutral focus is to put the subject in the final position, as in (80b).

However, if the subject *Johnson* is preposed to the initial position and receives stress, as in (80c), it is interpreted as contrastively focused. That is, the meaning of the sentence is that it is Johnson and not anybody else who died.

- (80)    a.    Truman je            UMRO  
                   Truman be<sub>AUX.3SG</sub> die<sub>PART.MSG</sub>  
                   “Truman died”

- b. Umro je JOHNSON  
 die<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> Johnson  
 “Johnson died”
- c. Johnson je umro  
 Johnson be<sub>AUX.3SG</sub> die<sub>PART.M.SG</sub>  
 “Johnson died”
- (S-C, Stjepanović 1999: 89)

Summarizing, the preceding sections have shown that although the Slavic languages have very free word order, the most natural one is SVO. As a rule, placement of temporal adverbs or objects at the beginning of a sentence requires special information structure contexts, which indicates that these elements are located in the Topic/Focus domain, above the TP layer. By contrast, movement of the subject or the *l*-participle to the initial position usually does not result in a focused interpretation of a clause.<sup>43</sup> This fact suggests that only these two elements may raise to Spec, TP.

## 2.3.5 L-participle fronting as XP movement - elaboration

The preceding parts of this chapter have demonstrated that only the subject or the *l*-participle may target Spec, TP. The following sections will provide more arguments for the analysis of participle fronting in terms of XP-movement. In particular, more evidence will be drawn from the properties of short participle movement discussed in section 2.3.5.1. The operation will be shown to be obligatory in Bulgarian (cf. section 2.3.5.1.2), but not in Serbo-Croatian (cf. section 2.3.5.1.1). The conclusions reached there will be confirmed by patterns of double participle constructions investigated in section 2.3.5.2. Finally, participle fronting will be juxtaposed with finite verb movement in the contexts of future tense constructions in section 2.3.5.3 and negation in section 2.3.6.

### 2.3.5.1 Auxiliary-participle adjacency

The following section will point out some differences between participle movement in Bulgarian and Serbo-Croatian concerning the adjacency between the auxiliary and the participle. The contrast between the two languages will be argued to be related to the richness of aspectual marking in Bulgarian.

The Bulgarian and Serbo-Croatian examples in (81a) and (81b) indicate that the fronted participle must always be left-adjacent to the auxiliary.

- (81) a. Čel (\*būrzo) e/beše knjigata (būrzo)  
 read<sub>PART.M.SG</sub> quickly be<sub>PRES/PAST.3SG</sub> book-the quickly  
 “He has/had read the book (quickly)” (Bg, cf. Lambova 2003)
- b. Zaboravio (\*potpuno) je/bješe Petra potpuno  
 forget<sub>PART.M.SG</sub> completely be<sub>PRES/PAST.3SG</sub> Peter completely  
 “Jovan has/had completely forgot Peter” (S-C, cf. Bošković 1995)

<sup>43</sup> Note, though, that the exact discourse function of the clause-initial *l*-participle also depends on the position of the constituents in the right periphery, as in (79c).

This is expected on the assumption that the fronted participle is in Spec, TP, whereas the auxiliary lands in T<sup>0</sup>, therefore no phrasal material may intervene between the two constituents.<sup>44</sup> Thus, the only elements that may occur between the fronted participle and the present tense auxiliary are clitics forming a clitic cluster.

- (82) Dal mu go e  
 give<sub>PART.MSG</sub> him<sub>CL.DAT</sub> him<sub>CL.ACC</sub> be<sub>PRES.3SG</sub>  
 “He has given it to him” (Bg)

However, Bulgarian and Serbo-Croatian exhibit divergent adjacency patterns when the *l*-participle follows the auxiliary. Namely, Bulgarian requires the auxiliary to be adjacent to the participle in such contexts, and neither an adverb (cf. 83a) nor an object (cf. 83b) may split their sequence.<sup>45</sup>

- (83) a. Ivan e/beše (\*būrzo) čel būrzo knigata  
 Ivan be<sub>PRES/PAST.3SG</sub> quickly read<sub>PART.MSG</sub> quickly book  
 “Ivan has/had the book quickly”  
 b. Ivan e/beše (\*knigata) čel knigata  
 Ivan be<sub>PRES/PAST.3SG</sub> book-the read<sub>PART.MSG</sub> book  
 (Bg, cf. Lambova 2003)

The fact that the intervening elements *būrzo* and *knigata* are of different categories implies that the constraint is related to movement of the main verb, rather than object shift or a restriction on adverb placement in this position. Therefore, I will refer to the operation as ‘short verb/participle movement’.

In contrast to Bulgarian, Serbo-Croatian does not impose any adjacency restrictions in the auxiliary-participle contexts and allows both adverbs (cf. 84a) and objects (cf. 84b) to intervene between the two constituents.

- (84) a. Jovan je (potpuno) zaboravio (potpuno) Petra  
 Jovan be<sub>AUX.3SG</sub> completely forget<sub>PART.MSG</sub> completely Peter  
 “Jovan completely forgot Peter”  
 b. Petar je (Mariju) zagrlio (Mariju)  
 Petar be<sub>AUX.3SG</sub> Marija<sub>ACC</sub> hug<sub>PART.MSG</sub> Marija<sub>ACC</sub>  
 “Petar hugged Marija” (S-C, Stjepanović 1999:73)

Importantly, the adjacency patterns do not hold exclusively for the *l*-participle. The same variation is observed with infinitives (cf. 85a) and finite verbs (cf. 85b), which may be followed or preceded by an adverb in Serbo-Croatian, although the latter option is strongly preferred by native speakers with all types of verbs.

<sup>44</sup> The option with the clitic auxiliary in (81b) is also ruled out, because clitics must follow the first constituent in Serbo-Croatian (cf. chapter 4).

<sup>45</sup> Some native speakers require only the present tense auxiliary to be left-adjacent to the *l*-participle and allow the past tense variant to be separated from the participle by some material. See Krapova (1999a) for details.

- (85) a. Jovan će (potpuno) zaboraviti (potpuno) Petra<sup>46</sup>  
 Jovan will<sub>CL,3SG</sub> completely forget<sub>INF</sub> completely Peter  
 “Jovan will forget Peter completely”  
 b. Petar (ludo) voli (ludo) Mariju  
 Petar madly love<sub>3SG</sub> madly Marija  
 “Petar loves Marija madly” (S-C, Stjepanović 1999: 39)

Correspondingly, it has been observed in the literature that finite verbs must move across VP adverbs in Bulgarian (cf. Lambova 2003: 7-8). This indicates that the requirement of short verb movement concerns not only *l*-participles (cf. 86), but finite verbs in the past and the present tense (cf. 87) as well. Moreover, this suggests that the movement is motivated by the same feature irrespectively of whether it is phrasal movement in the case of *l*-participles, or head movement in the case of finite verbs.<sup>47</sup>

- (86) Ivan e/beše (\*često) navestjaval (često) roditelite si  
 Ivan be<sub>PRES/PAST,3SG</sub> often visit<sub>PART,M,SG</sub> often parents self<sub>CL</sub>  
 “Ivan has/had often visited his parents” (Bg, Lambova 2003: 7-8)
- (87) a. Ivan (\*često) navestjava (često) roditelite si  
 Ivan often visits<sub>PRES,3SG</sub> often parents self<sub>CL</sub>  
 “Ivan often visits his parents”  
 b. Ivan (\*obiknoveno) e (obiknoveno) v kabineta si  
 Ivan usually be<sub>PRES,3SG</sub> usually in office self<sub>CL</sub>  
 po tova vreme  
 at this time  
 “Ivan is usually in his office at this time” (Bg, Lambova 2003: 7-8)

It is plausible that the short participle movement is an intermediate step in “long” participle fronting in Bulgarian discussed in the previous sections. Since “long” participle fronting targets an argument position, it represents A-movement. This implies that short participle movement must be of the A-type, too. If the landing site of the short participle movement were an A'-position, the “long” participle fronting would be illicit as a case of improper movement, because it would then involve raising from an A' to an A-position.

To summarize, I have presented evidence for an intermediate step in the movement of the *l*-participle and verbal heads, which is obligatory in Bulgarian. In the next section I will try to determine the trigger of the operation in both languages.

### 2.3.5.1.1 Short verb/participle movement in Serbo-Croatian

This section will argue that in spite of some superficial similarities between the short participle fronting in Bulgarian and Serbo-Croatian, these movements are of different types and occur for a different reason. The difference is related not only to the apparent “optionality” of the movement in Serbo-Croatian, but also to divergent semantic effects that the reordering brings about.

<sup>46</sup> The future auxiliary *će* may not be preceded by the adverb *potpuno*, because it is a second position clitic.

<sup>47</sup> This feature will be identified in section 2.3.5.1.2. Movement of finite verbs will be contrasted with *l*-participle fronting in sections 2.3.5.3 and 2.3.6.

Native speakers report that in neutral contexts the participle follows the adverb in Serbo-Croatian, as in (88a) and (89a). They also state that movement of the participle in front of the adverb gives rise to a somewhat focused interpretation of the adverb (N. Milićević, p.c.).

- (88) a. Jovan je potpuno zaboravio Petra  
 Jovan be<sub>AUX.3SG</sub> completely forget<sub>PART.MSG</sub> Peter  
 “Jovan completely forgot Peter”  
 b. #Jovan je zaboravio potpuno Petra (S-C)

Progovac (2005a: 31) states that the string in (89b) nearly requires a comma intonation before and after the adverb. This suggests that even though the verb movement is possible, it is dispreferred, and occurs only for special discourse effects.

- (89) a. Petar ludo voli Mariju  
 Petar madly love<sub>3SG</sub> Marija  
 “Petar loves Marija madly”  
 b. #Petar voli ludo Mariju (S-C, Stjepanović 1999: 39)

Correspondingly, given that Serbo-Croatian has SVO as the basic word order, the object follows the participle in neutral contexts. Preposing of the object in front of the participle leads to a contrastive focus reading, which was claimed to be licensed in preverbal positions (cf. section 2.3.4.4).

- (90) a. Petar je zagrlio Mariju  
 Petar be<sub>AUX.3SG</sub> hug<sub>PART.MSG</sub> Marija<sub>ACC</sub>  
 “Petar hugged Marija”  
 b. Petar je Mariju zagrlio  
 Petar be<sub>AUX.3SG</sub> Marija hug<sub>PART.MSG</sub>  
 “It was Marija that Peter hugged” (S-C, Stjepanović 1999:73)

Thus, it seems that short participle movement in Serbo-Croatian is related to the information structure of the clause, and requires a special context to be (marginally) acceptable. This suggests that the operation is not necessarily an intermediate step in the “long” participle fronting to Spec, TP. By contrast, as shown by (87), in Bulgarian the movement is not related to topic or focus considerations, because the lack of it always leads to ungrammaticality. This means that it is triggered by the necessity to establish some required feature checking configuration, as I will argue in the next section.

### 2.3.5.1.2 Short verb/participle movement in Bulgarian

Example (86) shows that in Bulgarian participles must be adjacent to the auxiliary. This fact is regarded here as an indication of short verb movement. However, there is an exception to this requirement. Krapova (1999a and b), Billings (2002), and Franks (forthcoming) observe that when the *l*-participle follows the auxiliary (or the cluster formed by the auxiliary together with pronominal clitics), the two elements may be separated from each other by aspectual adverbs, such as (*use*) *ošte* ‘still’ and *veče* ‘already’, as in (91).

- (91) a. Ivanne mu go e [vse ošte] vŭrnal  
 Ivan<sub>NEG</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> be<sub>AUX.3SG</sub> still return<sub>PART.M.SG</sub>  
 "Ivan still has not returned it to him" (Bg, Franks, forthcoming)
- b. Ivana ne e [ošte] napisala domašnoto si  
 Ivana<sub>NEG</sub> be<sub>AUX.3SG</sub> still write<sub>PART.F.SG</sub> homework-the her  
 "Ivana has not finished her homework yet"
- c. Da utre šte sŭm gi [veče] pratila  
 by tomorrow<sub>FUT</sub> be<sub>AUX.1SG</sub> them<sub>CL.ACC</sub> already send<sub>PART.F.SG</sub>  
 "By tomorrow I will have already sent them" (Bg, Krapova 1999b)

By contrast, when the participle is fronted, the aspectual adverb *veče* may not occur between the preposed participle and the auxiliary. Instead, it follows the clitic cluster that contains the auxiliary.

- (92) Dala (\*veče) sŭm ti ja veče  
 give<sub>PART.F.SG</sub> already be<sub>AUX.1SG</sub> you<sub>CL.DAT</sub> it<sub>CL.ACC</sub> already  
 "I have already given it to you!" (Bg, Franks, forthcoming)

Bošković (2001: 181) claims that these adverbs might be incorporated into the verb, on a par with adverbial clitics in some other languages (cf. Dobrovie-Sorin 1994 for Romanian).<sup>48</sup> However, Billings (2002) remarks that the explanation is incorrect, because adverbs are always stressed in this position. Moreover, in (91a) the adverb consists of two separate words, so it cannot be a clitic.

The fact that the only elements that may intervene between the auxiliary and the participle are aspectual adverbs suggests to me that the short verb movement takes place in order to check an aspect feature in a projection I will dub AspP. A similar proposal has already been made for Bulgarian by Krapova (1999a), who follows Giorgi & Pianesi's (1997) hypothesis of splitting TP into separate Tense- and Aspect-related projections.<sup>49</sup> Krapova claims that Bulgarian has two Tense projections: T1P, which dominates T2/AspP. T1 relates the reference time to the moment of speech, whereas T2/AspP relates the reference time to the event time. Following these insights, I suggest that aspect can be checked in two ways in Bulgarian: either by verb movement into Asp, or by merging an aspectual adverb in this position, as in (91).

The proposal gains additional support if we consider adjacency conditions outside the compound tenses formed with the *l*-participle. Lambova (2003: 179-180) observes that in copular constructions the verb 'to be' does not have to be adjacent to the subject or the nominal or adjectival predicate. Both clitic (cf. 93a) and non-clitic (cf. 93b) forms of the copula may be separated from the subject or the predicate by any type of adverb, not necessarily an aspectual one. This indicates that neither of these constituents must raise to the position immediately to the right of the copula.

<sup>48</sup> Alexandra Cornilescu (p.c.) points out to me that all adverbial clitics in Romanian express aspectual meanings, which makes a correlation between the Bulgarian and the Romanian patterns even stronger.

<sup>49</sup> The idea that verbs may move to check an aspect feature is not new. For example, Bok-Bennema (2001) suggests that verbs in French and Spanish may undergo short movement, which is triggered by an Aspect feature. She argues that the projection termed Agr by Pollock (1989), which is targeted by finite verbs in French, encodes an aspectual feature. Furthermore, see Svenonius (2004) for a claim that the locus of the aspectual tenses in Bulgarian is immediately below T.

- (93) a. Ivan (veče) e (veče) doktor na fizičeskite nauki  
 Ivan already be<sub>PRES.3SG</sub> already doctor of physics  
 “Ivan is already a doctor of physics”  
 a’. Doktor na fizičeskite nauki (veče) e Ivan  
 b. Ivan (opredelno) beše (opredelno) dovolen  
 Ivan certainly be<sub>PAST.3SG</sub> certainly satisfied<sub>M</sub>  
 “Ivan was certainly satisfied”  
 b’. Dovoln (opredelno) beše Ivan (Bg, Lambova 2003: 179-180; p.c.)

I would like to argue that the lack of adjacency between the copula and the predicative elements in (93) is due to the fact that the AspP projection is accessible only to categories that are specified for aspect, such as finite verbs and participles. Since adjectives and nouns do not mark aspectual distinctions, they do not pass through AspP. Consequently, they do not have to be right-adjacent to the copulas *e* and *beše*, which reside in T, immediately above AspP. They may move directly to Spec, TP, where they check the  $\varphi$ -features of T.

The postulation of AspP below TP is also relevant for the position of the subject with respect to the auxiliary. In (93) the subject may be split from the copula with an adverb. This is possible not only in copula constructions, but also in compound tenses formed with the *l*-participle, but only when the subject precedes the auxiliary (cf. 94a). If the *l*-participle is fronted, it must be adjacent to the auxiliary (cf. 94b).

- (94) a. (Nesūmneno) Ivan (nesūmneno) e pročel knjigata  
 undoubtedly Ivan undoubtedly be<sub>AUX.3SG</sub> read<sub>PART.MSG</sub> book-the  
 “Ivan has undoubtedly read the book”  
 b. (\*Nesūmneno) pročel (\*nesūmneno) e knjigata (Bg, S. Marinov, p.c.)

The data in (94) indicate that unlike the *l*-participle, the subject can be topicalized and raise across sentential adverbs, such as *nesūmneno* ‘undoubtedly’. Alexandra Cornilescu (p.c.) informs me that the impossibility of *l*-participle movement in this context might be related to the fact that verbs are the only grammatical category that may never be topicalized, but only focused (cf. also Cinque 1993).<sup>50</sup>

Furthermore, the examples in (94) also indicate that the *l*-participle in Bulgarian must always first move to Spec, AspP, and only then may it raise further to Spec, TP. By contrast, the subject does not need to target this intermediate landing site, and it may raise directly to Spec, TP. In Migdalski (2005) I suggested that the difference is related to  $\varphi$ -feature specification: the subject is marked for a full set of  $\varphi$ -features, whereas the *l*-participle carries only the gender and number features.

- (95) [TP T<sub>[+Person/Number/Gender]</sub> ... [AspP Part<sub>[+Number/Gender]</sub> ... [vP Subject<sub>[+Person/Number/Gender]</sub> ]]]

<sup>50</sup> Bošković (1997: 144-146) shows that the subject is able to move higher than the *l*-participle in Serbo-Croatian as well. For instance, in contrast to the *l*-participle, the subject may cross sentential adverbs.

- (i) a. Jovan je nesumnjivo istukao Petra  
 Jovan be<sub>AUX.3SG</sub> undoubtedly beat<sub>PART.MSG</sub> Peter<sub>ACC</sub>  
 “Jovan undoubtedly beat Peter”  
 b. \*Istukao je nesumnjivo Petra (S-C, cf. Bošković 1997: 144ff)

Assuming with Chomsky (2001) that T is specified for a full set of  $\varphi$ -features, I argued that the subject is raised when the feature [Person] is selected as the attractor. When [Gender] or [Number] are the attractors on T, the *l*-participle moves.

However, the claim makes use of a rather mechanical solution, which is *ad hoc* related to the richness of  $\varphi$ -features. It seems more reasonable to argue that the subject may not raise via AspP, because it does not have the aspectual morphology that is eligible for checking the feature of Asp.

The proposal developed here, which relates short participle movement to the presence of AspP receives typological support. Recall from chapter 1 that Bulgarian has retained the aspectual tenses inherited from Old Church Slavonic, imperfectum and aorist. Thus, it has two options of marking aspectual distinctions: via aspectual morphemes (usually prefixes) and via tense morphology. By contrast, Serbo-Croatian has lost the aspectual tenses, which in syntactic terms may mean that it does not project AspP or that this projection is weak. Consequently, there is no requirement of short verb movement in Serbo-Croatian. If a comparable movement does occur in this language, it is triggered by information structure considerations, rather than the necessity to check the aspect feature in Spec, Asp.

### 2.3.5.2 Double participle constructions

This section will analyze complex structures formed with a present tense form of the verb 'be', the *l*-participle of the verb 'be', and the *l*-participle of the main (thematic) verb. These structures will provide additional arguments for the existence of the AspP projection in the phrase structure, which is the target of the short participle movement.

The sentences in (96a and b) exemplify the double participle construction for Bulgarian and Serbo-Croatian, respectively. It is formed in the same way in both languages, but has a different meaning. In Bulgarian, it expresses the renarrated mood (cf. chapter 1, section 1.3.4.5.1), whereas in Serbo-Croatian it functions as the pluperfect tense (cf. chapter 1, section 1.3.4.3.1).

- (96) a. Az sŭm bil četjal knjigata  
 I bePRES.ISG bePART.MSG readPART.MSG book-the  
 "I am said to have been reading the book" (Bg)
- b. Ja sam bio pročitao knjigu  
 I bePRES.ISG bePART.MSG readPART.MSG bookACC  
 "I had finished reading the book" (S-C, cf. Tomić 1996a: 853-854)

Both participles agree in  $\varphi$ -features with the subject and either of them may be moved to the clause-initial position in Bulgarian (cf. 97) and Serbo-Croatian (cf. 98).<sup>51</sup>

<sup>51</sup> There is some discrepancy among native speakers concerning acceptability of fronting the thematic participle. According to Lema & Rivero (1989), the movement is excluded, but the judgments are disconfirmed by Rivero herself in her later work (1991), as well as by Embick and Izvorski (1995) and Lambova (2003). Tomić (1996a: 853) marks (97b) as '?'. Correspondingly, Embick and Izvorski (1995) reject a Serbo-Croatian example that is similar to the one in (98b), but their data are contested by Bošković (1995). What this suggests to me is that fronting of the thematic participle requires extra focusing, which is not accepted by all native speakers. This is confirmed by Lambova's (2003: 174) observation that in the absence of the subject the most neutral pattern is BePART-BeAUX-VPART, while the ordering VPART-BeAUX-BePART requires "non-neutral" intonational contours. The generalization is expected from a syntactic point of view: since the *l*-participle form of the verb 'be' is generated higher in the structure, it should be easier



- (97) a. Bil<sub>i</sub> sŭm četjal t<sub>i</sub> knjigata  
 be<sub>PART.MSG</sub> be<sub>PRES.ISG</sub> read<sub>PART.MSG</sub> book<sub>ACC</sub>  
 b. Četjal<sub>i</sub> sŭm bil t<sub>j</sub> knjigata (Bg, cf. Tomić 1996a: 853-854)
- (98) a. Bio<sub>i</sub> sam t<sub>i</sub> pročitao knjigu  
 be<sub>PART.MSG</sub> be<sub>PRES.ISG</sub> read<sub>PART.MSG</sub> book<sub>ACC</sub>  
 b. Pročitao<sub>i</sub> sam bio t<sub>j</sub> knjigu (S-C, cf. Tomić 1996a: 853-854)

However, it is impossible to move the two participles at the same time, as indicated in (99) for Bulgarian and in (100) for Serbo-Croatian.

- (99) a. \*Četjal bil sŭm knjigata  
 read<sub>PART.MSG</sub> be<sub>PART.MSG</sub> be<sub>PRES.ISG</sub> book<sub>ACC</sub>  
 b. \*\*Bil četjal sŭm knjigata (Bg)
- (100) a. \*Pročitao bio sam knjigu  
 read<sub>PART.MSG</sub> be<sub>PART.MSG</sub> be<sub>PRES.ISG</sub> book<sub>ACC</sub>  
 b. \*\*Bio pročitao sam knjigu (S-C, cf. , Bošković 1997: 159-160)

As shown in (101), the direct object may follow two participles in Serbo-Croatian. Neither the object (cf. 101b) nor the subject may intervene between the two participles when they are preceded by the auxiliary.

- (101) a. Vas dvoje ste bili čekali Marijinu prijateljicu  
 you two be<sub>AUX.2PL</sub> be<sub>PART.M.PL</sub> wait<sub>PART.M.PL</sub> Maria's friend  
 b. \*Vas dvoje ste bili Marijinu prijateljicu<sub>i</sub> čekali t<sub>i</sub>  
 c. \*Marijinu prijateljicu<sub>i</sub> ste bili vas dvoje čekali t<sub>i</sub> (S-C, cf. Bošković 1997: 157)

However, the two participles may be separated by an auxiliary (cf. 98). This leads Bošković (1997: 157) to conclude that they are head-adjoined to the auxiliary verb. One of them is adjoined to the left of it, whereas the other one is adjoined to the right. Bošković suggests that fronting of the thematic participle *čekali* across the auxiliary in a double participle construction proceeds as in (102).

- (102) Čekali ste bili Marijinu prijateljicu  
 wait<sub>PART.M.PL</sub> be<sub>AUX.2PL</sub> be<sub>PART.M.PL</sub> Maria's friend  
 a. [AuxP ste [VP bili [VP čekali Marijinu prijateljicu]]]  
 be<sub>AUX.2PL</sub> be<sub>PART.M.PL</sub> wait<sub>PART.M.PL</sub> Maria's friend  
 b. [AuxP [Aux [Aux ste] bili<sub>i</sub>] [VP t<sub>i</sub> [VP čekali Marijinu prijateljicu]]]  
 c. [AuxP [Aux čekali<sub>i</sub>] [Aux [Aux ste] bili<sub>i</sub>]] [VP t<sub>i</sub> [VP t<sub>j</sub> Marijinu prijateljicu]]

First, *bili* right-adjoins to the auxiliary and checks the [+aux] feature (cf. 102b). Next, *čekali*, crosses over the trace of *bili* and adjoin to the left of the auxiliary *ste* (cf. 102c).<sup>52</sup> In principle, the direct adjunction of *čekali* to *ste* violates the Minimize Chain Link

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to raise it. See also Čamdžić (2004 ch. 1) for an overview of double participle constructions across Slavic.

<sup>52</sup> Bošković is aware that his account is against Kayne's (1994) claim that rightward adjunction is disallowed. However, since he analyses participle fronting as head adjunction, his proposal is in line with Chomsky's (1995) suggestion, which excludes rightward adjunction only in the case of XP-movement.

Principle, but Bošković argues that this is a licit operation, because the trace  $t_i$  in (102c) and the landing site of *čekali*, which is a position adjoined to *ste*, belong to the same minimal domain of the chain ( $bili_i$ ,  $t_i$ ). Hence, they are equidistant from the base position of *čekali*, and the direct adjunction of *čekali* to *ste* does not lead to a violation of the locality conditions.

Bašić (2003) points out that Bošković's adjunction account is empirically inadequate, because an adverb, such as *potpuno* in (103a), may be inserted between the auxiliary verb and a thematic participle, such as *zaboravio* in (103). This demonstrates that the participle does not need to immediately follow the auxiliary, so it may not be right-adjoined to it.

- (103) a. Bio je potpuno zaboravio na sastanak  
 be<sub>PART.MSG</sub> be<sub>AUX.3SG</sub> completely forget<sub>PART.MSG</sub> about meeting  
 "He had completely forgotten about the meeting" (S-C, Bašić 2003)

Furthermore, Bašić remarks that only a thematic participle may be preceded by an adverb in this position. The *l*-participle of the verb 'be' does not allow adverb premodification (cf. 104). I suggest that the restriction is syntactic in nature, and I will account for it later in this section.

- (104) ?\*Zaboravio je potpuno bio na sastanak  
 forget<sub>PART.MSG</sub> be<sub>AUX.3SG</sub> completely be<sub>PART.MSG</sub> about meeting  
 (S-C, Bašić 2003)

In Bulgarian the adjacency requirements related to the position of the auxiliary and the participles are stricter than in Serbo-Croatian. As the data in (105) illustrates, both the thematic and non-thematic participle must always be adjacent to the auxiliary, whether they follow or precede it.

- (105) a. Čel (\*Ivan) e (\*Ivan) bil (Ivan) za izpita  
 read<sub>PART.MSG</sub> Ivan be<sub>3SG</sub> Ivan be<sub>PART.MSG</sub> Ivan for exam  
 "Supposedly, Ivan must have STUDIED for the exam"  
 a'. Bil (\*Ivan) e (\*Ivan) čel (Ivan) za izpita  
 b. Čel (\*intenzivno) e (\*intenzivno)  
 read<sub>PART.MSG</sub> hard be<sub>AUX.3SG</sub> hard  
 bil (intenzivno) za izpita  
 be<sub>PART.MSG</sub> hard for exam  
 "He must have studied hard for the exam"  
 b'. Bil (\*intenzivno) e (\*intenzivno) čel (intenzivno) za izpita  
 (Bg, cf. Lambova 2003; p.c.)

To summarize the observations that have been made so far, let me enumerate the possible patterns of double participle constructions. The auxiliary clitic cannot be clause-initial (cf. 106a), but must be preceded by one of the *l*-participles (cf. 106b/c). However, fronting of both participles at the same time is excluded (cf. 106d/e). Furthermore, Bulgarian and Serbo-Croatian differ in that in the former the non-fronted participle must be right-adjacent to the auxiliary, whereas in the latter the thematic participle may be separated from it by an adverb.





- (112) a. Šte e izpil konjaka  
FUT be<sub>PRES.3SG</sub> drink<sub>PART.MSG</sub> brandy-the  
 “He will have drunk the brandy”  
 b. \*Šte izpil e konjaka (Bg, Embick & Izvorski 1995: 106)

A focused *l*-participle may be fronted across *šte* (cf. 113a). However, finite verbs, such as *izpie* in (113b) may never be preposed across the future auxiliary, even when they are focused.

- (113) a. Izpil šte e konjaka  
drink<sub>PART.MSG</sub> FUT be<sub>PRES.3SG</sub> brandy-the  
 “He will have DRUNK the brandy”  
 b. Šte izpie konjaka  
FUT drink<sub>SUBJ.3SG</sub> brandy-the  
 “S/he will drink up the brandy”  
 b’. \*Izpie šte konjaka  
drink<sub>SUBJ.3SG</sub> FUT brandy-the  
 “S/he will DRINK up the brandy” (Bg, Labova 2003: 124)

On the assumption that finite verbs and *l*-participles have the same categorial status and are both heads, the contrast between (113a and b’) is quite mysterious. Locality principles cannot play a role here, because the participle in (113a) crosses more elements on its way than the finite verb in (113b’), and yet only the former output is well-formed. However, when the XP-movement approach to *l*-participle fronting is adopted, the contrast receives a straightforward account. The finite verb *izpie* in (113b’) may not raise across the future auxiliary, because this would lead to violation of the Head Movement Constraint. Conversely, the *l*-participle may move over *šte*, because it undergoes XP movement. First it raises to Spec, TP to check  $\varphi$ -features, and subsequently to a focus projection in the left periphery of the clause to check a focus feature. This results in a non-neutral interpretation of the preposed participle.

- (114) a. Izpil šte e konjaka  
 b. [FocP [PartP izpil<sub>k</sub> t<sub>j</sub>] [Mod šte [TP [tPartP t<sub>j</sub>] [T e ... [AgrOP konjaka<sub>i</sub> [vp Sub v [tPartP t<sub>j</sub> ]]]]]]]

Thus, it has been shown that fronting of the *l*-participle across the future auxiliary *šte* provides more evidence for the proposal that the movement is phrasal. More conclusive support for this claim will come from the way negation patterns with participle and finite verb movement. This issue will be addressed in the next section.

### 2.3.6 Interaction between participle movement and negation

The present section will examine interactions between participle movement and negation. It will be demonstrated that in South Slavic negation attracts certain grammatical categories, which incorporate into it. This property will be used as a criterion to determine the position of other constituents in the clause structure, as well

as to decide whether the attracted element, such as the finite verb or the *l*-participle, undergoes X<sup>0</sup> or XP movement.

Negation has received a lot of attention in the literature, but a detailed overview of the theories relevant to this phenomenon is far beyond the scope of this dissertation. In the analysis pursued here I will assume that the negative marker *ne* is a head which projects NegP, and that a constituent must be under the scope of NegP to be negated. The position of the NegP in the clause structure is a matter of debate, but I will follow Zanuttini (1997), who argues that there can be more than one NegP projections located at different heights in the clause and that each of them may host the negative marker. However, irrespectively of the number of NegPs, the polarity status of the clause (i.e. its negation or assertion) is always interpreted at LF in a Polarity Phrase, which dominates TP.

The subsequent sections will make a distinction between sentential negation and constituent negation, therefore it is important to define these two terms. Sentential negation takes scope over the whole predicate (cf. Acquaviva 1995: 84; Błaszczak 2001: 117), whereas constituent negation takes scope only over the elements it negates, so it is generated on the constituent that is negated (cf. Iatridou 1990: 574). For instance, (115a) involves sentential negation, because it scopes over the whole proposition, and the sentence carries the meaning “it is not the case that I read the book”. By contrast, (115b) exemplifies constituent negation, because only the internal argument is negated.

- (115) a. Ja nisam čitao knjigu  
 I NEG+beAUX.ISG readPART.MSG bookACC  
 “I didn’t read the book”  
 b. Ja sam čitao ne knjigu nego pismo  
 I beAUX.ISG readPART.MSG NEG bookACC but letterACC  
 “I didn’t read the book but a letter” (S-C, N. Milićević, p.c.)

The distinction between sentential and constituent negation can sometimes be very subtle, but a few tests have been devised to distinguish between these two types. One of them is the *not even* test due to Klima (1964), who observes that the *not even* tag is possible only in the case of sentential negation.<sup>54</sup>

- (116) a. John doesn’t drive a car, not even a Fiat 500 **sentential negation**  
 b. \*Not long ago Bill drove a car, not even a Fiat 500 **constituent negation**

The *not even* test can be used in South Slavic as well. As shown in (117), the *not even* tag is compatible only with sentential negation, but not with constituent negation.

- (117) a. Ja nisam čitao knjige, čak ni detektivske priče  
 I NEG+beAUX.ISG readPART.MSG booksACC even not detective stories  
 “I didn’t read books, not even detective stories”

<sup>54</sup> See Zeijlstra (2004: 47-51) for other tests that differentiate between sentential and constituent negation. It will be shown in chapter 5 that in Polish the two types of negation trigger different prosodic effects, and that only sentential negation licenses genitive of negation. These tests cannot be applied in the South Slavic languages, though.

- b. Ja sam čitao ne knjigu nego pismo  
 I be<sub>AUX.1SG</sub> read<sub>PART.MSG</sub> NEG book<sub>ACC</sub> but letter<sub>ACC</sub>  
 “I didn’t read the book but a letter”
- b’. \*Ja sam čitao ne knjigu nego pismo, čak ni  
 I be<sub>AUX.1SG</sub> read<sub>PART.MSG</sub> NEG book<sub>ACC</sub> but letter<sub>ACC</sub> even not  
 detektivske priče  
 detective stories  
 “\*I didn’t read the book but a letter, not even detective stories”  
 (S-C, N. Milićević, p.c.)

The analysis presented in the next sections is organized as follows. Section 2.3.6.1 overviews the relation between participle movement and negation. Section 2.3.6.2 discusses properties of negation in Serbo-Croatian, and proposes that there are two NegP sites available in this language: one above TP, referred to as “high negation”, and another above VP, which will be dubbed “low negation”. Section 2.3.6.2.2 is concerned with an interaction between participle fronting and negation in Serbo-Croatian. Section 2.3.6.3 describes negation in Bulgarian, arguing that it has only one NegP available. Section 2.3.6.3.2 discusses participle movement in the presence of negation in Bulgarian. On the basis of these findings, section 2.3.6.3.3 develops an alternative account of negated questions in Bulgarian.

### 2.3.6.1 Introduction

The examples in (118) for Bulgarian and in (119) for Serbo-Croatian demonstrate that the *l*-participle may not raise when it is preceded by the negative particle *ne*, irrespectively of whether it undergoes short (cf. 118b/119b) or long movement (cf. 118/119c and d). Moreover, negation must always precede the auxiliary, rather than the participle. However, placement of the subject in front of negation, as in (118a/119a), is possible.

- (118) a. (Az) ne sŭm pročel knjigata  
 I NEG be<sub>PRES.1SG</sub> read<sub>PART.MSG</sub> book  
 “I have not read the book”
- b. \*Az sŭm ne pročel knjigata  
 I be<sub>PRES.1SG</sub> NEG read<sub>PART.MSG</sub> book
- c. \*Pročel ne sŭm knjigata  
 read<sub>PART.MSG</sub> NEG be<sub>PRES.1SG</sub> book
- d. \*Ne pročel sŭm knjigata  
 NEG read<sub>PART.MSG</sub> be<sub>PRES.1SG</sub> book  
 (Bg, cf. Rivero 1991: 331)
- (119) a. (Ja) nisam čitao knjigu  
 I NEG+ be<sub>PRES.1SG</sub> read<sub>PART.MSG</sub> book  
 ”I haven’t read the book”
- b. \*Ja sam ne čitao knjigu  
 I be<sub>PRES.1SG</sub> NEG read<sub>PART.MSG</sub> book
- c. \*Čitao nisam knjigu  
 read<sub>PART.MSG</sub> NEG+be<sub>PRES.1SG</sub> book
- d. \*Ne čitao sam knjigu  
 NEG read<sub>PART.MSG</sub> be<sub>PRES.1SG</sub> book  
 (S-C, cf. Rivero 1991: 334)

According to Rivero (1991 & 1994: 90ff), this means that *l*-participle fronting is blocked by negation. She suggests that negation heads NegP in Bulgarian and Serbo-Croatian and takes TP as complement. On Rivero's approach the participle raises as a head via Long Head Movement from V to C, skipping the auxiliary located in I (cf. section 2.2.1 for an evaluation). The presence of Neg<sup>0</sup> is argued to block the operation.

The data in (118) and (119) require a more careful analysis, though, because negation does not block participle movement in all contexts. For instance, what has not been observed so far is that the fronting is blocked in Serbo-Croatian only by sentential negation. The sentence in (119c) improves to perfection when a "correction phrase", such as *nego pismo* 'but a letter' is added (cf. 120a). It exemplifies constituent negation, as it is incompatible with the *not even* tag.

- (120) a. Čitao nisam knjigu nego pismo  
 read<sub>PART.M.SG</sub> NEG+be<sub>PRES.1SG</sub> book but letter  
 "I didn't read the book but a letter" (S-C, A. Čamdžić, p.c.)
- b. \*Čitao nisam knjigu nego pismo,  
 read<sub>PART.M.SG</sub> NEG+be<sub>PRES.1SG</sub> book but letter  
 čak ni detektivske priče  
 even not detective stories  
 "I didn't read the book but a letter, not even detective stories"  
 (S-C, N. Milićević, p.c.)

The situation with constituent negation in Bulgarian is more complicated, because participle fronting seems to be sensitive to the type of the element that is negated. If the negated element is an argument, participle fronting is barred; if it is an adjunct, participle movement is possible. This is shown in (121) and (122), respectively.<sup>55</sup>

- (121) a. \*Pročel ne sūm knjigata, a pismoto  
 read<sub>PART.M.SG</sub> NEG be<sub>AUX.1SG</sub> book-the but letter-the  
 b. ?Pročel sūm ne knjigata, a pismoto (Bg, S. Marinov, p.c.)
- (122) a. Čel sūm ne za izpita a za udovolstvie  
 read<sub>PART.M.SG</sub> be<sub>AUX.1SG</sub> NEG for exam but for pleasure  
 "I didn't read for the exam but for pleasure"
- b. Učil e ne v Plovdiv, a v Sofia  
 study<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> NEG in Plovdiv but in Sofia  
 "He didn't study in Plovdiv, but in Sofia"
- c. Umrjal e ne na 24 maj a na 5 april  
 die<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> NEG on 24 may but on 5 april  
 "He didn't die on 24 May, but on 4 April" (Bg, S. Marinov, p.c.)

It seems that Rivero's account does not explain the patterns described above precisely enough. For instance, her proposal predicts the example in (120a) to be ungrammatical, contrary to fact. Correspondingly, it is not able to address the argument-adjunct asymmetry with respect to negation in Bulgarian in any way.

In the subsequent sections I will analyze interactions of verb movement in Bulgarian and Serbo-Croatian with negation in detail. I will demonstrate that sentential negation does not block participle fronting. Rather, the fronting is made invisible by the

<sup>55</sup> Note that placement of negation in front of the auxiliary or the *l*-participle results in ungrammaticality.



obligatory movement of verbal or pronominal heads to the Neg projection that immediately dominates TP.

$$(123) \quad [{}_{\text{NegP}} [{}_{\text{Neg}} \text{NEG} + \text{V}^0 / \text{D}^0; [{}_{\text{TP}} \text{PartP}_k [{}_{\text{T}} \text{t}_i [{}_{\text{PartP}} \text{t}_k \text{ } ] ] ] ] ] ]$$

Furthermore, I will show that the differences between Bulgarian and Serbo-Croatian with respect to constituent negation are due to a lack of the low NegP in Bulgarian. The analysis will also provide more evidence for the idea that the *l*-participle moves as a phrase and lands in Spec, TP, whereas finite verbs undergo head movement.

## 2.3.6.2 Serbo-Croatian

### 2.3.6.2.1 Properties of negation

The negative marker *ne* is commonly assumed to be the head of NegP in Serbo-Croatian. The evidence for its X<sup>0</sup> nature comes from the behaviour of *n*-words such as *nikoga* in (124), which may land in Spec, NegP to check the negative feature against Neg. The example in (124b) indicates that the movement need not be overt, but if an *n*-word is left in the post-verbal position, it receives a focus interpretation. The analysis of the negative feature checking has been first proposed by Brown (1999) for Russian, and extended to Serbo-Croatian by Progovac (2005b).

- (124) a. On  $[{}_{\text{NegP}} \text{nikoga}_i [{}_{\text{Neg}} \text{ne} [{}_{\text{TP}} [\text{voli t}_i]]]$   
 he nobody NEG love<sub>3SG</sub>  
 ‘‘He loves no one’’
- b. On *ne voli nikoga* (S-C, cf. Progovac 2005b)

Progovac (2005b) posits that positive polarity items, such as the existential quantifier *neko* ‘someone’<sup>56</sup> are attracted to this position as well. Therefore, she claims that NegP is not only related to licensing negation, but polarity items in general. For this reason, she decides to term the projection PolP.

- (125) Petar *nekoga nije video*  
 Peter someone NEG+be<sub>AUX.3SG</sub> see<sub>PART.MSG</sub>  
 ‘‘Peter did not see someone’’ (S-C, Progovac 2005b)

*N*-words may participate in negative inversion. For example, the *n*-word might be followed by an adverb, such as *ranije* ‘before’ in (126), and the whole complex may raise to the clause initial position. I suggest the constituent raises via Spec, NegP, and that the movement is triggered by a polarity feature in the Neg head.

<sup>56</sup> According to Ladusaw (1980) and Linebarger (1981), existential quantifiers such as *someone* should be classified as positive polarity items, because they can only be interpreted outside the scope of clausal negation.

- (126) Nikada ranije nisam pušio  
 never before NEG+be<sub>AUX.1SG</sub> smoke<sub>PART.MSG</sub>  
 “Never before have I smoked” (S-C, N. Milićević p.c.)

I will define the exact position of NegP in the clause structure in section 2.3.6.2.2. For the time being, observe that negation obligatorily attracts verbs in Serbo-Croatian (cf. Rivero 1991, Leko 1996,<sup>57</sup> Progovac 2005b). As a result, no overt material may intervene between the negative marker *ne* and the verb in (127).

- (127) a<sub>1</sub>. Ne čitam knjigu  
 NEG read<sub>PRES.1SG</sub> book<sub>ACC</sub>  
 “I don’t read the book”  
 a<sub>2</sub>. \*Ne knjigu čitam  
 b<sub>1</sub>. Ne čitam (nikad) knjigu (nikad)  
 NEG read<sub>PRES.1SG</sub> never book<sub>ACC</sub> never  
 “I never read a book”  
 b<sub>2</sub>. \*Ne nikad čitam knjigu (Bosnian, Leko 1996: 15)

Likewise, pronominal or reflexive clitics are also prohibited in this position, and they must follow the verb instead.

- (128) a<sub>1</sub>. Ne diraj me  
 NEG touch<sub>2SG</sub> me<sub>CLACC</sub>  
 “Don’t touch me”  
 a<sub>2</sub>. \*Ne me diraj  
 b<sub>1</sub>. Ne vracam se kuci  
 NEG return<sub>1SG</sub> REFL home<sub>DAT</sub>  
 “I don’t return home”  
 b<sub>2</sub>. \*Ne se vracam kuci (Bosnian, cf. Leko 1996: 15)

Rivero (1991: 338) argues that Neg attracts finite verbs in Serbo-Croatian, which incorporate into it. Her argument is motivated by the position occupied by pronominal clitics, which must always occur in the second position in this language. The example in (129) conclusively shows that the sequence neg+verb forms a single word, because it may be followed by the pronominal clitic *ga*. If this sequence were analyzed as two words, the clitic in (129) would occur in a non-second position, which is excluded in all other contexts in Serbo-Croatian (cf. chapter 4 for details).

- (129) Ne (\*ga) vidim ga  
 NEG him<sub>CLACC</sub> see<sub>PRES.1SG</sub> him<sub>CLACC</sub>  
 “I don’t see him” (S-C, Rivero 1991: 338)

The sentences in (130) indicate that negation forms a single word only with verbs. It may not be placed clause-initially in front of a DP, such as *Jovan* in (130a) to render constituent negation on the subject, because then the clitic *ga* will appear in the third position. This proves that negation may only incorporate into verbs, and that the incorporation is possible only in the case of sentential negation.

<sup>57</sup> Leko’s analysis is concerned with Bosnian, but native speakers inform me that negation in Serbo-Croatian patterns in exactly the same way.

- (130) a. \*Ne Jovan ga vidi  
           NEG Jovan him<sub>CL.ACC</sub> see<sub>PRES.3SG</sub>  
 b. Ne vidi ga Jovan  
       NEG see<sub>PRES.3SG</sub> him<sub>CL.ACC</sub> Jovan  
 “It is not Jovan who sees him” (S-C, N. Milićević p.c.)

However, it is important to observe that it is not only finite verbs that are attracted by Neg in Serbo-Croatian. Infinitives, such as *jesti* ‘to eat’ in (131) are attracted to Neg too, and they cannot be separated from it by any overt material, either.

- (131) a. Ne jesti tesku hranu je preporučljivo  
           NEG eat<sub>INF</sub> heavy food be<sub>3SG</sub> recommendable<sub>N</sub>  
 “Not eating heavy food is recommendable”  
 b. \*Ne tesku hranu jesti je preporučljivo (Bosnian, Leko 1996: 17)

By contrast, negation is unable to attract the *l*-participle in Serbo-Croatian. It must attract the auxiliary verb instead.

- (132) a. \*Ne čitao sam knjigu  
           NEG read<sub>PART.MSG</sub> be<sub>AUX.1SG</sub> book  
 b. (Ja) nisam čitao knjigu  
       I NEG+be<sub>AUX.1SG</sub> read<sub>PART.MSG</sub> book  
 “I haven’t read the book” (S-C, N. Milićević p.c.)

The auxiliary in (132) is a clitic, so it might be possible to argue that the incorporation of the auxiliary into negation is a way of compensating for its structural deficiency. However, the example in (133), which contains a non-clitic, past tense auxiliary *bješe* shows that this reasoning is not on the right track. Negation always attracts the auxiliary verb, and may never adjoin to the *l*-participle. This indicates that the clitic status of the attracted element is irrelevant, and that the attraction is not motivated prosodically. It is rather the highest verbal head that is incorporated.

- (133) a. \*Ne čitao bješe knjigu  
           NEG read<sub>PART.MSG</sub> be<sub>AUX.PAST.3SG</sub> book  
 b. (On) ne bješe čitao knjigu  
       he NEG be<sub>PAST.AUX.3SG</sub> read<sub>PART.MSG</sub> book  
 “He hadn’t read the book” (S-C, N. Milićević p.c.)

Hence, I would like to claim that the relevant condition for the Neg attraction is neither finiteness nor the clitic status of the verb. Rather, the verb must be a head in order to incorporate into negation. This is expected, given that only heads may incorporate into other heads (cf. Kayne 1994). Consequently, the *l*-participle is not eligible for incorporation into negation, because it always moves as an XP in Serbo-Croatian. If it were to undergo head movement, the contrast between (132) and the previous examples could not be explained.

### 2.3.6.2.2 Negation and participle movement

I submit that in Serbo-Croatian NegP (or a projection that encodes polarity) can be located either above TP (in “high” negation) or above VP (in “low” negation).

Furthermore, I also suggest that the low negation attracts *n*-words (e.g. *nikoga* 'nobody') to its Specifier, as demonstrated for the sentence in (124), repeated below as (134).

- (134) On [<sub>NegP</sub> nikoga<sub>i</sub> [<sub>Neg</sub> ne [<sub>voli</sub> t<sub>i</sub>]]]  
 he nobody NEG love<sub>3SG</sub>  
 "He loves no one" (S-C, Progovac 2001: 239)

I have argued that verbal heads must obligatorily incorporate into negation. I will assume that this holds for both the high and the low negation.

As is well-known, negation takes scope over the constituents it c-commands. Since the low negation dominates VP, it is expected that it will trigger constituent negation. This is exactly what happens in (125), repeated as (135), where the auxiliary *je* incorporates into the low Neg. The sentence means that there is a certain person that Peter did not see. It does not mean that Peter did not see any person.

- (135) Petar nekoga nije video  
 Peter someone NEG+be<sub>AUX.3SG</sub> see<sub>PART.M.SG</sub>  
 "Peter did not see someone" (S-C, Progovac 2005b)

Accordingly, a similar meaning is expressed by example (120), repeated below in (136a). The sentence is acceptable only on the constituent negation reading, which means that the auxiliary *je* incorporates into the lower Neg. The derivation is schematized in (136b).

- (136) a. Pročitao nije knjigu nego pismo  
 read<sub>PART.M.SG</sub> NEG+be<sub>PRES.3SG</sub> book but letter  
 "He didn't read the book but a letter" (S-C, A. Čamdžić, p.c.)  
 b. [<sub>TP</sub> pročitao ... [<sub>NegP</sub> [<sub>Neg</sub> ne + je<sub>i</sub> [<sub>AuxP</sub> [<sub>Aux</sub> t<sub>i</sub> ... [<sub>Agrop</sub> knjigu ]]]]]]

By contrast, the examples in (119), repeated below in (137), instantiate sentential negation.

- (137) a. Ja nisam čitao knjigu  
 I NEG+be<sub>AUX.1SG</sub> read<sub>PART.M.SG</sub> book  
 "I haven't read the book"  
 b. Nisam čitao knjigu  
 NEG+be<sub>AUX.1SG</sub> read<sub>PART.M.SG</sub> book  
 c. \*Čitao nisam knjigu  
 read<sub>PART.M.SG</sub> NEG+be<sub>AUX.1SG</sub> book (S-C, Rivero 1991: 334)

Since negation takes scope over the entire clause, the negation marker *ni* must c-command TP, and thus, dominate it. The derivation of the example in (137b) is given in (138). *Ni* attracts the auxiliary clitic, which must move from T and adjoin to it in Neg. This gives the impression of the blocking effect of negation on participle movement. The impression is only apparent, because the participle raises to Spec, TP as usual, but the movement is made invisible by the subsequent incorporation of the auxiliary verb into negation.

- (138) [<sub>NegP</sub> [<sub>Neg</sub> ni + sam<sub>i</sub> [<sub>TP</sub> čitao [<sub>T</sub> t<sub>i</sub> ... [<sub>Agrop</sub> knjigu ]]]]]]

Example (139) shows that the *l*-participle may not raise across the auxiliary that has incorporated into negation. The movement is barred on the sentential negation reading, because then negation must scope over the whole VP, rather than just the auxiliary verb.

- (139) \*Čitao nisam knjigu  
 read<sub>PART.MSG</sub> NEG+be<sub>AUX.ISG</sub> book (S-C, Rivero 1991: 334)

However, it is possible to move the complete TP dominated by negation for focus reason, which results in an emphatic interpretation of the fronted constituent, as in (140).

- (140) a. Pio vina nisam  
 drink<sub>PART.MSG</sub> wine NEG+be<sub>AUX.ISG</sub>  
 “Drink wine, I did not!”  
 b. Čitao knjigu nisam  
 read<sub>PART.MSG</sub> book NEG+be<sub>AUX.ISG</sub>  
 “Read the book, I did not!” (S-C, Tomić 1996a: 857)

The derivation proceeds as follows. The object *vina* moves out of the PartP for case checking. The auxiliary *sam* raises as a head from Aux to T and checks Tense in this position. Subsequently, the *l*-participle *pio* raises as a remnant XP to Spec, TP in order to check  $\varphi$ -features. This stage of the derivation resembles the familiar case of *l*-participle fronting argued for earlier in this chapter and is illustrated in (141a). Next, the auxiliary is attracted by the head of the higher NegP and incorporates into it (cf. 141b). Finally, the whole TP, which is dominated the high NegP, raises via A'-movement to Spec, FocP, as schematized in (141c).<sup>58</sup>

- (141) a. [TP [PartP pio t<sub>j</sub>] [T sam]<sub>j</sub>... [AgrOP vina]<sub>i</sub> [Aux t<sub>j</sub> [VP [t<sub>PartP</sub> t<sub>j</sub>]]]]]  
 b. [NegP [Neg ni + sam]<sub>j</sub> [TP [PartP pio t<sub>j</sub>] [T t<sub>j</sub>... [AgrOP vina]<sub>i</sub>]]]]]  
 c. [FocP [TP [PartP pio t<sub>j</sub>] [T t<sub>j</sub>... [AgrOP vina]<sub>i</sub>]]] [tTP [NegP [Neg ni + sam]<sub>j</sub>]]]]]

The analysis proposes that the whole TP moves to Spec, FocP. Consequently, it predicts that it should be possible to pied-pipe all the elements contained by TP across negation. This is indeed the case. For example, adverbs, such as *nikad* ‘never’ or *juče* ‘yesterday’, must raise together with TP (cf. 142a), and the result is ungrammatical if the adverb is not pied-piped by TP (cf. 142b).

- (142) a. Pio vina nikad/juče nisam  
 drink<sub>PART.MSG</sub> wine never/yesterday NEG+be<sub>AUX.ISG</sub>  
 “Drink wine, I never did!”/“Drink the wine yesterday, I didn’t”  
 b. \*Pio vina nisam nikad/juče (S-C, N. Milićević, p.c.)

Since the TP is raised across the higher NegP, it is expected that only the sentential negation interpretation is available. The prediction is borne out, as is evidenced by the ill-formedness of (143), which necessarily implies constituent negation.

<sup>58</sup> The derivation partly resembles Kayne & Pollock’s (2001) analysis of stylistic inversion in French, which also presupposes movement of the whole TP.

- (143) \*Pio vina nisam nego rakiju  
 drink<sub>PART.MSG</sub> wine NEG+be<sub>AUX.ISG</sub> but rakija  
 The intended meaning: "Drink wine, I did not, but rakija, I did"  
 (S-C, N. Milićević, p.c.)

The proposed analysis can be straightforwardly extended to other polarity items if Progovac (2005b) is correct when claiming that NegP is not only related to licensing negation, but polarity in general. For example, she shows that positive polarity items, such as the existential quantifier *neko* 'someone' in (125), repeated below as (144), move to the specifier of the lower NegP as well.

- (144) Petar nekoga nije video  
 Peter someone NEG+be<sub>AUX.3SG</sub> see<sub>PART.MSG</sub>  
 "Peter did not see someone" (S-C, Progovac 2005b)

In a similar vein, Wilder & Ćavar (1994: 22ff) observe that the assertive morpheme *je* shows the same distribution as the negation particle *ne*. The morpheme is homophonous with the 3<sup>rd</sup> person singular auxiliary form *je*<sup>59</sup> and the merger of *je* and the clitic auxiliary results in an emphatic assertive form such as *jesam*/be<sub>1SG</sub>, 'I AM'. Since the emphatic auxiliaries induce an affirmative interpretation of a clause (cf. 145a), I would like to suggest that semantically they correspond to positive polarity items.

As expected, the permutations in (145) demonstrate that it is possible to front TP across the affirmative auxiliary for focus reasons, on a par with the movement over the negative auxiliaries. Movement of a bare participle in (145c) is excluded, because this would only include the auxiliary under the scope of positive polarity, and not the *l*-participle (cf. 139 for a related case of movement across *nisam*).

- (145) a. Jesam čitao knjigu  
*je*+be<sub>AUX.ISG</sub> read<sub>PART.MSG</sub> book<sub>ACC</sub>  
 "I have read the book"  
 b. Čitao knjigu jesam  
 read<sub>PART.MSG</sub> book<sub>ACC</sub> *je*+be<sub>AUX.ISG</sub>  
 "Read the book, I did"  
 c. \*Čitao jesam knjigu (S-C, Wilder & Ćavar 1994)

Apart from the auxiliaries related to assertion and negation, Serbo-Croatian has the future/modal auxiliary *ću* (cf. chapter 1, section 1.3.4.4.1), which is an enclitic, so it may not occur clause initially (cf. 146b), but must always appear in the second position (cf. 146c).

- (146) a. Ćitati ću knjigu  
 read<sub>INF</sub> want<sub>CL.ISG</sub> book<sub>ACC</sub>  
 "I want to read the book"  
 b. \*Ću Ćitati knjigu  
 c. \*Ćitati knjigu ću (S-C, Wilder & Ćavar 1994)

*Ću* may incorporate into the morpheme *ho*, which produces the focused variant *hoću* 'I WILL/WANT'. The modal auxiliary is followed by the infinitival form of a main verb

<sup>59</sup> In chapter 4 I will show that the assertive *je* is not the same element as the 3<sup>rd</sup> person auxiliary, but is rather a spell-out of a focus-related feature.

rather than the *l*-participle, but the structures with the modal verb exhibit the same fronting patterns as the constructions with *nisam* and *jesam*. Thus, *hoću* may be preceded by a focused TP, as shown in (147b), but the movement of a bare infinitive across it is prohibited (cf. 147c).

- (147) a. Hoću čitati knjigu  
 want<sub>1SG</sub> read<sub>INF</sub> book<sub>ACC</sub>  
 ‘I want to read the book’  
 b. Čitati knjigu hoću  
 ‘Read the book, I want!’  
 c. \*Čitati hoću knjigu (S-C, N. Milićević, p.c.)

The data presented so far demonstrate that the auxiliary clitic may be attracted not only by polarity items, such as the negative particle *ne* or the affirmative particle *je*, but also by elements that express a modal meaning, such as *ho* in (147). In chapter 4 I will argue that the attraction is an instance of Force licensing by the head  $\Sigma$  (cf. Laka 1994), which hosts elements that are operators over propositions (TPs). Moreover, I will discuss similar types of movement which involve imperatives in Macedonian (cf. chapter 4, section 4.4.2.4.2.3) as well as subjunctive mood and topicalization in Polish (cf. chapter 5, sections 5.3.4.1.1 and 5.3.4.1.2).

The constructions with non-clitic affirmative and negative auxiliaries have been analysed in the literature by Wilder & Ćavar (1994), among others. However, their account of these constructions is different from mine. They argue that the morphemes *ni/ne*, *je*, and *ho* occupy the AST (“assertion”) head,<sup>60</sup> which is located between CP and TP and which may adjoin to verbs, such as the auxiliary *sam*. This results in the creation of “strong” (that is, non-clitic) auxiliaries. Recall from section 2.2.2 that Wilder & Ćavar analyze *l*-participle fronting as head movement. Hence, on their approach the head movement of the participle is blocked by the presence of the AST head.

- (148) a. \*[C V<sub>Part</sub>] ... [ASTP [AST ni+sam] [TP t [VP tv ]]]  
 b. [C V<sub>Part</sub>] ... [TP [T sam] [VP tv]] (S-C, Wilder & Ćavar 1994: 23)

However, in this way their analysis faces the same problem as the one by Rivero (1991), as it does not explain why the presence of the AST-head does not block participle movement in the context of constituent negation.

- (149) Pročitao nije knjigu nego pismo  
 read<sub>PART.MSG</sub> NEG+be<sub>PRES.3SG</sub> book but letter  
 ‘He didn’t read the book but a letter’ (S-C, A. Ćamdžić, p.c.)

Moreover, on the assumption that the strong auxiliaries are derived via adjunction of an auxiliary clitic to the AST head above TP, it is predicted that the strong forms should always appear in the second position or in the left periphery of the clause. However, this is not the case, because the strong forms may occur in the same positions as other finite verbs, that is following other clitics (cf. 150a) or clause-initially (cf. 150b).

<sup>60</sup> In their later work (Ćavar & Wilder 1997) they dub the projection  $\Sigma P$ , following Laka (1994), but place it below TP.

- (150) a. Ja [mu se] nisam predstavio  
 I him<sub>CL.DAT</sub> REFL NEG+be<sub>AUX.1SG</sub> introduce<sub>PART.MSG</sub>  
 "I have not introduced myself to him" (S-C, Rivero 1991:336)
- b. Nije mi ga dao  
 NEG+be<sub>PRES.3SG</sub> me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.MSG</sub>  
 "He didn't give it to me" (S-C, Tomić 1996a: 844)

This suggests that movement of the auxiliary clitics to NegP above TP is only one of the options to pick up a polarity item. The auxiliary clitics may also do this by incorporating into a polarity morpheme located above the VP, into the low Neg head. This is what happens in the examples in (150). The fact that the strong auxiliary forms may appear outside the left periphery supports the idea of the existence of a lower and a higher Negation/Polarity Phrase in Serbo-Croatian.

Summarizing, it has been shown that Serbo-Croatian has two NegP projections in the clause structure: above VP and TP. The head of NegP obligatorily attracts verbal heads, which become incorporated and form a single word with it. Neg may never attract the *I*-participle, which is to be expected on the assumption that the *I*-participle always undergoes XP movement.

The subsequent section will analyze the relationship between negation and verb movement in Bulgarian.

### 2.3.6.3 Bulgarian

#### 2.3.6.3.1 Properties of negation

Just as in Serbo-Croatian, *ne* is claimed to head NegP in Bulgarian (cf. Dimitrova-Vulchanova 1995; Dimitrova-Vulchanova & Hellan 1999). It attracts *n*-words, such as *ništo* 'nothing' in (151), which may raise into Spec, NegP, as shown in (151b). The movement is not obligatory, but if the *n*-word is left in the post-verbal position (cf. 151a), it receives a focus interpretation.

- (151) a. Petür ne čete ništo  
 Peter NEG read<sub>PRES.3SG</sub> nothing  
 "Peter doesn't read anything"
- b. Ništo ne čete Petür (Bg, Pavlov 2000: 45)

The assumption that *n*-words target a specifier position in Bulgarian is confirmed by the fact that they may pied-pipe other words, such as the adverb *predi* 'before'. I will assume that in (152) *predi* forms a constituent with the *n*-word *ništo* 'never', and that they move together to Spec, NegP.

- (152) Ništo predi ne süm go viždal  
 never before NEG be<sub>AUX.1SG</sub> him<sub>CL.ACC</sub> see<sub>PART.MSG</sub>  
 "Never before have I seen him" (Bg, S. Marinov p.c.)

Negation attracts finite verbs, the way it also does in Serbo-Croatian. Therefore, no overt material may intervene between *ne* and the auxiliary clitic in (153a) or between *ne* and the non-clitic auxiliary *beše* in (153b).



- (153) a. Vlakūt ne (\*togava) sme go čuli da pristiga  
 train-the<sub>NEG</sub> then be<sub>PRES.3PL</sub> it<sub>CL.ACC</sub> heard<sub>PART.PL</sub> that arrive<sub>SUBJ.3SG</sub>  
 “As for the train, we did not hear it coming”  
 b. Vlakūt ne (\*togava) beše pristignal  
 train-the<sub>NEG</sub> then be<sub>PAST.3SG</sub> arrive<sub>PART.M.SG</sub>  
 “The train had not arrived (then)” (Bg, Pavlov 2000: 42)

However, in contrast to Serbo-Croatian, negation in Bulgarian must attract not only verbal heads, but pronominal and reflexive clitics as well. In fact, in the presence of both clitics and the finite verb, the clitics must be attracted, rather than the verb (cf. 154b<sub>3</sub>).

- (154) a<sub>1</sub>. Ne me pipaj  
 NEG me<sub>CL.ACC</sub> touch<sub>2SG</sub>  
 “Don’t touch me”  
 a<sub>2</sub> \*Ne pipaj me  
 b<sub>1</sub>. Nikūde ne se sreštat takiva primeri  
 nowhere NEG REFL encounter<sub>3PL</sub> such examples  
 “Such examples cannot be encountered anywhere”  
 b<sub>2</sub>. \*Nikūde se ne sreštat takiva primeri  
 b<sub>3</sub>. \*Nikūde ne sreštat se takiva primeri (Bg, Pavlov 2000: 80)

Rivero (1994b: 113) argues that this means that negation in Bulgarian imposes no categorial restrictions on the clitics it attracts. It is always the highest clitic available, in line with the template given in (155; cf. chapter 4 for details concerning cliticization), and irrespectively of the fact whether it is a pronominal, reflexive or an auxiliary clitic.

- (155)  $\bar{l}i > \bar{s}te > \text{AUX (except 3rd SG } e) > \text{DAT} > \text{ACC} > \text{REFL} > e$   
 (Bg, Tomić 1996a; Franks & King 2000: 61)

However, negation attracts not only clitics, but non-clitic elements such as the past tense auxiliary *beše* (cf. 153b) as well. Therefore, I would like make a generalization that negation in Bulgarian attracts the first available head, regardless of its clitic or non-clitic status.

A well-known property of the negation particle in Bulgarian is that it never bears stress by itself, but it is always followed by a stressed constituent, such as the verb *vali* in (156).

- (156) a. Ne vaLI  
 NEG rain<sub>3SG</sub>  
 “It doesn’t rain” (Bg, Rudin et al 1999: 562)

Obviously, clitics do not carry any lexical stress of their own. However, they do receive stress in the presence of negation. This is indicated (157) by capitalization. In (157a) the stress falls on the accusative clitic *me*, which precedes the verb *boli*. In (157b and c) the verbs are preceded by a whole clitic clusters, but it is only the first clitic that receives stress from negation.

- (157) a. Ne ME boLI  
NEG me<sub>CL,ACC</sub> hurt<sub>3SG</sub>  
 "It doesn't hurt me"
- b. Ne MI se STRUva, če ...  
NEG me<sub>CL,DAT</sub> REFL seem<sub>3SG</sub> that  
 "It doesn't seem to me that..."
- c. Ne SŪM ti go DAla  
NEG be<sub>PRES,1SG</sub> you<sub>CL,DAT</sub> it<sub>CL,ACC</sub> give<sub>PART,F,SG</sub>  
 "I haven't given it to you" (Bg, Rudin et al 1999: 562)

In view of this property, the consensus is that in Bulgarian negation forms a prosodic word with the constituent that follows it (cf. Dimitrova-Vulchanova 1995; Tomić 1996a; Rudin et al 1999).

- (158) a. [Ne ME] [boLI]  
 b. [Ne MI] se [STRUva]  
 c. [Ne SŪM] ti go [DAla] (Bg, Rudin et al 1999: 563)

Since prosodic constituency is often assumed to reflect syntactic constituency (cf. Progovac 2000), I take this to mean that negation attracts only the first clitic in the cluster (cf. section 2.3.6.3.3 for more evidence).

Still, even though negation in Bulgarian attracts finite verbs, verbal clitics and pronominal clitics alike, it is not able to attract the *l*-participle. Again, this is to be expected, because the *l*-participle moves as an XP. Since negation is a head, it may adjoin to verbal heads, such as the past tense auxiliary *beše* or the clitic *e* in (159a), but not to the *l*-participle *pristignal* in (159b).

- (159) a. Vlakūt ne e/ beše pristignal na vreme  
train-the NEG be<sub>PRES/PAST,3SG</sub> arrive<sub>PART,M,SG</sub> on time  
 "The train had not arrived on time"
- b. \*Vlakūt e/ beše ne pristignal na vreme  
train-the be<sub>PRES/PAST,3SG</sub> NEG arrive<sub>PART,M,SG</sub> on time (Bg, Pavlov 2000: 41)

Hence, the main descriptive difference between negation in Serbo-Croatian and Bulgarian is that in the former language only verbal heads are attracted by Neg. In the latter language the closest head available is attracted by Neg. In the subsequent section I will try to account for this contrast by suggesting that this is due to the presence of only one NegP layer in Bulgarian.

### 2.3.6.3.2 Negation and participle movement

Pavlov (2000: 73) points out that the differences in the distribution of negative elements in Bulgarian and Serbo-Croatian indicate that the former lacks the low NegP above VP. I take his observation to be correct. Moreover, Pavlov shows that negation in Old Church Slavonic patterned in the same way as in Serbo-Croatian, so verbs had to obligatorily incorporate into the negative particle *ne*. This is exemplified in (160), where negation immediately precedes the finite verb in the past tense, *poklonijō* 'bowed'. The orderings corresponding to the ones in (157a and b), with negation preceding pronominal clitics, are unattested in Old Church Slavonic.

- (160) I ne poklonijō se imъ bъxma  
 and NEG bowed<sub>3PL</sub> REFL them<sub>CL.DAT</sub> at all  
 “And they did not bow to them at all”  
 (OCS, *Suprasliensis* 261.2; Pavlov 2000: 76)

Once the lower NegP is lost, verbs are not able to adjoin to it any more. Presumably, they are not able to adjoin to the higher Negation dominating TP, either, because it is too distant. In chapter 4 I will show that pronominal clitics in Bulgarian must leave the VP in order to check number and person features. Because of this obligatory movement, they may precede the verb, and thus are eligible for attraction by negation.

The loss of the lower NegP in contemporary Bulgarian has consequences for the interaction between negation and participle movement. Recall from section 2.3.6.1 that participle fronting in Bulgarian is blocked by both sentential and constituent negation, which is exemplified in (161).

- (161) a. ?Pročel sŭm ne knjigata, a pismoto  
 read<sub>PART.MSG</sub> be<sub>AUX.ISG</sub> NEG book-the but letter-the  
 b. \*Pročel ne sŭm knjigata, a pismoto  
 read<sub>PART.MSG</sub> NEG be<sub>AUX.ISG</sub> book-the but letter-the  
 (Bg, S. Marinov, p.c.)

Conversely, participle movement is possible in Serbo-Croatian when constituent negation is involved, so the Serbo-Croatian equivalent of the sentence in (161b) is grammatical (cf. 136). The contrast is due to the presence of the lower NegP in Serbo-Croatian, which c-commands the VP and is thus able to negate it without negating the whole clause. This option is unavailable in Bulgarian, because of the lack of NegP above VP. However, the crucial question is how Bulgarian is able to express constituent negation once it has lost the lower NegP. It seems that the only option is to apply contrastive negation by placing negation in front of any element that is supposed to be negated. In this context the negative particle is not the head of NegP, but rather functions like a negative adverb. Hence, this strategy does not involve any restriction on the position of negation in the phrase structure. For example, the subject in (162) can be negated whether it is clause-initial, or clause-final.

- (162) a. Ne az sŭm izmislil tova  
 NEG I be<sub>AUX.ISG</sub> conceive<sub>PART.MSG</sub> this  
 “I haven’t come up with this (thing)”  
 b. Tova sŭm go izmislil ne az (a Ivan)  
 this be<sub>AUX.ISG</sub> it<sub>CL.ACC</sub> conceive<sub>PART.MSG</sub> NEG I but Ivan  
 “This hasn’t been conceived by me (but by Ivan)” (Bg, Pavlov 2000: 74-75)

As far as sentential negation is concerned, Bulgarian patterns in the same way as Serbo-Croatian. The movement of the *l*-participle is made invisible by the obligatory incorporation of the auxiliary into the negative marker above TP. The derivation of the sentence in (163a) is presented in (163b-c). First, the *l*-participle *pročel* raises to Spec, TP, in the same manner as described earlier in this chapter. Next, the auxiliary verb *sŭm* is attracted by negation and incorporates into the Neg head located immediately above TP.

- (163) a. Ne sŭm pročel knigata  
 NEG be<sub>PRES.1SG</sub> read<sub>PART.MSG</sub> book  
 "I haven't read the book"  
 b. [TP [PartP pročel t<sub>j</sub>] [T sŭm<sub>j</sub>... [AgrOP knigata<sub>i</sub> [Aux t<sub>j</sub> [vP Sub v [TP<sub>PartP</sub> t<sub>j</sub> ]]]]]]  
 c. [NegP [Neg Ne + sŭm<sub>j</sub>] [TP [PartP pročel t<sub>j</sub>] [T t<sub>j</sub>... [AgrOP knigata<sub>i</sub> ]]]] (Bg)

The assumption that NegP is located above TP in Bulgarian is additionally supported by the position of subjects in negative clauses. Arnaudova (2003: 93) shows that the subject may then occur stranded at the right edge of the clause.

- (164) Ništo ne e napravil Ivan  
 nothing NEG be<sub>AUX.3SG</sub> do<sub>PART.MSG</sub> Ivan  
 "Ivan didn't do anything" (Bg, Arnaudova 2003: 93)

I suggest that the post-verbal subject in (164) is in Spec,vP, as is also proposed by Arnaudova (2003) on independent grounds. The *l*-participle *napravil* is located in Spec, TP, where it has moved to check the  $\varphi$ -features of T. The auxiliary *e* incorporates into the negation in Neg. The negative adverb *ništo* opens the clause in Spec, NegP (cf. 165).

- (165) [NegP ništo [Neg ne + e [TP napravil [T t<sub>i</sub>... [vP Ivan ]]]]]

The fact that the subject often appears towards the end of the clause in negative clauses has led some researchers (e.g. Dimitrova-Vulchanova & Hellan 1999; Pavlov 2000) to assume that the subject-final order is the basic one in Bulgarian.<sup>61</sup> However, native speakers inform me that the object *ništo* is somewhat focused in (164). At any rate, this suggests that negation must reside very high in the Bulgarian clause structure.

Summarizing, this section has shown that negation in Bulgarian may only attract pronominal and verbal heads. Just as in Serbo-Croatian, it may not attract elements that undergo XP-movement, such as the *l*-participle. More evidence for this distinction will come from the analysis of negated focus questions in Bulgarian, which is presented in the next section.

### 2.3.6.3.3 Interaction between the interrogative complementizer *li* and negation in Bulgarian

This section will discuss a problematic issue of negated questions in Bulgarian, which has given rise to a lot of controversy in the literature. It will be demonstrated that the phenomenon receives a principled explanation once it is assumed that the *l*-participle moves as an XP element.

Focus questions in Bulgarian are formed with the particle *li*. *Li* is an interrogative complementizer that is found in most of the Slavic languages. It is commonly assumed to be hosted in C, because it is in complementary distribution with other complementizers (cf. chapter 4, section 4.4.3.2 for details).<sup>62</sup>

<sup>61</sup> See Rudin (1986: 14ff) for compelling evidence showing that this is not true.

<sup>62</sup> Moreover, *li* is right-adjacent to the *wh*-word in *wh*-questions, which also suggests that it is in C.

- (i) a. Koj li e vzel knigata?  
 who Q be<sub>AUX.3SG</sub> take<sub>PART.MSG</sub> book-the  
 "Who(ever) could have taken the book?"  
 b. \*Koj e vzel li knigata? (Bg, Rudin 1986: 67)

*Li* is an enclitic and may be preceded by many different constituents, both heads and phrases alike. Rudin (1986: 64) claims that when the preceding word is a verb, the whole sentence is interpreted as being questioned.

- (166) a. Kupil li e vestnika?  
 buy<sub>PART.MSG</sub> Q be<sub>AUX.3SG</sub> newspaper-the  
 “Did he buy the newspaper?”  
 b. Pitaxa me kupil li e vestnika  
 asked<sub>3PL</sub> me<sub>ACC</sub> buy<sub>PART.MSG</sub> Q be<sub>AUX.3SG</sub> newspaper-the  
 “They asked me whether he (had) bought the newspaper”  
 (Bg, Rudin 1986: 63)

However, when *li* is attached to a non-verbal constituent, the scope of interrogation falls on this constituent. In such cases *li* licenses a focus feature on the fronted element that is located in Spec, CP (cf. Rudin et al. 1999).

- (167) a. Kūštata li namerixte (vie)?  
 house-the Q found<sub>2PL</sub> you  
 “Was it the house that you found?” (Rudin 1986: 64)  
 b. Prez gardinata li xodeše?  
 through garden-the Q walked<sub>2SG</sub>  
 “Were you walking THROUGH THE GARDEN?” (Rudin et al. 1999:546)

Furthermore, *li* can be used for questioning single words in isolation, which might be heads and XPs alike (cf. 168a and c).

- (168) a. Az li?  
 I Q  
 “Me?”  
 b. Kūštata li?  
 house-the Q  
 “The house?”  
 c. Na masata li?  
 on table-the Q  
 “On the table?”  
 (Bg, Rudin 1986: 65)

*Li* is an enclitic, so it needs a phonological host to its left, but it must also precede all the other clitics when it clusters together with them. The ordering in which it occurs is indicated in the template in (169) and the examples in (170).

- (169)  $\bar{li} > \text{Mod} > \text{Neg} > \text{\textit{ste}} > \text{AUX (except 3rd SG)} > \text{DAT} > \text{ACC} > \text{REFL} > e$   
 (3rd SG AUX)  
 (cf. Tomić 1996a, Franks & King 2000; cf. chapter 4 for details)

- (170) a. (Vie) davate li mu go?  
 you<sub>PL</sub> give<sub>2PL</sub> Q him<sub>CL.DAT</sub> it<sub>CL.ACC</sub>  
 “Do you give it to him?”  
 b. (Vie) dali li ste mu go?  
 you<sub>PL</sub> give<sub>PART.PL</sub> Q be<sub>AUX.2PL</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub>  
 “Have you given it to him?” (Bg, Hauge 1999: 117)

As shown in (171), clitics may be attracted by negation. However, they are arranged hierarchically with respect to each other, and only the highest clitic is accessible for the attraction. Hence, negation may attract the accusative clitic *go* (cf. 171a) only in the absence of the dative clitic *mu* (cf. 171c). If both pronominal clitics are present, only the dative one may be preposed (cf. 171b). Moreover, it is impossible to move more than one clitic at the same time (cf. 171d).<sup>63</sup>

- (171) a. Ne go li iskate  
 NEG it<sub>CL.ACC</sub> Q want<sub>2PL</sub>  
 "Don't you want it?"  
 b. Ne mu li go dadoxte?  
 NEG him<sub>CL.DAT</sub> Q it<sub>CL.ACC</sub> gave<sub>2PL</sub>  
 "Didn't you give it to him?"  
 c. \*Ne go li mu dadoxte?  
 d. \*Ne mu go li dadoxte? (Bg, Hauge 1999: 108; S. Marinov, p.c.)

Apart from pronominal clitics, auxiliary clitics and non-clitic finite verbs can be moved as well (cf. 172a and b). However, since the 3<sup>rd</sup> person singular auxiliary clitic follows all the others in the cluster (cf. the template in 169), it may not be preposed across the pronominal clitics (cf. 172c).

- (172) a. Ne iskate li?  
 NEG want<sub>2PL</sub> Q  
 "Don't you want to?"  
 b. Ne ste li mu go dali?  
 NEG be<sub>AUX.2PL</sub> Q him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.PL</sub>  
 "Haven't you given it to him?"  
 c. \*Ne e li mu go dal?  
 NEG be<sub>AUX.3SG</sub> Q him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.MSG</sub>  
 (Bg, Hauge 1999: 108; S. Marinov, p.c.)


The pattern has been a long-standing problem of Bulgarian syntax and has received a number of different analyses. For example, Rivero (1993) claims that in the context of neutral *yes-no* questions, such as (166a) and (170), the verb moves as a head to C to host the clitic *li*, which may not appear in the clause-initial position. In negated clauses, however, the verbal head may not move to C, because negation is a barrier for the movement. Consequently, *li* must lower ("hop") in the structure. It adjoins to I, and as a result it precedes the finite verb and the participle, but follows the clitics.

Izvorski et al (1997) notice empirical problems with Rivero's account. First of all, negation cannot be a barrier for all verbal heads, because non-clitic finite verbs may move in front of *li* (cf. 172a). Second, Rivero's analysis predicts that if there are several clitics in a negated question, all of them will precede *li*, given that *li* must lower and adjoin to I. In reality this never happens, and *li* always appears after the first clitic, irrespectively of the number of clitics that are present in the cluster.

According to Izvorski et al, the crucial property of *li* is that it requires a phonologically overt host capable of bearing stress to its left. Therefore, they suggest that if a host of this type is missing, *li* will undergo prosodic inversion and will cliticize

<sup>63</sup> All the sentences in (171) have a sentential negation reading. This is to be expected, as the "high" negation is involved, so *ne* scopes over the entire clause.

onto the right edge of the first word that bears stress. The process is claimed to take place at PF.

- (173) Li izpratix mu kniga  
  
 Q send<sub>PAST.ISG</sub> him<sub>CL.DAT</sub> book  
 “Did I send him the book?” (Bg, Izvorski et al. 1997: 193)

Negation does not carry stress on its own in Bulgarian, so it is not a suitable candidate for giving support to *li*. However, it has the property of shifting stress over to the word that follows it, even if it is a clitic. Hence, in negated clauses *li* will move across the first clitic to its right (capitalized in 174), which will carry stress in this context.<sup>64</sup>

- (174) Ne MU li go dadoxte?  
 NEG him<sub>CL.DAT</sub> Q it<sub>CL.ACC</sub> gave<sub>2PL</sub>  
 “Didn’t you give it to him?” (Bg, Izvorski et al. 1997: 193)

Without appealing to the mechanism of prosodic inversion, Bošković (2001 ch. 4.3.1.1) analyzes the data under a “scattered deletion” approach. What is crucial for his account is the fact that *li* must occur after the first stressed constituent in the clause. He argues that the string *ne go vidja* (cf. 175a) forms a complex head, which arises through adjunction of the pronominal clitics and negation to the verb. Next, the complex head left-adjoins to *li* (cf. 175b).

- (175) a. [Ne go vidja]  
 NEG him<sub>CL.ACC</sub> saw<sub>2/3SG</sub>  
 “He/she/you didn’t see him”  
 b. [ne go vidja+li] ~~ne go vidja~~ (Bg, Bošković 2001: 208)

This results in a phonologically infelicitous structure, because *ne* assigns stress to the word that follows it. In the case at hand, the clitic *go* is stressed. The problem is that *vidja* is stressed, too, because it is a lexical verb with its own lexical stress. However, *li* must occur after the first stressed word in the clause, while in (175b) there are two stressed elements preceding it. Bošković argues that the derivation is rescued by a phonological filter,<sup>65</sup> which enforces spell-out of the lower copy of the verb *vidja*, rather than the head of the chain.

- (176) [ne go ~~vidja~~+li] ~~ne go~~ vidja

In this way the phonological requirements of both the negative marker *ne* and the interrogative complementizer *li* are met.

<sup>64</sup> A similar account of the facts, which also relies on prosodic inversion, is presented in Franks (1998) and Rudin et al. (1999).

<sup>65</sup> According to Bošković, syntactic movement is evaluated by a phonological filter. It may enforce pronunciation of a lower copy of the movement chain if the pronunciation of the head of a chain results in a violation of phonological constraints. See Bošković (2001) for an in-depth description of his pronounce-a-copy account of cliticization in South Slavic.

To sum up what has been established so far, all the previous approaches to the interaction between *li* and negation state that *li* may be preceded by clitics (cf. 177a) and finite verbs (cf. 177b) in the presence of *ne*.

- (177) a. Ne go li iskate  
NEG it<sub>CLACC</sub> Q want<sub>2PL</sub>  
 "Don't you want it?"  
 b. Ne iskate li?  
NEG want<sub>2PL</sub> Q  
 "Don't you want to?" (Bg, Hauge 1999)

However, a major flaw of these prosodic analyses is that they do not take into account the fact that neither the *l*-participle nor the subject may precede *li* in this context.<sup>66</sup>

- (178) a. \*Ne kupil li e knjigata?  
not buy<sub>PART.M.SG</sub> Q be<sub>PRES.3SG</sub> book-the  
 b. Ne e li kupil knjigata?  
 "Hasn't he bought the book?" (Bg, S. Marinov, p.c.)

- (179) a. \*Ne az li (šum)?  
NEG I Q be<sub>PRES.1SG</sub>  
 b. Ne šum li az?  
 "Not me?" (Bg, S. Marinov, p.c.)

This is quite striking, given that the non-negated variants of (178a) and (179a) are completely grammatical.

- (180) a. Kupil li e knjigata?  
buy<sub>PART.M.SG</sub> Q be<sub>AUX.3SG</sub> book-the  
 "Has he bought the book?"  
 b. Az li?  
I Q  
 "Me?" (Bg)

Likewise, the sentence corresponding to the one in (178a) is completely acceptable if a past tense form of the verb is used instead of the *l*-participle, as shown in (181).

- (181) a. Ne kupi li knjigata?  
not bought<sub>3SG</sub> Q book-the  
 "Didn't he buy the book?" (Bg, S. Marinov, p.c.)

Moreover, there is no phonological reason why (178a) and (179a) should be excluded. The stress patterns that these examples would potentially show should be the same as in the constructions with past tense verbs or clitics. In principle, negation may place

<sup>66</sup> The only *syntactic* account of *li* placement in the presence of negation that I am aware of is due to Tomić (1996a), who argues that the 'ne + first clitic' sequence excorporates from the clitic cluster and raises as unit in order to lend support to *li*. However, she does not mention the way this sequence patterns in the presence of the subject and the *l*-participle (cf. 178a and 179a). She also does not provide a syntactic motivation for this movement.



stress on the *l*-participle or the subject, so there is no reason why this option should be ruled out.

I conclude that the contrasts indicate that the process is constrained syntactically, rather than prosodically. The impossibility of the subject or the *l*-participle insertion between negation and *li* is due to the phrasal status of these elements.

I propose that the focus questions are constructed in the following way: the highest head available in the structure is attracted by negation and subsequently, the ‘negation+head’ complex left-adjoins to *li*. Each of the attracted elements has a focus interpretation, whereas *li* is the spell-out of the focus feature. I suggest that these elements check focus via adjunction into *li*. Since negation is a head, it may only attract X<sup>0</sup> elements, such as finite verbs and clitics. It does not attract *l*-participles or subjects, because they undergo XP movement. As an example, I provide the derivation of (171b) in (182).

- (182) a. Ne mu li go dadoxte?  
NEG him<sub>CL.DAT</sub> Q it<sub>CL.ACC</sub> give<sub>PAST.2PL</sub>  
 “Didn’t you give it to him?”  
 b. [TP [T dadoxte]<sub>i</sub>] [VP [v t<sub>i</sub>] mu go]  
 c. [TP [T mu<sub>j</sub> + go<sub>k</sub> + dadoxte]<sub>i</sub>] [VP [v t<sub>i</sub>] t<sub>j</sub> t<sub>k</sub>]  
 d. [<sub>NegP</sub> [<sub>Neg</sub> ne+mu<sub>j</sub>]<sub>i</sub>] [TP [T t<sub>j</sub> + go<sub>k</sub> + dadoxte]<sub>i</sub>] [VP [v t<sub>i</sub>] t<sub>j</sub> t<sub>k</sub>]]  
 e. [C [C <ne+mu<sub>j</sub>><sub>m</sub> + li]<sub>i</sub>] [<sub>NegP</sub> [<sub>Neg</sub> t<sub>m</sub>]<sub>i</sub>] [TP [T t<sub>j</sub> + go<sub>k</sub> + dadoxte]<sub>i</sub>] [VP [v t<sub>i</sub>] t<sub>j</sub> t<sub>k</sub>]]]

The derivation proceeds as follows. Since the verb *dadoxte* is tensed, it must raise to T in order to check Tense (cf. 182b). Pronominal clitics must be adjacent to the verb in Bulgarian, which I assume implies that they raise from their argument positions within the VP and adjoin to the verb in T (cf. 182c and section 4.4.3.4.3 in chapter 4 for details). NegP is merged immediately above TP. Negation in Neg attracts the highest head available below it in the structure, which is *mu* in (182), which incorporates into it. Finally, *li* is merged as the C head. *Li* is a spell-out of the Focus feature; besides it is also an enclitic, so it needs a phonologically overt element to its left. The complex head *ne+mu* raises out of Neg and left-adjoins to *li* in C (cf. 182e). This results in the focus question *Ne mu li go dadoxte?*

To summarize, the analysis of the negated questions developed in this section has shown that the operation is fully syntactic. Moreover, it has demonstrated that the impossibility of the subject or the *l*-participle insertion between negation and *li* is due to their phrasal status. This provides more evidence for the claim that the *l*-participle undergoes XP movement.

Furthermore, this section has made two hypotheses concerning the nature of negation in Slavic. First, sentential negation always involves incorporation of a verbal or pronominal head into the negative particle. Hence, it is a useful criterion for deciding about the X<sup>0</sup>/XP status of other elements in the clause. Second, it has been suggested that NegP may be located in two positions in Slavic: above TP, as in Bulgarian, or above both TP and VP, as in Serbo-Croatian. The logical extension of this idea is that there should be a language with just one NegP above VP. It will be shown in chapter 5 that this option is represented by Polish.

## 2.4 Conclusions

This chapter has analyzed the structure of the compound tenses formed with the *l*-participle and the auxiliary ‘to be’. The *l*-participle was argued to be able to assign

accusative case and project an external theta role. Moreover, it was claimed that the *l*-participle and the subject are in a Small Clause configuration, which is overtly manifested through morphological agreement between the two constituents.

The main topic of the chapter was the widely-discussed *l*-participle fronting across the auxiliary to the clause-initial position. It was pointed out that the previous accounts of the operation, which argue that it proceeds via head movement, face theoretical and empirical problems. For example, they are unable to explain why the subject and the preposed *l*-participle are in complementary distribution, or why the *l*-participle must be the left-most constituent in the clause.

The present proposal suggests that the *l*-participle raises into Spec, TP, and that the movement is phrasal. It is contingent on agreement, as the *l*-participle checks the  $\varphi$ -features of T in this position. The phrasal status of the movement was confirmed on the basis of the properties of double participle constructions, short participle movement, as well as the interactions between the *l*-participle and the future auxiliary *šte* in Bulgarian and negation.

# Chapter 3 The syntax of ‘have’-perfects and passive participles

## 3.1 Introduction

So far the thesis has been concerned with the syntax of compound tenses formed with the auxiliary ‘be’ and the *l*-participle. The present chapter will discuss properties of the tenses constructed with the auxiliary ‘have’ and the past and passive participles. These are the default compound tense constructions in Germanic and Romance, but as was noted in chapter 1, section 1.3.4.5.2, they are diachronically very recent in Slavic, and have been completely grammaticalized only in Kashubian and Macedonian. They have received very scant attention in the generative literature so far. This chapter aims at analyzing them in detail, and is organized as follows. Sections 3.2 and 3.3 will describe properties of passive participles. It will be shown that they vary in the degree of their verbal or adjectival properties. In spite of the variation, following the ideas developed in chapter 2 I will claim that they are categorially the same as the past participle in the ‘have’-perfect construction. I will also argue that a high degree of verbiness of the participle is a hallmark of the grammaticalization of the ‘have’-perfect. Section 3.4 will discuss ‘have’-perfects in Kashubian and Macedonian. To my knowledge, the syntax of Kashubian has not been studied in the generative literature so far, thus section 3.4.1 introduces the language into this framework. Special attention will be given to past participle fronting across the auxiliary ‘have’ in Macedonian (cf. section 3.4.2.2), which will be contrasted with *l*-participle movement across the auxiliary ‘be’ in Bulgarian and Serbo-Croatian investigated in chapter 2. Subsequently, section 3.5 will analyze impersonal participles in Polish. They resemble past participles in Kashubian and Macedonian in their morphological structure. However, it will be shown that they exhibit a higher degree of verbiness, because they are able to assign accusative case and project an external theta role. Section 3.6 will describe the process of grammaticalization of ‘have’-perfects in some older variants of Germanic and Romance languages. Section 3.6.3 will demonstrate that the ‘have’-perfect is currently undergoing the same process of grammaticalization in some Slavic languages.

## 3.2 A typology of passive participles

It has often been observed in the literature that passive participles do not form a uniform grammatical category. As a result, a number of taxonomic distinctions have been proposed to capture their variation. For instance, Wasow (1977) suggests a division into verbal and adjectival participles. In English they are morphologically identical in most contexts, but there are a few criteria that are used to distinguish between the two types. For example, Siegel (1973) observes that the negative prefix *un-* attaches to adjectives, such as *unfriendly*, *unhappy*, and *unspectacular*, as well as to some passive participles, such as *unopened*, *unshaven*, and *untouched*. However, *un-* may not be

prefixed to verbs (cf. 1).<sup>67</sup> Therefore, those participles that permit prefixation with *un-* are regarded as adjectival (cf. 2).

- (1) a. \*Human hands untouched our products  
 b. \*Humans uninhabited the island  
 c. \*Data have unsupported all his claims (Anagnostopoulou 2003)
- (2) a. Our products are untouched by human hands  
 b. The island was uninhabited by humans  
 c. All his claims have been unsupported by the data (Anagnostopoulou 2003)

Furthermore, Wasow (1977) notices that only adjectives and adjectival participles may be selected as complements by linking verbs such as *act*, *become*, *remain*, *seem*, and *sound* (cf. 3a). The contrast is due to the fact that linking verbs carry the meaning of a completed activity or “having a property”, which is compatible with adjectives, but not with verbs.

- (3) a. The door remained *closed* during the noon hour  
 a.' John seems very (*un*)*satisfied*  
 b. \*Many polluted cities remain (*un*)*avoided/escaped* during the summer  
 b.' \*New York seems (very much) *approached/left* in the tourist season  
 (Emonds, 2000: 174-175)

Finally, it has been pointed out that only adjectival participles may act as DP-modifiers. Since verbs do not modify nouns, verbal passive participles may not appear in a prenominal adjectival position.

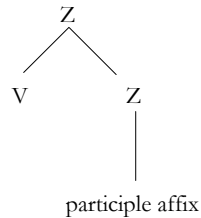
- (4) The broken/filled/painted/cherished box sat on the table  
 (Anagnostopoulou 2003)

Levin and Rappaport (1986: 625) argue that the two types of passive participles differ also in their semantics. Thus, adjectival participles describe a state which results from a previous event and do not introduce an implicit agent. Conversely, verbal participles characterize an event that has taken place and imply the existence of an agent.

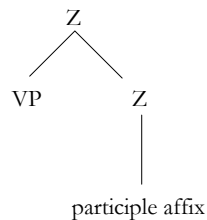
The variation in the distribution of adjectival and verbal participles is often assumed to reflect contrasts in their syntactic structures. For instance, Wasow (1977) claims that while verbal participles are derived in syntax, adjectival passive participles must be formed in the lexicon, because they involve a category change when a verb is reinterpreted as an adjective. Jackendoff (1977) and Abney (1987) challenge this view, arguing that both types of participles are built in syntax. However, in the case of adjectival passives the participial morphology is a sister to V (cf. 5). In verbal passives participial morphology is adjoined to VP (cf. 6).

<sup>67</sup> *Un-* can be attached to some verbs, such as *zip/unzip*, *load/unload*, *button/unbutton*. However, in these cases the prefix carries the meaning of a reversal of an action, rather than negation. For instance, *John unloaded the truck* does not mean that John did not load the truck. Rather, it means that somebody loaded the truck first and then John reversed the action (cf. Allen 1978).

- (5) lexical affixes (adjectival passive participle)



- (6) phrasal affixes (verbal passive participle)



(Abney 1987, as illustrated in Anagnostopoulou 2003)

The contrast between XP versus X<sup>0</sup> adjunction of the participial morphology captures the fact that only verbal passives may contain DP complements, which are italicized in (7).

- (7) a. Those workers were allowed *a lot of vacations*  
 a.' Peter was (being) forgiven *his sins*  
 b. \*Those workers seemed allowed *a lot of vacations*  
 b.' \*Peter felt forgiven *his sins* (Emonds 2000: 177)

Summarizing, I have enumerated a number of differences between adjectival and verbal passive participles. The adjectival vs. verbal dichotomy has been modified a number of times in the literature. Some researchers (e.g. Kratzer 1994, 2000; Embick 2004) have argued for more fine-grained distinctions, but the exact details of these approaches are not relevant for the present purposes. What is crucial, though, is that passive participles may vary in the degree of their verbal or adjectival properties. The verbal properties that I will be concerned with are mainly syntactic and include the ability to assign structural case and project an external theta role. Adjectives and adjectival passive participles are not able to perform these functions. However, through a process of a diachronic reanalysis they may increase their verbiness, become reanalyzed as verbal forms and in some cases even reinterpreted as finite verbs. The present chapter will demonstrate that the Slavic languages display an array of passive participles which are grammaticalized as 'verbal' to various degrees. Before I turn to Slavic, I will discuss properties of 'have'-perfects, which are formed with a verbalized variant of the passive participle.

### 3.3 Generalizations concerning 'have'-perfects

The Germanic and the Romance languages form compound tenses with the auxiliary 'have' or 'be', which select the past participle as a main verb. The past participle is morphologically very similar or identical to the corresponding passive participle. As an example, consider the Dutch sentences in (8).

- (8)
- |    |     |            |            |            |            |
|----|-----|------------|------------|------------|------------|
| a. | Een | geschreven | manuscript |            |            |
|    | a   | written    | manuscript |            |            |
| b. | Het | manuscript | werd       | geschreven |            |
|    | the | manuscript | was        | written    |            |
| c. | Hij | heeft      | het        | manuscript | geschreven |
|    | he  | has        | the        | manuscript | written    |
- "He has written the manuscript" (Dutch, Hoekstra 1986: 97)

The participle *geschreven* can be used as an attributive adjective (cf. 8a), a passive participle (cf. 8b), or as a past participle (cf. 8c). All the three variants are identical in form. The participle derives from the verb *schrijven* 'to write', which assigns two theta roles: Agent and Theme. However, it has been assumed since Chomsky (1981: 54-55 and 117-127) that the thematic role Agent is absorbed by the passive morphology. Moreover, the passive morphology disables the verb from assigning structural case to its complement. Consequently, in order to comply with the Case Filter requirement the object *het manuscript* must move to the subject position in order to receive nominative case from INFL. This results in the placement of the object *het manuscript* in the subject position in (8b).

The situation is more complex in the compound tense construction in (8c). Even though the participle *geschreven* is morphologically identical to the passive participle, the subject *hij* is present in the sentence, which means that its thematic role has not been suppressed. Likewise, the object *het manuscript* has not moved to the subject position, which indicates that it was assigned accusative case. In chapter 2 this irregularity was ascribed to the presence of the auxiliary 'have', whose role is to reintroduce the external theta role and assign structural case to the internal argument of the participle. On this approach there is nothing exceptional about the behaviour of the past participle in (8c). Just as the passive participle in (8b) it suppresses the agent and is not able to assign accusative case to the object.

Consequently, I would like to pursue the idea that the past and the passive participle are the same elements and should receive a uniform analysis. This proposal receives additional support from diachronic development of the compound tense formed with the auxiliary 'have' and the past participle. In many languages the tense derives from a possessive construction, which combined the verb 'have' with a passive participle. It is exemplified for Latin in (9), and from now onwards it will be referred to as the 'stative perfect'.

- (9)
- |    |                          |                        |                     |  |
|----|--------------------------|------------------------|---------------------|--|
| a. | Habeo                    | scriptum               | librum              |  |
|    | have <sub>PRES.1SG</sub> | written <sub>ACC</sub> | book <sub>ACC</sub> |  |
- "I possess the book which is written" (Latin, Smith 1995: 271)

The sentence in (9) does not render an eventive meaning, because Latin did not form a perfect tense with the auxiliary 'have'. However, the construction was reinterpreted as a compound tense in the Romance languages, which are descendants of Latin.

- (10) a. J'ai écrit le livre (French)  
 b. Ho scritto il libro (Italian)  
 c. He escrito el libro (Spanish, Smith 1995: 271)  
 "I have written the book"

The reinterpretation involved a number of grammatical changes, such as the loss of agreement between the participle and the object (cf. section 3.6). A similar reanalysis is taking place in the Slavic languages, but so far the process has been completed only in Kashubian and Macedonian, which will be discussed in the subsequent section.

### 3.4 Properties of 'have'-perfects in Slavic

All the South Slavic and most West Slavic languages use a compound tense which consists of the auxiliary 'be' and the *L*-participle. This construction was extensively investigated in chapter 2. In chapter 1, section 1.3.4.5.2 I pointed out that two Slavic languages, Kashubian and Macedonian have an additional option of forming a periphrastic tense with the auxiliary 'have'. The main difference between 'be'-perfects and 'have'-perfects is that the auxiliary 'have' is accompanied by an invariant form of the passive participle, which always occurs in the same morphological form irrespectively of the gender and number specification of the subject or the object. Thus, even though the subject is masculine singular and the object is feminine singular in the Macedonian example in (11), the participle *završeno* is neuter singular.

- (11) Petar ja ima završeno taa rabota  
 Petar<sub>M</sub> it<sub>CL,ACC</sub> have<sub>1PL</sub> finish<sub>PTP,N</sub> that<sub>F</sub> work<sub>F</sub>  
 "Petar has finished that work" (Mac)

Section 3.4.2.1 will show that 'have'-perfects are possible with unergative and unaccusative participles, that is the types of verbs that never undergo passivization. For this reason, I will refer to the main verb in (11) as the past participle.

Constructions similar to the one in (11) are found in many other Slavic languages, including Bulgarian, Czech, Polish, and Serbian. However, these languages have not grammaticalized 'have'-perfects yet. The differences between grammaticalized and non-grammaticalized 'have'-perfects' will be investigated in section 3.6.3.

#### 3.4.1 Kashubian

Kashubian (or Cassubian) is a language spoken in Northern Poland near the city of Gdańsk. It has approximately 150 thousand speakers (Stone 2002) and has some literary tradition, but only 200-300 people are able to write it ([www.naszekaszuby.pl](http://www.naszekaszuby.pl)). Little attention has been paid to the syntax of compound tenses in this language so far, but the issue certainly deserves more detailed research, because together with Macedonian Kashubian is the only Slavic language that exhibits fully grammaticalized 'have'-

perfects. This section overviews the construction and presents some new linguistic data from this language.

Unless indicated otherwise, the data come from a survey I conducted among native speakers of Kashubian on the website [www.naszekaszuby.pl](http://www.naszekaszuby.pl). The orthography of Kashubian has not been completely standardized. The examples presented in this section are taken from different sources but for consistency the spelling of some of them has been modified in line with the convention adopted in Stone (2002).

The compound tenses in Kashubian show auxiliary alternation that depends on the type of participle that the auxiliary appears with. This alternation is also common in many Germanic and Romance languages. In these languages the auxiliary 'be' may only select unaccusative past participles, while the auxiliary 'have' is accompanied by transitive and unergative participles. In the languages that have morphological means of showing agreement, the unaccusative past participles agree with the subject in gender and number. This is the way it also happens in the Kashubian example in (12), where the unaccusative past participle *jidzenô* is in the feminine singular form and occurs with the auxiliary 'be'.

- (12) Ta bialka je precz jidzenô  
 this woman<sub>F.SG</sub> be<sub>AUX.3.SG</sub> away go<sub>PTP.F.SG</sub>  
 "This woman has gone away" (Csb, Stone 2002: 777)

The auxiliary 'be' may also be used in pluperfect constructions. They are formed with an *l*-participle of the verb 'be' as the auxiliary, which is followed by the main verb. The main verb can be either an *l*-participle (cf. 13a) or a past/passive participle (cf. 13b). Both of the participles agree with the subject.

- (13) a. Jô jem bél pisôl  
 I be<sub>PRES.3.SG</sub> be<sub>PART.M.SG</sub> write<sub>PART.M.SG</sub>  
 "I had written" (Csb, Stone 2002: 777)
- b. Jô jem bél jachony  
 I be<sub>PRES.3.SG</sub> be<sub>PART.M.SG</sub> go<sub>PASS.M.SG</sub>  
 "I have left" (Csb, [www.naszekaszuby.pl](http://www.naszekaszuby.pl))

The auxiliary 'have' selects transitive (cf. 14) and unergative (cf. 15) past participles. They occur in the singular neuter form and never agree with the subject or the object in  $\varphi$ -features.

- (14) a. Të mǎš to wszétko zrob'ioné/zrob'iony<sup>68</sup>  
 you have<sub>PRES.2.SG</sub> this all do<sub>PTP.N.SG</sub>/do<sub>PTP.M.SG</sub>  
 "You have made all of this"
- b. Jô móm tą bialkã bité  
 I have<sub>PRES.1.SG</sub> this<sub>F</sub> woman<sub>ACC.F.SG</sub> beaten<sub>PTP.SG.N</sub>  
 "I have beaten this woman" (Csb, [www.naszekaszuby.pl](http://www.naszekaszuby.pl))

<sup>68</sup> According to some sources (Breza & Treder 1981: 133; Gogolewski 1963; Lorentz 1919: 45; 74), the past participle may also appear in the masculine variant, irrespectively of the subject or object feature content (cf. 14a). However, the native speakers I have consulted claim that only the neuter form is possible, and that the confusion may have resulted from divergent orthographic conventions.



- c. Măș            tĕ        vizõné?  
 have<sub>PRES.2SG</sub> you see<sub>PTP.N.SG</sub>  
 "Have you seen [it]?" (Csb, Gogolewski 1963: 71)
- d. Mój    woejc    mô                    ten    ćòln            zbudovõné  
 my    father have<sub>PRES.3SG</sub> this ship<sub>ACC.M.SG</sub> build<sub>PTP.N.SG</sub>  
 "My father has built that ship" (Csb, Elliott 2001: 137)

- (15) a. On    mî            sponé  
 he    have<sub>PRES.3SG</sub> sleep<sub>PTP.N.SG</sub>  
 "He has slept"
- b. Ona    mî            lezoné  
 she    have<sub>PRES.3SG</sub> lie<sub>PTP.N.SG</sub>  
 "She has lain" (Csb, www.naszekaszuby.pl)

'Have'-perfects in Kashubian are possible with non-human and inanimate subjects. Section 3.6.3 will show that this semantic property is a strong indication that the construction is fully grammaticalized.

- (16) a. To    àuto    mô                    rozjachoné        kùrã  
 this<sub>N</sub> car<sub>N</sub> have<sub>PRES.3SG</sub> run-over<sub>PTP.N.SG</sub> hen<sub>F.SG</sub>  
 "This car has run over the hen"
- b. Nen    pòjk    mô                    wëpité            mlékò  
 this<sub>M</sub> cat<sub>M</sub> have<sub>PRES.3SG</sub> drink<sub>PTP.N.SG</sub> milk<sub>N</sub>  
 "This cat has drunk milk" (Csb, www.naszekaszuby.pl)

Morphologically, the past participles are the same as passive participles. This can be observed in the form of the passive participle *bité* in (17), which is identical to the past participle in (14b).

- (17) To    dziecko    je        bité  
 this<sub>N</sub> child<sub>N</sub> be<sub>3SG</sub> beat<sub>PASS.N.SG</sub>  
 "This child is beaten" (Csb, Breza & Treder 1981: 134)

The past participle must always appear together with the auxiliary 'have'. Omission of the auxiliary results in ungrammaticality.

- (18) a. Móm            to    wszétko        zrob'ioné  
 have<sub>PRES.1SG</sub> it all done<sub>PTP.N.SG</sub>  
 "I have done all of this"
- b. \*Zrob'ioné to wszétko (Csb)

Bearing in mind that the past participle is morphologically the same as the passive participle, which is assumed to be unable to assign structural case and project the external theta role, the restriction on the auxiliary omission suggests that 'have' performs these two functions. Hence, the example in (18b) is ill-formed because the object *to wszystko* lacks a case assigner. I will provide more support for this claim in section 3.5 while discussing impersonal participles in Polish.

Just as the verb 'be', the auxiliary 'have' renders the pluperfect meaning when it is used in the form of the *l*-participle.

- (19) Jô miôł to wszëtko zrob'ioné<sup>69</sup>  
 you have<sub>PART.M.SG</sub> this all do<sub>PTP.N.SG</sub>  
 “You have made all of this” (Csb, www.naszekaszuby.pl)

The auxiliary ‘have’ also occurs with reflexive verbs. As expected, they appear in the singular neuter form irrespectively of the  $\varphi$ -feature specification of the subject.

- (20) a. On mô sã dowiedzóné  
 he have<sub>3SG</sub> REFL learn<sub>PTP.N</sub>  
 “He has found out”  
 b. Ona mô sã pitóné  
 she have<sub>3SG</sub> REFL ask<sub>PTP.N</sub>  
 “She has asked” (Csb, www.naszekaszuby.pl)

The past participle in (21a) is in the perfective aspect. However, it may appear in the imperfective aspect as well (cf. 21b and c), but then it expresses the meaning of the “perfect of experience”.

- (21) a. Jô móm zjadłé polnie  
 I have<sub>1SG</sub> eat<sub>PRF.PART.N.SG</sub> dinner  
 “I have (just) had dinner”  
 b. Jô móm jadłé pomuchła  
 I have<sub>1SG</sub> eat<sub>IMPF.PART.N.SG</sub> cod  
 “I have (already) eaten cod”  
 c. Mój wójc mô budovóné čólna  
 My father have<sub>1SG</sub> build<sub>IMPF.PTP.N.SG</sub> ships  
 “My father has built ships” (Csb, www.naszekaszuby.pl)

In (21a and b) the auxiliary ‘have’ is accompanied by the *l*-participle. This is because Kashubian tends to conflate the *l*-participle with the past participle. Likewise, in contrast to other Slavic languages, Kashubian may use the *l*-participle as a passive participle. For instance, (22) exemplifies two sentences in the passive voice. The one in (22a) is formed with the passive participle, but the one in (22b) contains the *l*-participle (cf. also 13 above).

- (22) a. To àuto je pòstawioné przed chęcą  
 this car be<sub>3SG</sub> place<sub>PASS.N.SG</sub> before house  
 “This car is parked in front of the house”  
 b. Mój czóln je òsódly na mielëznie  
 My ship be<sub>3SG</sub> come-down<sub>PTP.M.SG</sub> on shallows  
 “My ship is on shallows” (Csb, www.naszekaszuby.pl)

This strategy is not available in any other Slavic language. According to Piotrowski (1981: 13), this shows that Kashubian has lost a categorial distinction between *l*-participles and passive participles. Possibly, this has happened under the influence of German, which has the same type of participle in passive and compound tense constructions. As expected, when the *l*-participle is used in ‘have’-perfects, it appears in its invariant neuter form.

<sup>69</sup> The finite auxiliary is missing in this example, because in contemporary Kashubian the *l*-participle may occur without the present tense auxiliary ‘to be’ (cf. Breza & Treder 1981: 133).

- (23) a. Jô môm to widziałé  
 I have<sub>1SG</sub> it see<sub>PART.N.SG</sub>  
 "I have seen it" (Csb, Stone 2002: 777)

It has been demonstrated that most verbs, transitive and unergative alike, are compatible with the auxiliary 'have'. However, modal verbs are excluded in this construction (cf. 24). The *l*-participle is used to render modal meaning in the past instead (cf. 25).<sup>70</sup>

- (24) a. \*Jô miól muszoné  
 I have<sub>PART.M.SG</sub> must<sub>PTP.N.SG</sub>  
 b. \*Jô miól rozmioné  
 I have<sub>PART.M.SG</sub> can<sub>PTP.N.SG</sub> (Csb, www.naszekaszuby.pl)

- (25) a. Muszelé to zrobiec, bò przébliziwól sã termin  
 must<sub>PART.N.SG</sub> it do<sub>INF</sub> because approach<sub>PART.M.SG</sub> REFL. deadline<sub>M.SG</sub>  
 "They had to do this, because the deadline was approaching"  
 b. Nie rozmiélé wétłomaczéc sã z nygò  
 NEG can<sub>PART.N.SG</sub> explain<sub>INF</sub> REFL. from this  
 "They couldn't explain themselves" (Csb, www.naszekaszuby.pl)

The restriction on the usage of past participles as modal verbs will be explained in section 3.7, where I will argue that it is related to the degree of verbalization of passive participles.

Summarizing, the section has outlined properties of 'have'-perfects in Kashubian. It has been shown that the past participle selected by the auxiliary 'have' is morphologically the same as the passive participle. However, the construction permits unergative verbs such as 'sleep', which are never passivized. This suggests that the past participle is more verbal than the passive participle. Nevertheless, in contrast to finite verbs, the past participle is unable to project an external theta role or assign structural case, and it needs to be accompanied by the auxiliary 'have', which performs these functions.

### 3.4.2 Macedonian

'Have'-perfects in Macedonian have been described in the literature more extensively than the related construction in Kashubian, which permits a more detailed analysis. Section 3.4.2.1 will describe properties of this construction. Section 3.4.2.2 will compare past participle fronting across the auxiliary 'have' in Macedonian with *l*-participle fronting across the auxiliary 'be' in Bulgarian and Serbo-Croatian, which was investigated in chapter 2.

<sup>70</sup> This restriction may be unexpected, because modal verbs do not have a defective paradigm in Slavic.

### 3.4.2.1 Properties of the construction

Unlike Kashubian, Macedonian does not make a distinction in the auxiliary selection related to transitivity of a verb, so both unaccusative (cf. 26a), unergative (cf. 26b) and transitive participles (cf. 26c) take the auxiliary 'have'.

- (26) a. Gostite imaat dojdeno  
 guests-the have<sub>3PL</sub> arrive<sub>PTP,N</sub>  
 "The guests have arrived" (Mac, Elliott 2001: 39)
- b. Goce Delčev ima spieno tuka  
 Goce Delčev have<sub>3SG</sub> sleep<sub>PTP,N</sub> here  
 "Goce Delčev has slept here" (Mac, Friedman 1977: 91)
- c. Imam dobieno edno pismo do sega od Violeta  
 have<sub>1SG</sub> receive<sub>PTP,N</sub> one letter up till now from Violeta  
 "Up till now I have received one letter from Violeta" (Mac, Friedman 1977: 88)

Likewise, reflexive verbs may be selected by the auxiliary 'have', too.

- (27) a. Veke se imam izmieno  
 just REFL have<sub>1SG</sub> wash<sub>PTP,N</sub>  
 "I have just washed (myself)"
- b. Veke se imam izbriceno  
 just REFL have<sub>1SG</sub> shave<sub>PTP,N</sub>  
 "I have just shaved (myself)" (Mac, L. Grujoska, p.c.)

Just as in Kashubian, human, non-human, and inanimate subjects are permitted in this construction.

- (28) a. Mačkata go ima ispieno mlekoto  
 cat it<sub>CL,ACC</sub> have<sub>3SG</sub> drink<sub>PTP,N</sub> milk-the  
 "The cat has drunk milk"
- b. Brodot se ima udreno vo karpite  
 ship-the REFL have<sub>3SG</sub> hit<sub>PTP,N</sub> in rocks  
 "The ship hit rocks" (Mac, L. Grujoska, p.c.)

However, not all verbs can be used as participles in 'have'-perfects. For instance, on a par with Kashubian, modal verbs such as 'must' (cf. 29a) and 'can' (cf. 30a) are excluded. They may only appear in a simple past tense form (cf. 29b and 30b).

- (29) a. \*Imam morano/trebano da gi napravam ovie raboti  
 have<sub>1SG</sub> must<sub>PTP,N</sub>/must<sub>PTP,N</sub> da them<sub>CL,ACC</sub> do<sub>SUBJ,1SG</sub> these work<sub>PL</sub>
- b. Morav da ja napravam ovaa rabota  
 must<sub>PAST,1SG</sub> that it<sub>CL,F</sub> do<sub>SUBJ,1SG</sub> this<sub>F</sub> work  
 "I have had to do this work" (Mac, L. Grujoska, p.c.)

- (30) a. \*Nemam moženo da se objasnam  
 NEG+have<sub>1SG</sub> can<sub>PTP,N</sub> that REFL explain<sub>SUBJ,1SG</sub>  
 b. Ne možev da se objasnam  
 NEG can<sub>PAST,1SG</sub> that REFL explain<sub>SUBJ,1SG</sub>  
 "I couldn't explain myself" (Mac, L. Grujoska, p.c.)

Correspondingly, the usage of the verbs 'have' and 'be' as past participles in 'have'-perfects is quite limited, as well. It is possible only in the Western dialects of the language, that is in the area where the construction is the most widespread and where it was grammaticalized the earliest (cf. chapter 1, section 1.3.4.5.2.1).

- (31) a. Imam bideno tamu  
 have<sub>PRES,1SG</sub> be<sub>PTP,N</sub> there  
 "I have been there" (Radožda-Vevčani dialect, Hendriks 1976: 226)  
 b. Imam imano  
 have<sub>PRES,1SG</sub> have<sub>PTP,N</sub>  
 "I have had" (Ohrid dialect, Graves 2000: 489)

However, this option is considered ill-formed in the standard dialect, and a past tense form or a compound tense with the *l*-participle must be used instead (cf. 32).<sup>71</sup>

- (32) a. Toj beše vo Skopje  
 he be<sub>PAST,3SG</sub> in Skopje  
 "He was in Skopje (I vouch for it)"  
 b. Toj bil vo Skopje  
 he be<sub>PART,M,SG</sub> in Skopje  
 "Supposedly, he was in Skopje" (Mac, Friedman 2002: 272)

It has been shown that the past participle always occurs in the invariant form, which is morphologically the same as the singular neuter passive participle. For instance, *skinato* in (33) is a neuter variant, which can be both a passive participle and a past participle that complements the auxiliary 'have'. The passive and 'have'-perfect constructions are compared in (33) through (35). These examples demonstrate that even though the passive form always agrees with the object, the past participle remains the same.

- (33) a. Novoto palto mu e skinato  
 new-the<sub>N</sub> coat<sub>N</sub> him<sub>CL, DAT</sub> be<sub>3SG</sub> tear<sub>PASS, N</sub>  
 "His/her new coat is torn"  
 b. Go imam skinato moeto novo palto  
 him<sub>CL, ACC</sub> have<sub>1SG</sub> tear<sub>PTP, N</sub> my-the new coat  
 "I have torn my new coat" (Mac, L. Grujoska, p.c.)

<sup>71</sup> The two sentences differ in evidentiality. As noted in chapter 1, section 1.3.4.5.1.1, the constructions formed with the *l*-participle express the renarrated mood in Macedonian.

- (34) a. Novata košula mu e skinata  
 new<sub>F</sub> shirt<sub>F</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> tear<sub>PASS.F</sub>  
 "His/her new shirt is torn"
- b. Ja imam skinato mojata nova košula  
 her<sub>CL.ACC</sub> have<sub>1SG</sub> tear<sub>PTP.N</sub> my-the new shirt<sub>F</sub>  
 "I have torn my new shirt" (Mac, L. Grujoska, p.c.)
- (35) a. Noviot kaput mu e skinat  
 new-the<sub>M</sub> jacket<sub>M</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> tear<sub>PASS.M</sub>  
 "His/her new jacket is torn"
- b. Go imam skinato mojot nov kaput  
 him<sub>CL.ACC</sub> have<sub>1SG</sub> tear<sub>PTP.N</sub> my-the new jacket<sub>M</sub>  
 "I have torn my new jacket" (Mac, L. Grujoska, p.c.)

Just as in Kashubian, the construction is ungrammatical when the auxiliary 'have' is absent (cf. 36). Following the hypothesis concerning auxiliary selection assumed in chapter 2, this suggests that the past participle is not a case assigner by itself, and that the auxiliary 'have' is needed to assign case to the object and project an external theta role.

- (36) Jas gi \*(imam) kupeno knigite  
 I them<sub>CL.ACC</sub> have<sub>1SG</sub> buy<sub>PTP.N.SG</sub> books-the  
 "I have bought the books" (Mac)

Summarizing, it has been shown that 'have'-perfects are formed in a similar way in Kashubian and Macedonian. The main difference between the two languages concerns the requirement of the selection of the auxiliary 'be' with unaccusative participles, which is absent in Macedonian. Furthermore, it seems that the participle selected by the auxiliary 'have' has been verbalized to a greater degree in Macedonian than in Kashubian. This is evidenced by the fact that the verbs 'have' and 'be' are possible as past participles in some dialects of Macedonian.

### 3.4.2.2 Participle fronting across the auxiliary 'have'

This section analyzes fronting of the past participle across the auxiliary 'have' in Macedonian. The movement is contrasted with *l*-participle movement in Bulgarian and Serbo-Croatian, which was discussed in chapter 2.<sup>72</sup>

The example in (37b) illustrates preposing of the past participle *kupeno* across the auxiliary 'have'. The operation always gives rise to a focused or topicalized reading of the fronted constituent; therefore I will refer to it as 'VP topicalization'.

- (37) a. Nie gi imame kupeno knigite  
 we them<sub>CL.ACC</sub> have<sub>1PL</sub> buy<sub>PTP.N</sub> books-the  
 "We have bought the books"
- b. Kupeno knigite (nie) gi imame  
 buy<sub>PTP.N</sub> books-the we them<sub>CL.ACC</sub> have<sub>1PL</sub>  
 "Buy the books, we did!" (Mac, S. Spasovska, p.c.; cf. Tomić 1996a)

<sup>72</sup> Recall from chapter 2 that *l*-participle movement is impossible in Macedonian. This restriction will be explained in chapter 4, section 4.4.2.4.2.2.

It is also possible to front the past participle when the auxiliary 'have' is negated, as in (38).

- (38) Kupeno knigite (nie) gi nename  
 buy<sub>PTP,N</sub> books-the we them<sub>CL,ACC</sub> NEG+have<sub>I,PL</sub>  
 "Buy the books, we didn't" (Mac, L. Grujoska, p.c.)

VP topicalization differs from *l*-participle fronting across the auxiliary 'be' in several ways. First of all, the past participle does not agree with the subject in  $\varphi$ -features. In (37), the subject pronoun *nie* is marked for plural, whereas the past participle *kupeno* is singular neuter. In chapter 2 I claimed that the agreement on the *l*-participle bears evidence for its movement to Spec, TP, where the  $\varphi$ -features of T are checked. The lack of agreement on the past participle indicates that the movement to Spec, TP does not take place.

The past participle is a potential candidate for raising to Spec, TP, so it is necessary to explain why the movement is excluded. The answer is relatively simple on the assumptions that *l*-participle movement across the auxiliary 'be' is an instance of locative inversion and that the auxiliary 'have' is an external theta-role assigner. As is well-known, locative inversion is incompatible with verbs assigning external theta-roles (cf. 39). It is possible only with the verb 'be' and a small selection of other unaccusative verbs (cf. 40).

- (39) a. \*Into the room rolled John the ball  
 b. \*Down the street walked the old nanny her dog (Rochemont 1978)
- (40) a. Crashing through the woods came a wild boar  
 b. On that table was put a valuable book  
 (cf. Bresnan 1994: 77-79; Coopmans 1989)

In chapter 2 I argued that the verb 'have' is a transitive auxiliary, which assigns structural case and projects an external argument. In this scenario, the past participle may not participate in locative inversion, because it raises across the transitive verb 'have'.

Another difference between *l*-participle fronting and VP-topicalization concerns the landing site of the moved element. The example in (37b) shows that the past participle raises higher in the structure than the *l*-participle, because it may cross the subject *nie*. As the translation indicates, the movement results in a focused interpretation of the preposed element. I take this to mean that the operation is triggered by a Focus feature. The participle heads PartP and is complemented by the object *knigite*. The whole PartP lands in Spec, FocP above Spec, TP.

- (41) [<sub>FocP</sub> kupeno knigite<sub>i</sub> [<sub>TP</sub> nie [<sub>VP</sub> gi+imame [<sub>PartP</sub> t<sub>i</sub> ]]]]

This means that in contrast to *l*-participle fronting, which takes place in order to check the  $\varphi$ -features of T and thus involves A-movement, the preposing of the past participle exemplifies A'-movement.

VP-topicalization also differs from *l*-participle movement with respect to the size of the constituent that undergoes movement. As demonstrated in (37b), the past participle may pied-pipe the object when it raises to the clause initial position. However,

it may also leave the object stranded behind, as in (42a), or it may move together with manner adverbs such as *brzo* in (42b).

- (42) a. Kupeno gi imame knjige  
 buy<sub>PTP.N.SG</sub> them<sub>CL.ACC</sub> have<sub>1PL</sub> books-the  
 "We did buy the books!" (Mac, S. Spasovska, p.c.)
- b. Brzo pročitano gi imame knjige  
 quickly read<sub>PTP.N.SG</sub> them<sub>CL.ACC</sub> have<sub>1PL</sub> books-the  
 "We have read the books really quickly" (Mac, L. Grujoska, p.c.)

By contrast, recall from chapter 2 that the *l*-participle may raise across the auxiliary 'be' only entirely on its own. Pied-piping of an object (cf. 43a) or an adverb (cf. 43b) results in ungrammaticality.

- (43) a. Pročel e knjigata  
 read<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> book-the  
 "He has read the book"
- b. \*Pročel knjigata e
- c. \*Bürzo pročel e knjigata  
 quickly read<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> book-the (Bg)

In chapter 2 I suggested that the restriction is due to the way the compound tense formed with the auxiliary 'to be' and the *l*-participle is structured (cf. 44). Since 'to be' is an unaccusative verb, it is not able to assign accusative case to the object and project an external argument, so the *l*-participle must perform these functions. This implies that the subject must be the external argument of the *l*-participle, rather than of the auxiliary 'be'. Therefore, in the template in (44) the subject is located in Spec, vP, while the auxiliary 'be' heads an independent projection AuxP above the subject.

- (44) [TP ... T<sub>[+φ]</sub> ... [Aux BE [vP subject<sub>[+φ]</sub> v [PartP Part<sub>[+φ]</sub> object]]]]

The ban on object pied-piping by the *l*-participle (cf. 43b) was attributed to the assumption that the movement of the whole PartP raises the object across its case checking position. Therefore, it was argued that the object must first raise to Spec, AgrOP, and only then may PartP raise to Spec, TP via remnant movement.

The restriction on fronting of adjuncts or the subject together with the *l*-participle was claimed to be due to the size of the constituent that is preposed. It is impossible to move vP together with these elements, because this would leave the *l*-participle too deeply embedded to check the φ-features of T. Therefore, the largest constituent that can be fronted is PartP. This precludes raising of adjuncts or the subject, which are generated above PartP.

Correspondingly, the following structure was proposed in chapter 2, section 2.3.1, for the compound tense formed with the auxiliary 'have'.

- (45) [TP ... T<sub>[+φ]</sub> ... [vP subject<sub>[+φ]</sub> v [VP **have** [PartP Part<sub>[-φ]</sub> object]]]]

The past participle selected by the verb 'have' in Kashubian and Macedonian is morphologically the same as the singular neuter form of the passive participle. This suggests that it is analyzed by speakers as a verb which is unable to project an external theta role or to assign accusative case to its complement. In line with the argumentation



developed in chapter 2, these functions must be performed by the auxiliary 'have'. The assumption is confirmed by the data in (18) and (36), repeated below as (46) and (47), respectively, which indicate that 'have'-perfects in Kashubian and Macedonian are ungrammatical if the auxiliary is dropped.

- (46) a. Móm to wszétko zrob'ioné  
 have<sub>PRES,1SG</sub> it all done<sub>PTP,N,SG</sub>  
 "I have done all of this"  
 b. \*Zrob'ioné to wszétko (Csb)
- (47) Jas gi \*(imam) kupeno knigite  
 I them<sub>CL,ACC</sub> have<sub>1SG</sub> buy<sub>PTP,N,SG</sub> books-the  
 "I have bought the books" (Mac)

Furthermore, the past participle does not share  $\varphi$ -features with  $T^0$ . In both Kashubian and Macedonian it always occurs in the invariant form, regardless of the  $\varphi$ -features carried by the subject. Moreover, since it appears with the transitive auxiliary 'have', it is not eligible for movement via locative inversion. These two properties preclude raising of the past participle to Spec, TP and indicate that the  $\varphi$ -features of T may be checked only by movement of the subject. As a result, unlike the *l*-participle in Bulgarian and Serbo-Croatian, the past participle in Macedonian does not compete with the subject for the same position. Therefore, the fronted past participle *kupeno* may co-occur with the subject *nie* (cf. 37b; repeated below as 48).

- (48) Kupeno knigite nie gi imame  
 buy<sub>PTP,N</sub> books-the we them have<sub>PRES,1PL</sub>  
 "Buy the books, we did!" (Mac)

It has been established that preposing of the past participle in Macedonian (cf. 37 and 42) is triggered by a Focus feature that resides in the Focus head located above TP. Obviously, the size of the element that needs to be focused in a clause depends on discourse structure requirements, and as the data show, it may comprise a bare past participle (cf. 42a), a past participle accompanied by an object (cf. 37b) or by an adverb (cf. 42b). This suggests that the constituent that undergoes VP-topicalization in Macedonian is much larger than the PartP that is moved to Spec, TP via locative inversion in Bulgarian and Serbo-Croatian.

The fact that the topicalized PartP may be accompanied by some other elements gives some insights about the structure of the VP that contains 'have'-perfects (cf. 45). For instance, it implies that PartP is not immediately dominated by the VP headed by the auxiliary 'have'. There might be a number of functional elements, marked as XP and ZP in (49), which intervene between the two projections.

- (49) [TP ... T<sub>[+ $\varphi$ ]</sub> ... [VP subject<sub>[+ $\varphi$ ]</sub> v [VP **have** [XP ... [ZP [PartP Part<sub>[+ $\varphi$ ]</sub> object]]]]

Presumably, these projections host different types of adverbs that can be fronted together with PartP. However, they may also contain an Agreement projection in which the object, such as *knigite* in (48), can check its case. Hence there is no need for evacuation of an object out of the fronted phrases prior to the movement of PartP to

Spec, FocP, and this is why it is possible for the past participle to carry the object on the way to Spec, FocP.<sup>73</sup>

The assumption that there is a range of extended projections of the past participle below the auxiliary 'have' is independently supported by the base positions of adverbs in 'have'-perfects. As indicated in (50), in Macedonian the auxiliary 'have' may be separated from the past participle by a number of different adverbs and other constituents.

- (50) a. (Sama) gi imam (sama) napraveno ovie raboty  
 oneself<sub>CL,ACC</sub> have<sub>1SG</sub> oneself<sub>F</sub> do<sub>PTP,N,SG</sub> these work<sub>PL</sub>  
 "I have done this work by myself"
- b. Gi imam denes veke napraveno ovie raboty  
 it<sub>CL,ACC</sub> have<sub>1SG</sub> today already do<sub>PTP,N,SG</sub> these work<sub>PL</sub>  
 "I have already done this work today"
- c. (Nie) go imame potpolno/kompletno isprazneto frižiderot  
 we it<sub>CL,ACC</sub> have<sub>1PL</sub> completely empty<sub>PTP,N</sub> fridge-the  
 "We have completely emptied the fridge"
- d. Petar (brzo) gi ima (brzo) spakuvano knjigite (brzo)  
 Petar quickly them<sub>CL,ACC</sub> have<sub>3SG</sub> quickly pack<sub>PTP,N</sub> books quickly  
 "Petar has packed the books quickly" (Mac, L. Grujoska, p.c.)

By comparison, consider the minimal pairs for (50) in (51), which consist of 'be-perfects'. Here the auxiliary clitic 'be', which clusters together with pronominal clitics such as *gi* or *go*, must immediately dominate the *l*-participle.

- (51) a. (Jas) sama sam gi (\*sama)  
 I oneself<sub>F</sub> be<sub>AUX,1SG</sub> them<sub>CL,ACC,PL</sub> oneself<sub>F</sub>  
 napravila ovie raboti  
 do<sub>PART,F,SG</sub> these work<sub>PL</sub>  
 "I have done this work by myself, they say"
- b. (Nie) potpolno/kompletno sme go  
 we completely be<sub>1PL</sub> it<sub>CL,ACC</sub>  
 (\*potpolno/kompletno) ispraznile frižiderot  
 completely empty<sub>PART,PL</sub> fridge  
 "Supposedly, we have emptied the fridge completely"
- c. Petar (brzo) gi (\*brzo) spakuval knjigite (brzo)  
 Petar quickly them<sub>CL,ACC</sub> quickly pack<sub>PART,MSG</sub> books-the quickly  
 "Petar has packed his books quickly, they say" (Mac, L. Grujoska, p.c.)

Fronting of the *l*-participle across the auxiliary 'be' is excluded in Macedonian (see chapter 4, section 4.4.2.4.2.2 for an explanation), so it is impossible to juxtapose the two types of movement operations within one language. However, the contrast between the data in (50) and (51) suggests that unlike the past participle, the *l*-participle must raise to a position immediately below the auxiliary 'be', as it may not be separated from the auxiliary with any non-clitic material. Since the past participle does not need to undergo this movement and be right-adjacent to the auxiliary 'have', it may be fronted together a number of functional projections that dominate it.

<sup>73</sup> An alternative might be to assume that case on the object is checked by reconstruction, which is possible with A<sup>2</sup>-movement and thus also with VP topicalization, but is not available with *l*-participle fronting, which exemplifies A-movement.

Past participle fronting in Macedonian exhibits the same properties as raising of the past participle across the auxiliary 'have' in some Germanic languages, such as Dutch and German. The construction has received a lot of attention in the literature (cf. Thiersch 1985, Den Besten and Webelhuth 1987, Koster 1987, Den Besten and Webelhuth 1990, and Müller 1998), and is exemplified in (52) for Dutch.

- (52) a. Jan heeft het boek<sub>i</sub> niet [<sub>VP</sub> t<sub>i</sub> gelezen ]  
 Jan has the book not read  
 b. [<sub>VP</sub> gelezen ] heeft Jan het boek niet t<sub>VP</sub>  
 c. [<sub>VP</sub> het boek gelezen ] heeft Jan niet t<sub>VP</sub>  
 d. [dat boek te snel gelezen]<sub>i</sub> [<sub>C</sub> heeft hij niet t<sub>i</sub>]  
 that book too quickly read has he not  
 (Dutch, H. Broekhuis, p.c.)

Just as in Macedonian the past participle in Dutch may move entirely by itself (cf. 52b), it may raise together with an object (cf. 52c) and it may even pied-pipe a VP-external element, such as a VP-adverb *te snel* 'too quickly' in (52d). The fact that (52d) is possible indicates that virtually an infinitely large phrase may be preposed.

The landing site of the fronted element in (52) is usually assumed to be Spec, CP or Spec, FocP. Given that finite verbs are standardly claimed to land in C in V2 contexts in Dutch and German, the auxiliary *heeft* in (52) must be in C. Moreover, the fronted phrase *dat boek te snel gelezen* found to the left of the auxiliary has crossed the subject pronoun *hij*. This indicates that exactly as in the case of VP topicalization in Macedonian, the fronted constituent in Dutch raises higher than the *l*-participle in Bulgarian and Serbo-Croatian.

Summarizing, this section has shown that fronting of the *l*-participle in Bulgarian and Serbo-Croatian and fronting of the past participle in Macedonian instantiate two different types of raising. The former is A-movement, the latter is A'-movement. Both of them involve XP-displacement, but the former is triggered by the  $\varphi$ -features of T, whereas the latter is driven by a Focus feature in Foc. They also vary in the size of the preposed constituent.

Both operations are found outside Slavic. The *l*-participle fronting exemplifies locative inversion, while the past participle fronting in Macedonian is a Slavic counterpart of the Germanic VP topicalization.

*L*-participle fronting in Slavic has been frequently contrasted with VP topicalization in Germanic (cf. especially Borsley, Rivero & Stephens 1996) in order to show that it does not involve XP-movement. This section has demonstrated that indeed *l*-participle fronting is different from VP-topicalization, but this does not preclude an XP-movement account. These movements instantiate two different types of syntactic operations, which differ in the size of the moved element, as well as the A/A' properties, therefore it is misguided to postulate any similarities between them.

This concludes the analysis of grammaticalized 'have'-perfects in Kashubian and Macedonian. The next section will discuss impersonal participles in Polish. It will be shown that they exhibit the highest degree of verbalization of passive participles in Slavic.

### 3.5 Impersonal participles in Polish

The preceding sections investigated past participles that are used in compound tense constructions formed with the auxiliary 'have'. The past participles historically originate from passive participles. Even though they may be derived from verbs that normally reject passivization, such as unergatives or unaccusatives, they are morphologically the same as their passive variants. Moreover, on a par with passive participles they are unable to project an external theta role or assign accusative case, therefore they must always appear with the auxiliary 'have'. In terms of the distinction between 'adjectival' and 'verbal' types of passive participles made in section 3.2, they are still largely on the adjectival side.

The present section will analyze impersonal participles in Polish. They never occur with the verb 'have' or any other overt auxiliary. Morphologically they are very similar to the past participles in Macedonian, because they also end in the invariant *-no/-to* morpheme. Moreover, just as the past participles they are the product of a diachronic reanalysis of passive participles. However, in contrast to the past participles, they demonstrate a greater degree of verbiness. It will be shown that they are able to assign structural case and project a (covert) external theta role.

Even though impersonal participles have been subject to numerous linguistic analyses (cf. the references mentioned in the following section, as well as Baker 1988, Baker, Johnson & Roberts 1989, Goodall 1993, and Boeckx 1998), they have never been contrasted with past participles in Kashubian and Macedonian, in spite of the obvious morphological and structural similarities. The subsequent section is an attempt in this direction.

#### 3.5.1 Properties of the impersonal participles

Polish, Ukrainian, Byelorussian, and some dialects of Northern Russian have developed a construction that is often referred to as the 'impersonal passive'<sup>74</sup> or a '*no/to* construction'. For the reasons that will become immediately clear, I will avoid the notion 'passive', and following Siewierska (1988), I will adopt the term 'impersonal participle'. The investigation in this section will focus on Polish, but see Lavine (2000) for a comparison of Polish with Ukrainian, Byelorussian and Northern Russian.

The construction is exemplified in (53). It consists of a participle followed by an object marked for accusative case.<sup>75</sup> The participle does not show agreement with the object, and it always remains in the same morphological form. Its morphological structure is similar to the passive participle, because it ends in the *-n* or *-t* suffix (cf. chapter 1, section 1.3.3.5). Semantically, it always describes a past event, which is understood as finished if the verb appears in the perfective variant (cf. 53a), or as unfinished if the verb is marked for imperfective aspect (cf. 53b).

<sup>74</sup> The term was first used by Comrie (1977).

<sup>75</sup> Obviously, the case of the object is not always accusative. Some verbs, such as *kierować* 'to drive' assign inherent case, which is also preserved in impersonal participle constructions.

(i)                    *Kierowano    samochodem*  
                          *drive<sub>IPF</sub>        car<sub>INSTR</sub>*  
                          "The car was driven"

- (53) a. Napisano listy  
 write<sub>IPT,PRF</sub> letters<sub>ACC</sub>  
 “The letters were written down”  
 b. Pisano listy  
 write<sub>IPT,IMPF</sub> letters<sub>ACC</sub>  
 “The letters were being written” (Pl)

In spite of the similarity, the impersonal participle is not part of the inflectional paradigm of passive participles in modern Polish.<sup>76</sup> Thus, the examples in (54) indicate that the 3<sup>rd</sup> person neuter morphology used in adjectival passives is *-ne* or *-te*, whereas in impersonal participles it is always *-no* or *-to*.

- (54) a. Kochano dziecko  
 love<sub>IPT</sub> child<sub>ACC,N</sub>  
 “The child was loved”  
 a’. Dziecko było kochane przez matkę  
 child<sub>NOM,N</sub> be<sub>PART,N,SG</sub> love<sub>PASS,N</sub> by mother  
 “The child was loved by the mother”  
 b. Bito dziecko  
 beat<sub>IPT</sub> child<sub>ACC,N</sub>  
 “The child was beaten”  
 b’. Dziecko było bite przez matkę  
 child<sub>NOM,N</sub> be<sub>PART,N,SG</sub> beat<sub>PASS,N</sub> by mother  
 “The child was beaten by the mother” (Pl, cf. Dziwirek 1994: 185)

In this way impersonal participles stay in a stark contrast with past participles in Kashubian and Macedonian, which are morphologically the same as passive participles in the singular neuter form.

Impersonal participles are never used with any overt auxiliary, neither ‘be’ (cf. 55a) nor ‘have’ (cf. 55b).

- (55) a. Pisano (\*sa/\*byly/\*było) listy  
 write<sub>IPT</sub> be<sub>PRES,3PL/PART,NV,PL/PART,N,SG</sub> letters  
 b. Pisano (\*maja/\*miałe/\*miało) listy  
 write<sub>IPT</sub> have<sub>PRES,3PL/PART,NV,PL/PART,N,SG</sub> letters (Pl)

The construction is dubbed “impersonal”, because it never allows the subject to be expressed overtly, not even via a “by-phrase” (cf. 56a), the way it is possible in passive structures (cf. 56b).

- (56) a. Pisano listy (\*przez dzieci)  
 write<sub>IPT</sub> letters by children  
 “The letters were written”  
 b. Listy są pisane przez dzieci  
 letters be<sub>PRES,3PL</sub> write<sub>PASS,NV,PL</sub> by children  
 “The letters are written by children” (Pl)

<sup>76</sup> However, in the older stages of Polish it had the same form as the neuter singular passive participle (cf. section 3.5.2).

However, even though the subject may never be expressed, there is some evidence that it is present covertly. For example, (57) illustrates that the construction permits subject-oriented anaphors such as *swoj* 'one's own' and the reflexive *się*, which must be bound by a subject.

- (57) a. Sprzedano swoje samochody  
 sell<sub>IPT</sub> one's cars  
 "People sold their (own) cars" (Pl, Kupść & Marciniak 1997: 2003)
- b. Oglądano się w lustrze  
 look<sub>IPT</sub> REFL in mirror  
 "One was looking at oneself in the mirror"  
 (Pl, Bondaruk & Charzyńska-Wójcik 2002: 87)

Moreover, Bondaruk & Charzyńska-Wójcik (2002) point out that the presence of a covert subject in sentences with impersonal participles (cf. 58a) is confirmed by control patterns, which are analogous to those found in the sentences with referential subjects (cf. 58b).

- (58) a. Ewa chce wyjechać za granicę  
 Ewa want<sub>PRES,3SG</sub> go<sub>INF</sub> abroad  
 "Ewa wants to go abroad"
- b. Chciano wyjechać za granicę  
 want<sub>IPT</sub> go<sub>INF</sub> abroad  
 "One wanted to go abroad" (Pl, Bondaruk & Charzyńska-Wójcik 2002: 88)

The sentences in (58) involve the same predicate, but the one in (58b) does not contain an overt subject. However, PRO in (58b) is interpreted as identical with the implied subject of the main impersonal clause, on a par with the example in (58a), in which the subject *Ewa* controls PRO.

Furthermore, Bondaruk & Charzyńska-Wójcik (2002) observe that the covert subject must bear a  $\theta$ -role, because impersonal constructions are incompatible with 'weather' verbs, which require an expletive subject (cf. 59a). It is necessary to use the *l*-participle in the singular neuter form instead in order to render the intended meaning (cf. 59b; see chapter 5 for a discussion of the syntax of the *l*-participle in Polish).

- (59) a. \*Wiano śniegiem  
 blow<sub>IPT</sub> snow<sub>INSTR</sub>
- b. Wiało śniegiem  
 blow<sub>PART,N,SG</sub> snow<sub>INSTR</sub>  
 "It was blowing with snow"  
 (Pl, cf. Bondaruk & Charzyńska-Wójcik 2002: 88)

Rozwadowska (1992) and Kibort (2004: 257ff) show that impersonal participles can be formed from unaccusative verbs. As indicated in the primed examples in (60), unaccusative verbs never passivize.

- (60) a. Umierano z wycięczenia  
 die<sub>IPT</sub> from exhaustion  
 “(They) died/used to die of exhaustion”  
 a’. \*Było umierane  
 be<sub>PART.N.SG</sub> die<sub>PASS.NV.PL</sub>  
 b. Często bywano w Warszawie  
 often be<sub>IPT.IMP</sub> in Warsaw<sub>LOC</sub>  
 “(They) used to be often in Warsaw”  
 b’. \*Było bywane  
 be<sub>PART.N.SG</sub> be<sub>PASS.IMP.NV.PL</sub> (Pl, Kibort 2004: 258)  
 c. Tonięto w morzu, a nie w wannie  
 drown<sub>IPT</sub> in sea and <sub>NEG</sub> in bathtub  
 “People drowned in the sea, not in a bathtub” (Pl, Rozwadowska 1992: 62)

Finally, Jabłońska (2006) observes that modal verbs are also eligible candidates for impersonal participles. This contrasts them with passive participles (cf. 61a’ and b’),<sup>77</sup> as well as the past participles in Kashubian and Macedonian.

- (61) a. Musiano to wykonać, bo zbliżał się termin  
 must<sub>IPT</sub> this do<sub>INF</sub> because approach<sub>PART.MSG</sub> REFL deadline  
 “(They) had to do this, because the deadline was approaching”  
 a’. \*Ktoś był musiany to zrobić  
 someone be<sub>PART.MSG</sub> must<sub>PASS.MSG</sub> this done  
 b. Nie umiano się z tego wytłumaczyć  
 NEG can<sub>IPT</sub> REFL from this explain<sub>INF</sub>  
 “(They) didn’t know how to explain themselves”  
 b’. \*Ktoś był nie umiany  
 someone be<sub>PART.MSG</sub> NEG can<sub>PASS.MSG</sub> (Pl, cf. Jabłońska 2006)

To sum up, it has been shown that constructions with the impersonal participle contain a covert subject, which bears the external  $\theta$ -role, and an object, which carries accusative or inherent case. Since there is no other verb available in the structure, the external  $\theta$ -role and accusative case are evidently assigned by the impersonal participle. This suggests that it cannot be classified as passive. In this way the impersonal participle is different from the past participle in Kashubian and Macedonian. Moreover, in contrast to the past participles, the impersonal participles can be formed from modal verbs.<sup>78</sup> Thus, they are less restrictive in their lexical selection. These two facts indicate that impersonal participles are more verbal than past participles.

In spite of the synchronic differences between past participles and impersonal participles in Slavic, both forms derive from passive participles. The diachrony of impersonal passives will be presented in the next section.

<sup>77</sup> The passive forms of ‘must’ and ‘can’ are hypothesized morphological variants, because they do not exist in the language.

<sup>78</sup> In syntactic terms this may mean that the impersonal participle raises higher in the structure than the past participle. For example, it may target a Mood projection, which is inaccessible for the past participle. See section 3.7 as well as Jabłońska (2006), who claims that the degree of verbalization of a category corresponds to the number of functional heads spelt out by the participial morpheme: the higher head it lexicalizes, the more verbal it is.

### 3.5.2 Historical development of the impersonal participles

Impersonal participles in Polish originate from passive participles. Recall from chapter 1 (section 1.3.3.5) that passive participles in Old Church Slavonic were frequently used as adjectives, and that adjectives and passive participles occurred in two declensions: a nominal declension and a pronominal declension (cf. Klemensiewicz et al 1964: 323-326). The passive participles from the nominal declension paradigm ended in *-no/to* in their neuter forms. Gradually, the nominal paradigm was eliminated in Polish, with the exception of the neuter *-no/to* variants, which were the only ones that remained. Since *no/to* participles were passive, they were incompatible with nominative subjects, which appeared in instrumental case or were introduced by the preposition *od*, such as *od nyeprzyaczol* and *od poganov* in (62). The *no/to* participle were accompanied by the copula 'be' in the present tense or in the form of the *l*-participle, such as *było* in (62), to render the past tense (cf. Oesterreicher 1926: 57; Siewierska 1988: 270).

- (62) By thesz krolesthwo tho nakonyecz abo skazano  
 so also kingdom this end or sentence<sub>PASS.N</sub>  
 od nyeprzyaczol abo posyandyono od poganov nye było  
 by enemies or possess<sub>PASS.N</sub> by pagans not be<sub>PART.N.SG</sub>  
 "And also so that the kingdom will never be overrun by (its) enemies or  
 possessed by pagans" (Old Polish, *Postanie króla Aleksandra*, Doros 1975: 92)

The *no/to* passive participle was marked for the singular neuter agreement, so it appeared only with singular neuter nouns. However, Lavine (2000) observes that some of these nouns, such as *rucho* in (63) were ambiguous between nominative and accusative case forms. They could be interpreted as nominative subjects, as in "the garment is woven" or accusative objects, as in "someone has woven the garment".

- (63) Nye obleczesz syø w rucho, jesto z velni  
 NEG dress<sub>2SG</sub> REFL in garment<sub>N.SG</sub> which<sub>NOM/ACC.N.SG</sub> from wool  
 a z lnu tkano jest  
 and from linen weave<sub>PASS.N.SG</sub> be<sub>3SG</sub>  
 "You shall not wear a garment that is woven of wool or of linen"  
 (*Deuteronomy*, 21,11; *Biblia Królowej Zofii* 15<sup>th</sup> c; Oesterreicher 1926: 55)

Lavine argues that the interpretation was disambiguated when the 3<sup>rd</sup> person auxiliary was lost in Polish between the 15<sup>th</sup> and the 17<sup>th</sup> century (cf. chapter 1, section 1.3.4.2.2.1). Since the *no/to* forms were the only remaining representatives of passive participles from the nominal paradigm, once the 3<sup>rd</sup> person auxiliary disappeared, it was no longer possible to interpret them as passive participles or adjectives. Rather, they were reanalyzed as a new type of active predicate that selects the object in accusative case. As a result, once the new form emerges, the noun *rucho* in (63) is unambiguously interpreted as an accusative object.

Lavine's hypothesis is supported by diachronic considerations. Oesterreicher (1926) notices that the development of impersonal participles in Polish coincides with the decline of the 3<sup>rd</sup> person auxiliary. Even though neuter singular nouns, such as *syerze* in (64b) remain morphologically ambiguous between nominative and accusative, the missing auxiliary indicates that they are direct objects carrying accusative case.



- (64) a. Y smyotano nan' wyeliką gromado kamienya  
 and raise<sub>PTP</sub> on-him great bunch<sub>ACC.F</sub> stone<sub>GEN</sub>  
 "And they raised over him a great heap of stones"  
 (Old Polish, Jos, 7, 26; *Biblia Królowej Zofii* 15<sup>th</sup> c; Oesterreicher 1926: 55)
- b. A popodzono syerce lyuczske ku dzalanyu  
 and drive<sub>PTP</sub> heart<sub>ACC.N</sub> people's towards work  
 "For the people's heart were driven to work"  
 (Old Polish, Nehem 4,6; *Biblia Królowej Zofii* 15<sup>th</sup> c; Oesterreicher 1926: 55)

To conclude, even though the impersonal participles appear without the auxiliary 'have', they developed in the same way as past participles in Kashubian and Macedonian, as they are also a result of a reanalysis of passive participles. However, the impersonal participles became 'verbalized' to a greater degree, as they are able to assign accusative case, project an external theta role, and thus, they pattern like finite verbs. Moreover, they cover a wider spectrum of verbal forms, because they can be also constructed from modal verbs.

The chart in (65) summarizes properties of the past participles and the impersonal participles.

(65)

	past participles	impersonal participles
invariant morphological form	yes	yes
morphologically the same as passive participles	yes	no
the auxiliary 'have' present	yes	no
able to project an external argument and assign structural case	no	yes
can be formed from the verbs 'be' and 'have'	no in Kashubian; yes in some dialects of Macedonian	yes
can be formed from modal verbs	no	yes
can be constructed from both perfective and imperfective forms	yes	yes

Impersonal participles are not compound formations; so a syntactic analysis of their structure is beyond the scope of this thesis. However, they have received a lot of attention in the literature; see Blevins (2003), Bondaruk & Charzyńska-Wójcik (2002), Jabłońska (2006), Kibort (2004), Lavine (2000), and Rozwadowska (1992) for an extensive discussion.

### 3.6 Grammaticalization of 'have'-perfects

Sections 3.4.1 and 3.4.2 described the 'have'-perfect in Kashubian and Macedonian. The construction developed a full paradigm and accepts almost all types of verbs as

past participles. These facts indicate that it has been fully grammaticalized in these languages.<sup>79</sup>

The present section will analyse constructions formed with the verb 'have' and a passive participle in some other Slavic languages. They will be termed 'stative-perfects'. Semantically, these structures resemble the 'have'-perfects, but they differ in the way they are formed. For example, the passive participle always agrees with its complement in  $\varphi$ -features, and may only appear in the perfective variant. It will be shown that they represent an early stage of grammaticalization of the compound tense formed with the auxiliary 'have'.

In Germanic and Romance 'have'-perfects' developed in the same way as in Slavic. They originated from a possessive construction formed with 'have' as the main verb, which was followed by a DP complement and a passive participle. Given the similarity, I will first outline grammaticalization of the structure in these languages.

### 3.6.1 Romance

As was noted in section 3.3, 'have' perfects did not exist in Latin. This language expressed perfectivity synthetically, as indicated in (66).

- (66) Obsedimus oppidum  
 besiege<sub>PF,1PL</sub> town  
 "We have besieged the town" (Latin, Hoekstra 1986: 98)

Nevertheless, there was a related construction, which I will dub 'the stative perfect'. It combined the verb *habere* 'have' with a passive participle, as in (67).

- (67) Habemus oppidum obsessum  
 have<sub>1PL</sub> town<sub>ACC,MSG</sub> besieged<sub>ACC,MSG</sub>  
 "We have a town besieged" (Latin, cf. Hoekstra 1986: 98)

The stative perfect paved the way to the analytic 'have'-perfect in the contemporary Romance languages (cf. 68 for Italian). At first blush, the main difference between the compound tense formed with the auxiliary 'have' (cf. 68a) and the stative perfect construction (cf. 68b) is the lack of agreement between the object and the participle. Thus, the object and the participle are both feminine in the stative perfect in (68b), whereas in the 'have'-perfect in (68a) the participle appears in an invariant form.

- (68) a. Abbiamo assediato una città  
 have<sub>1PL</sub> besieged<sub>A</sub> town<sub>F,SG</sub>  
 "We have besieged the town"  
 b. Abbiamo una città assediata  
 have<sub>1PL</sub> <sub>A</sub> town<sub>F,SG</sub> besieged<sub>F,SG</sub>  
 "One of the towns we have is besieged" (Italian, N. Grillo p.c.)

Before I discuss grammaticalization of 'have'-perfects, let me analyze the Latin sentence in (67) in more detail. The verb *habemus* takes two complements: the direct object

<sup>79</sup> See Oubouzar (1974) and Breitbarth (2005), who argue that a construction is completely grammaticalized once it has developed a full paradigm.

*oppidum* and the object complement *obsessum*. *Obsessum* is not a modifier of the direct object *oppidum*. They are two separate constituents, which according to Salvi (1987) is evidenced by the fact that the direct object can be pronominalized independently of the object complement (that is, the passive participle).

- (69) (Equitatum) quem ex omni provincia...coactum habebat  
 cavalry which<sub>ACC</sub> from each province gathered<sub>ACC</sub> had<sub>3SG</sub>  
 “(The cavalry) that he had (having) gathered (it) from all provinces”  
 (Latin, Caesar, *De bello gallico* I.15.1; Salvi 1987: 226)

If the participle were a modifier of the object, it should not be possible to express it overtly after pronominalization of the object, as in the contemporary Italian example in (70).

- (70) a. Leggo il libro svedese  
 read<sub>1SG</sub> the book Swedish  
 “I read the Swedish book”  
 b. Lo leggo (\*svedese)  
 him read<sub>1SG</sub> Swedish  
 “I read it” (Italian, Salvi 1987: 326)

The passive participle agrees in  $\varphi$ -features and case with the object (cf. 67). Moreover, it may appear in the comparative form. Since verbs do not show comparison inflection, this suggests that the passive participle is adjectival in nature.

- (71) Comitiorum dilationes occupatiorem me habebant  
 meetings<sub>GEN</sub> delays<sub>NOM</sub> occupy<sub>PASS.ACC.COM</sub> me had<sub>3PL</sub>  
 “The delays of the meetings kept me rather occupied”  
 (Latin, Celsus in Cicero, *Epistulae ad familiares* VIII.4.3; Salvi 1987: 227)

Salvi proposes that the verb ‘have’ selects a Small Clause, which is headed by an adjective. The direct object is located in Spec, AP. Thus, the sentence in (72a) is assigned the syntactic representation in (72b).

- (72) a. Habeo epistulam scriptam  
 have<sub>1SG</sub> letter<sub>ACC</sub> written<sub>ACC</sub>  
 “I have the result of the fact that a letter has been written”  
 “I have a letter that has been written”  
 b. [VP habeo [<sub>SC(AP)</sub> [<sub>DP</sub> epistulam] [<sub>A</sub> scriptam]]  
 (Latin, adapted from Salvi 1987: 228)

Moreover, according to Salvi the DP-subject of the Small Clause *epistulam* is underlyingly the direct object of the (adjectival) passive participle *scriptam*. In this way the construction is very similar to a passive sentence, which consists of the same participle and the copula ‘be’ instead of the verb ‘have’ (cf. 73a). The object and the passive participle form a Small Clause. The subject position of the sentence is empty, but it can be filled by the direct object, which in Latin moves together with the passive participle and becomes the subject of the clause, as in (73).

- (73) a. Epistula scripta (est)  
 letter<sub>NOM</sub> written<sub>NOM</sub> is  
 "A letter has been written"  
 b. [TP [SC [DP epistula] [scripta<sub>PASS</sub>]]; [T est [SC t<sub>j</sub>]]<sup>80</sup>  
 (Latin, adapted from Salvi 1987: 231)

As is standardly assumed in the analyses of passive constructions, the movement occurs for case checking. The direct object cannot receive accusative case in its base position, because the passive participle is not a case assigner. It may not receive case from the copula, either, because it is an unaccusative verb. Therefore, it must move to the subject position, where it checks nominative case of T in Spec, TP. However, the direct object does not need to move to Spec, TP in the presence of the verb 'have', which is transitive and thus assigns accusative case to its object. Hence, the object follows 'have' in (72).

I argued in chapter 2 that since the passive participle is unable to assign a thematic role to the subject, this role is performed in 'have'-perfects by the auxiliary. A corollary of this claim is the assumption that 'have' is always the same verbal category, irrespectively of its function as an auxiliary or a lexical verb meaning 'possess' (see also Kayne 1993). Salvi (1987: 232ff) argues that grammaticalization of the lexical verb 'have' into an auxiliary involves semantic bleaching, because 'have' does not express the meaning of possession. In his view, this semantic process has structural consequences, because 'have' is no longer capable of projecting an external theta role. However, it may "help" the participle to do so.

Furthermore, Salvi claims that since the auxiliary is not able to assign accusative case to the object by itself, the object must stay in situ. In effect, the participle-direct object word order prevails (cf. 74a). This also results in the impossibility of raising the direct object to the subject position of the Small Clause (cf. 72b). Since this position cannot be filled any more, it loses its function and the Small Clause is eliminated. Consequently, the compound tense formed with the auxiliary 'have' will have a structure as in (74b).

- (74) a. Piero ha scritto la lettera  
 Piero has written the letter  
 b. [TP Piero [T ha [VP [V scritto [DP la lettera]]]]]  
 (Italian, adapted from Salvi 1987: 232-233)

I agree with Salvi that grammaticalization of 'have'-perfects is accompanied by the elimination of the Small Clause. I also follow his assumption that the verb 'have' is semantically bleached when it becomes an auxiliary. However, I do not subscribe to the idea that the auxiliary loses its ability to assign an external theta role. It is not clear to me how the auxiliary 'have' should be able to "help" the passive participle to do that, either. Thus, I suggest that 'have' has the same properties related to case and theta role assignment whether it is a lexical verb or an auxiliary. Likewise, following the ideas developed in chapter 2, I will continue to assume that the passive participle is the same

<sup>80</sup> The derivation is slightly simplified in order to render the Latin word order correctly. In the modern Romance languages only the object moves to the subject position, and the passive participle is left *in situ*. See Salvi (1987: 235 fn 9)

(i) [TP [DP Subject] [T BE [VP Participle [DP t<sub>j</sub>]]]

element, whether it occurs in a passive construction or as a past participle in a compound tense formed with the auxiliary 'have'. However, due to the process of verbalization, the paradigm of the past participle is extended to all verbs, and it also covers verbs which disallow passivization, such as the one-place predicate 'laugh'.

- (75)           Ho       riso  
                   have<sub>1SG</sub> laugh<sub>PTP</sub>  
                   'I have laughed' (Italian)

This concludes the presentation of the grammaticalization of the 'have'-perfect in Romance. Before I turn to Slavic, I will discuss the way the process proceeded in the Germanic languages in the next section.

### 3.6.2 Germanic

The compound tense formed with the auxiliary 'have' evolved in the Germanic languages in largely the same way as in the Romance languages. Thus, it is argued in Behaghel (1928) that the passive structure in (76a) was the source of the modern 'have'-perfect in German (cf. 76b).<sup>81</sup> The passive participle agrees with the direct object in (76a). However, once the verb 'have' is reinterpreted as an auxiliary, the agreement on the participle is lost (cf. 76b).

- (76) a. Ich habe ihn geschlagenen  
           I have<sub>1SG</sub> him beaten<sub>PASS.MN</sub>  
           'I have him as a beaten one'  
       b. Ich habe ihn geschlagen  
           I have<sub>1SG</sub> him beaten<sub>PTP</sub>  
           'I have beaten him'

Turning to English, it is a matter of debate whether 'have'-perfects reached grammaticalization already in Old English, or only in Middle English (cf. Mitchell 1985: 292-295; Wischer 2004). At any rate, it is clear that in some Old English relics the passive participle, such as *getynedne* in (77) agrees with the object it modifies. This tends to be an exception, rather than a regular pattern, though.

- (77)           Oðrum þe hiora dæl getynedne hæbben...  
                   others who their part enclosed<sub>PASS.ACC</sub> have  
                   'Others who have their part enclosed' (Old English, Wischer 2004)

In (77) the participle precedes the verb 'have'. However, Mitchell (1985: 287) points out that the most common ordering was "have-participle-direct object", as in Modern English.

The verb 'have' did not have to carry the meaning of possession in Old English, which suggests that it had undergone semantic bleaching. For instance, the subject of the clause in (78) has drunk poison, so s/he cannot possess it any more.

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<sup>81</sup> I thank Anne Breitbarth for pointing out this example to me.

- (78)           Gif he ær hæfþ attor gedrunčen...  
               if he before has poison drunk...  
               “If he has drunk poison before...” (Old English, Wischer 2004)

As far as the aspectual content of the participle is concerned, it has often been claimed that in Old English ‘have’ may only combine with participles of telic verbs (cf. Hoffmann 1934). For instance, the ‘have’-structure in (79a) marks completion of an action in a series of events and characterizes the event as perfective. However, Wischer (2004) provides a few examples with atelic participles, as in (79b).

- (79) a.   Hafa þe ær geworht clam of beor ... & of ...  
           have<sub>SG</sub> you<sub>SG.DAT</sub> previously made paste of beer ... & of ...  
           “Previously, have yourself made a paste of beer ... & of ...”  
       b.   Æfterðæmðe hie gesyngod habbað  
           after-that they sinned have  
           “...after they have sinned” (Old English, Wischer 2004)

Section 3.6.3 will show that the use of atelic/imperfective participles is one of the criteria for grammaticalization of ‘have’-perfects.

Finally, I will conclude with some remarks on the grammaticalization of ‘have’-perfects in Dutch. Following Kern (1912), Hoekstra (1984: 268) points out that older stages of Dutch had adjectival participles, which could be formed from both intransitive verbs and two-place predicates. They were combined with verbs *worden* ‘become’ and *zijn* ‘be’. Constructions with transitive verbs expressed the meaning of a perfect or a pluperfect, whereas structures with two-place predicates were interpreted as passive. These formations paved the way to the stative perfect, which was formed with the verb ‘have’ and a passive participle that agreed with the direct object. Thus, its structure was similar to the Latin construction in (80), repeated below as (80).

- (80)           Habemus oppidum obsessum  
           have<sub>1PL</sub> town<sub>ACC.M.SG</sub> besieged<sub>ACC.M.SG</sub>  
           “‘We possess a town that is besieged” (Latin, cf. Hoekstra 1986: 98)

At first the new perfect was possible only with transitive verbs, as in the Modern Dutch example in (81a), which contains the two-place predicate ‘read’. Subsequently, the construction was extended to one-place predicates, such as *lachen* ‘laugh’ in (81b).

- (81) a.   dat Jan het boek gelezen heeft  
           that John the book read has  
           “...that John has read the book”  
       b.   dat Jan gelachen heeft  
           that John laughed has  
           “...that John has laughed” (Dutch, Hoekstra 1984: 268)

Hoekstra (1984, 1986) argues that the reinterpretation of the ‘have’-perfect involved a syntactic reanalysis. He claims that in the stative perfects (cf. 80) ‘have’ is the main verb, which takes a Small Clause complement. However, a Small Clause may not consist solely of a predicate. This is why the English examples in (82) are ungrammatical.

- (82) a. \*I want laughed  
 b. \*I want off my ship

This suggests that the verb 'have' in (81b) cannot be complemented by a Small Clause any more, because 'laugh' is a one-place predicate. In section 3.6.1 I have claimed that the elimination of the Small Clause structure marks the emergence of the 'have'-perfect. In view of this, the acceptability of the structures such as (81b) serves as a reliable criterion for the presence of the 'have'-perfect in a language. The construction becomes available only when the verb 'have' is not complemented by a Small Clause. This is a condition for the verb 'have' to function as an auxiliary.

Summarizing, the preceding two sections analyzed the development of the stative perfect into the 'have' perfect in Romance in Germanic. The chart in (83) compares some of the properties of the two constructions.

(83)

	the stative perfect	the 'have' perfect
participle-direct object agreement (cf. 67, 68, 76)	yes	no
the telic/perfective variant of the participle predominates (cf. 79)	yes	no
grading of the participle is possible (cf. 71)	yes	no
the verb 'have' may carry the meaning of possession (cf. 78)	yes	no
the participle may be a one-place predicate	no	yes

In the next section I will investigate grammaticalization of 'have'-perfects in the Slavic languages. I will also provide a syntactic account of this process.

### 3.6.3 Slavic

As was noted in chapter 1, section 1.3.4.5.2 and in section 3.4 of the present chapter, 'have'-perfects have been grammaticalized only in two Slavic languages, Kashubian and Macedonian. It is difficult to trace the origin of the construction in Kashubian, because the first description of the grammatical system of the language comes from 1879 (Ceynova 1879), and there are very few literary works available. However, the evolution of 'have'-perfects in Macedonian is quite well documented. The earliest example that is reminiscent of the contemporary 'have' perfect was found in a manuscript from the monastery of Krnino in 1706. The sentence contains a passive participle that agrees in number and gender with the object clitic, so it represents the stative perfect.

- (84) ...imamъ go aforesanъ...  
 have<sub>PRES.1SG</sub> him<sub>CL.ACC</sub> excommunicate<sub>PASS.M.SG</sub>  
 "I [will] have him excommunicated..." (18<sup>th</sup> c. Mac, cf. Koneski 1987)

In the contemporary version of the sentence the participle does not agree with the object, but it occurs in the singular neuter form. Thus, the structure in (85) exemplifies a grammaticalized 'have'-perfect.

- (85)           Go           imam           aforesano  
 him<sub>CL.ACC</sub> have<sub>PRES.ISG</sub> excommunicate<sub>PTP.N</sub>  
 "I [will] have excommunicated him..." (Mac, Elliott 2001: 39)

In Macedonian the stative perfect has been completely replaced by the 'have'-perfect. However, it is still available in many other Slavic languages, as will be shown in section 3.6.3.1. Section 3.6.3.2 will contrast the 'have'-perfect with the stative perfect and will provide a syntactic account of its grammaticalization.

### 3.6.3.1 Properties of the stative perfect

A few other Slavic languages that have not grammaticalized the compound tenses formed with the auxiliary 'have' display a related construction that resembles the stative perfect construction attested in older variants of Germanic and Romance. The Slavic languages exemplified here include Polish (cf. 86), Czech (cf. 87), Serbian (cf. 88), and Bulgarian (cf. 89). As shown in (86) and (88), both affirmative and negated forms are possible. The most noticeable difference between stative perfect structures and 'have'-perfects is agreement between the object and the participle, which obtains only in the former type of constructions.

- (86) a. Mam już zapięte pasy  
 have<sub>1SG</sub> already fasten<sub>PASS.ACC.NV.PL</sub> seatbelts<sub>ACC.NV.PL</sub>  
 "I have already fastened the seatbelts"  
 b. Nie mam jeszcze spakowanych książek  
 NEG have<sub>1SG</sub> still pack<sub>PASS.GEN.NV.PL</sub> books<sub>GEN.NV.PL</sub>  
 "I haven't packed my books yet" (Pl)
- (87) Mám úlohu napsanou  
 have<sub>1SG</sub> task<sub>ACC.F.SG</sub> write<sub>PASS.ACC.F.SG</sub>  
 "I have my task written" (Czech, Maslov 1988: 80)
- (88) On nema položen nijedan ispit  
 he NEG+have<sub>1SG</sub> pass<sub>PASS.M.SG</sub> NEG+single exam<sub>M.SG</sub>  
 "He has not passed a single examination/He does not have a single exam passed" (Serbian, Dimitrovski 1957: 246 quoted in Friedman 1976: 97)
- (89) Toj ima dve nivi izoreni  
 he have<sub>1SG</sub> two field<sub>PL</sub> plow<sub>PASS.PL</sub>  
 "He has two fields ploughed/He has two ploughed fields/He has ploughed two fields" (Bg, Dimitrovski 1957: 246 quoted in Friedman 1976: 97)

However, the two constructions differ in more respects, which will be illustrated by contrasting stative perfect structures in Polish with 'have'-perfects in Macedonian. Moreover, since Polish also has impersonal participles, which are morphologically very similar to 'have'-perfects (cf. section 3.5), they will be exemplified as well.



I will begin the description of the stative perfect by establishing a syntactic relation between the direct object and the passive participle. The two elements agree in  $\varphi$ -features. However, this does not mean that the participle is an adjectival modifier of the direct object. This is can be evidenced through pronominalization of the direct object, which leaves the passive participle intact<sup>82</sup>.

- (90) a. Mam już wszystkie ciasta upieczone  
 have<sub>1SG</sub> already all cakes<sub>NV.PL</sub> bake<sub>PASS.NV.PL</sub>  
 "I have already baked all the cakes"
- b. Mam już je wszystkie upieczone  
 have<sub>1SG</sub> already them<sub>NV</sub> all bake<sub>PASS.NV.PL</sub>  
 "I have baked all of them already" (PI)

Conversely, when a noun is (pre-)modified by an adjective, pronominalization affects both the noun and the adjective.

- (91) a. Mam wiele ciekawych książek  
 have<sub>1SG</sub> many<sub>GEN.NV.PL</sub> interesting<sub>GEN.NV.PL</sub> books<sub>GEN.NV.PL</sub>  
 "I have a lot of interesting books"
- b. Mam ich wiele (\*ciekawych)  
 have<sub>1SG</sub> them<sub>GEN.NV.PL</sub> many<sub>GEN.NV.PL</sub> interesting<sub>GEN.NV.PL</sub>  
 "I have many of them" (PI)

The contrast shows that the passive participle is not an adjectival modifier of the direct object in (90). I will assume that the two constituents form a Small Clause.

The sentence in (92a) demonstrates that in the case of stative perfects, the agent of the action described by the participle need not be the same as the subject of the entire clause. In Macedonian the subject of the 'have'-perfect clause must be the same as the agent of the event characterized by the past participle (cf. 92b). In impersonal participles the agent is always undetermined (cf. 92c).

- (92) a. Mamy już zarezerwowane miejsca  
 have<sub>1SG</sub> already book<sub>PASS.ACC.NV.PL</sub> seats<sub>ACC.NV.PL</sub>  
 "We have already booked our seats"  
 "We have already had our seats booked" (PI)
- b. Gi imame veke rezervirano sedistata  
 them have<sub>1PL</sub> already reserve<sub>PREF.PTP.N.SG</sub> seats-the  
 "We have already booked our seats"  
 "\*Someone has already booked the seats for us" (Mac, O. Tomić, p.c.)
- c. Zarezerwovano już miejsca  
 book<sub>IPF</sub> already seats<sub>ACC.NV.PL</sub>  
 "The seats have already been booked" (PI)

The examples in (93b and c) illustrate that impersonal participles as well as compound structures formed with the auxiliary 'have' permit both perfective and imperfective variants of the main verb. By contrast, stative-perfects are possible only with perfective forms (cf. 93a).

<sup>82</sup> The same test was applied by Salvi (1987) in his analysis of the 'have'-structures in Latin (cf. example 69 above).

- (93) a. Mam już przeczytane dwie książki  
 have<sub>1SG</sub> already read<sub>PRF.PASS.NV.ACC.PL</sub> two books<sub>NV.ACC.PL</sub>  
 "We have already finished reading two books"
- a'. \*Mam już czytane dwie książki  
 have<sub>1SG</sub> already read<sub>IMPF.PASS.NV.ACC.PL</sub> two books (PI)
- b. Gi imame pročitano knjige  
 them<sub>CL.ACC</sub> have<sub>1PL</sub> read<sub>PRF.PTP.N.SG</sub> books-the  
 "We have (finished) read(ing) the books" (Mac, L. Grujoska, p.c.)
- b'. Gi imame čitano knjige  
 them<sub>CL.ACC</sub> have<sub>1PL</sub> read<sub>IMPF.PTP.N.SG</sub> books-the  
 "We been reading the books" (Mac, L. Grujoska, p.c.)
- c. Prerečyto dvie knižki  
 read<sub>PRF.IPT</sub> two books  
 "Someone has finished reading two books" (PI)
- c'. Čyto dvie knižki  
 read<sub>IMPF.IPT</sub> two books  
 "Someone has been/was reading two books" (PI)

It was noted in section 3.6.1 that the participle-direct object order predominates in English once the 'have'-perfect is grammaticalized. Given the free word order in the Slavic languages, the pattern is not so clear-cut in the stative-perfect constructions, but structures with the object preceding the participle are usually emphatic. Likewise, placement of the direct object in front of the past participle requires additional focus on the object. In fact, Bubenik (2001: 81-82) even reports the example in (94b) to be ungrammatical in standard Macedonian, but the native speakers I have consulted disconfirm his judgments and claim that the sentence is acceptable when the object *taa rabota* is focused.

- (94) a. Mam już [te vszystkie sprawy] zalatwione  
 have<sub>1SG</sub> already these all things<sub>NV.PL</sub> arrange-for<sub>PASS.NV.PL</sub>  
 "All these things have been taken care of" (PI)
- a'. Mam już zalatwione [te vszystkie sprawy] (PI)
- b. Ja imam završeno taa rabota  
 she<sub>CL.ACC</sub> have<sub>1SG</sub> finish<sub>PTP.N</sub> this<sub>F</sub> work<sub>F</sub>  
 "I have finished this work"
- b.' %Ja imam taa rabota završeno (Mac, cf. Bubenik 2001: 81-82)

I have argued that one of the criteria of grammaticalization of 'have'-perfects is availability of one-place predicates as past participles (cf. 95a). One-place predicates may also appear as impersonal participles (cf. 95c), but they are excluded in stative perfects (cf. 95b).

- (95) a. Goce Delčev ima spieno tuka  
 Goce Delčev have<sub>PRES.3SG</sub> sleep<sub>PTP.N</sub> here  
 "Goce Delčev has slept here" (Mac, Friedman 1977: 91)
- b. \*Jan ma już tutaj spane  
 Jan have<sub>1SG</sub> already here sleep<sub>PASS.N.SG</sub> (PI)
- c. W tym lóžku już spano  
 in this bed already sleep<sub>PTP</sub>  
 "Someone has already slept in this bed" (PI)

Correspondingly, adverbs are incompatible with adjectival passives in stative-perfect clauses, because they may modify only verbal elements, such as past participles (cf. 96b) or impersonal participles (96c).

- (96) a. Imam često pieno mleko  
 have<sub>1SG</sub> often drink<sub>PTP,N</sub> milk  
 "I have often drunk milk" (Mac, L. Grujoska, p.c.)
- b. \*Mam često pite mleko  
 have<sub>1SG</sub> often drink<sub>PASS,N,SG</sub> milk<sub>N,SG</sub> (Pl)
- c. Često pito mleko  
 often drink<sub>PTP</sub> milk (Pl)

It has been shown that the reanalysis of the verb 'have' as an auxiliary in Germanic and Romance leads to a loss of the meaning of possession expressed by the verb. The data in (97) indicate that the verb 'have' in the stative-perfect constructions has been semantically bleached as well. For instance, the events of selling apples and losing umbrellas imply that the agent does not possess these objects any more. The fact that the sentences in (97) are felicitous indicates that the verb 'have' has lost part of its semantic content in the stative perfects in Slavic as well.

- (97) a. Mam wszystkie jablka sprzedane  
 have<sub>1SG</sub> all apple<sub>NV,PL</sub> sell<sub>PASS,NV,PL</sub>  
 "All my apples have been sold" (Pl)
- b. Tazi godina imam zagubeni pet čadara  
 this year have<sub>1SG</sub> lose<sub>PASS,PL</sub> five umbrellas  
 "This year I have lost five umbrellas" (Bg, Lindstedt 2000: 41)

However, the stative perfect imposes semantic restrictions on the subject. The example in (98a) shows that the subject may not be inanimate. By contrast, the 'have'-perfect permits inanimate subjects (cf. 98b). This confirms full grammaticalization of this construction in Macedonian.

- (98) a. \*Statek ma uderzone w skaly  
 ship have<sub>1SG</sub> hit<sub>NV,PL</sub> in rocks  
 "The ship hit rocks" (Pl)
- b. Brodot se ima udreno vo karpite  
 ship-the REFL have<sub>1SG</sub> hit<sub>PTP,N</sub> in rocks  
 "The ship hit rocks" (Mac, L. Grujoska, p.c.)

### 3.6.3.2 Towards an analysis

Both Salvi (1987) and Hoekstra (1986) propose that the grammaticalization of 'have'-perfects consists in reduction of the Small Clause selected by the verb 'have' in the stative perfect. Hoekstra is not clear about the structure of the Small Clause he assumes, but Salvi suggests that the Small Clause is headed by an adjectival passive participle, while the direct object is located in Spec, AP. In this way he seems to follow Stowell's (1981) concept of the Small Clause architecture, in which the Small Clause is a projection of the category which heads the predicate. For example, in (99) the Small Clause is AP, which is a complement of the verb *have*. It is headed by the adjectival

passive participle *hidden*, while the subject of the Small Clause *fugitives* is located in Spec, AP.<sup>83</sup>

- (99) a. We have fugitives hidden  
 b. [TP we [VP [V have [(SC)AP [NP fugitives [A hidden]]]]]]

If Slavi's proposal is adopted for Slavic, the stative perfect in (86a) will have the structure as in (100).

- (100) a. Mam pasy zapięte  
 have<sub>1SG</sub> seatbelts<sub>ACC.NV.PL</sub> fasten<sub>PASS.ACC.NV.PL</sub>  
 b. [VP [V mam [(SC)AP [NP pasy [A zapięte]]]]] (Pl)

The subject of the Small Clause *pasy* 'seatbelts' is in the predicate relationship with the adjectival passive participle *zapięte* 'fastened'. The fact that the two elements form a Small Clause is overtly manifested through agreement on the participle.

I suggest that the stative perfect structure is grammaticalized into a 'have'-perfect construction when the adjectival passive participle is reinterpreted as a verbal category. In syntactic terms this means that the passive participle is no longer the head of the Small Clause, but is reanalyzed as the head of the PartP, which takes the former subject of the Small Clause as a complement. This eliminates the Small Clause configuration, which results in the lack of agreement between the participle and the object. As an illustration, a template representing the 'have'-perfect is given in (101).

- (101) a. Jas imam kupeno knigi  
 I have<sub>1SG</sub> buy<sub>PTP.N.SG</sub> books<sub>FE.PL</sub>  
 b. [VP jas [VP imam [PartP kupeno [DP knigite]]]] (Mac)

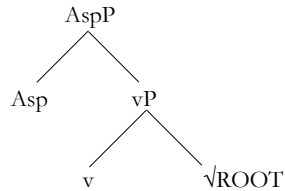
One of the intriguing properties of the stative perfect that still needs to be accounted for is the prerequisite that all the participles must appear in the perfective form in this construction (cf. 93a' for Polish and 79a for Old English). I would like to explain this requirement by referring to Embick's (2004) analysis of passive participles.

Embick (2004: 361ff) suggests that adjectival passive participles differ from verbal passive participles in a structural way.<sup>84</sup> The root of the verbal passive participle is dominated by *v*, a verbalizing head, which in turn is dominated by an Asp[ect] projection. Adjectival passive participles lack the *v* projection above them, so they attach directly to Asp in the course of derivation.

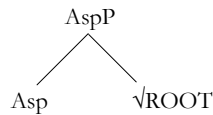
<sup>83</sup> See Hoekstra (2004) for an overview of various approaches to the structure of Small Clauses.

<sup>84</sup> I am slightly simplifying Embick's analysis here, because he proposes a ternary distinction of participles. Namely, he examines the traditional division of passive participles in English into 'verbal' and 'adjectival' ones (cf. section 3.2), employs the term 'eventive passive' for the former group and proposes a distinction between 'stative' and 'resultative' in the latter.

## (102) a. Verbal passives



## b. Adjectival passives



I assume that the Asp head hosts perfective prefixes.<sup>85</sup> Since adjectival passives are not dominated by the v-head, they must directly attach to Asp in the course of the derivation. This is why only perfective forms of participles are possible in the stative perfects in Slavic. Given that the (verbal) past participles in 'have'-perfects are not immediately dominated by the Asp head, they may appear in both perfective and imperfective variants.

Verbal passives are dominated by v, which is a verbalizing head that encodes eventivity and agentivity. One of the consequences of the presence of v is the possibility of adverbial modification, which is compatible with eventive, but not with stative readings.

- (103) a. The package remained carefully opened  
 b. \*The package remained carefully open

- (104) a. The carefully opened package  
 b. \*The carefully open package (Embick, 2004: 357; cf. also Kratzer 1994)

Correspondingly, since the adjectival passives in the stative perfect constructions lack the verbalizing v head above their roots, they never allow any adverbial modification (cf. 96, repeated below as 105a).

- (105) a. \*Mam często pite mleko  
 have<sub>1SG</sub> often drink<sub>PASS,N,SG</sub> milk<sub>N,SG</sub> (Pl)  
 b. Imam često pieno mleko  
 have<sub>1SG</sub> often drink<sub>PTP,N</sub> milk  
 "I have often drunk milk" (Mac, L. Grujoska, p.c.)

To summarize, this section has investigated the grammaticalization of 'have'-perfects in the Slavic languages. The analysis has been carried out by contrasting the 'have'-perfect

<sup>85</sup> The assumption follows from the commonly accepted idea that imperfective aspect is the default (unmarked) form in Slavic. The perfective aspect requires an aspectual prefix, whereas the imperfective aspect does not.

with the stative perfect. It has been shown that the process involves elimination of the Small Clause selected by the verb 'have' in the stative perfect. The passive participle becomes verbalized, which means that it is no longer the complement of the empty head of the Small Clause, but instead it starts to occupy this position, which is reinterpreted as V<sup>0</sup>.

To conclude, I contrast the properties of the stative perfect with the characteristics of the 'have'-perfect in the chart in (106).

(106)

	the stative perfect	the past perfect
participle-object agreement	yes	no
"subject" of the participle = subject of the clause	not necessarily	yes
only perfective forms of the participle are permitted	yes	no
the have-participle-object order is more common	no	yes
the verb 'have' expresses possession	often yes	no
the verb 'have' may be complemented by one-place predicates	no	yes
adverbials may modify the constructions	no	yes

### 3.7 Conclusions

This chapter has investigated the evolution of the compound tense formed with the auxiliary 'have' and the past participle in Slavic. Since the grammaticalization of this construction has been completed only in Kashubian and Macedonian, whereas some other Slavic languages use its rudimentary variant termed the "stative perfect", it was possible to study the diachronic development of this structure from a synchronic point of view.

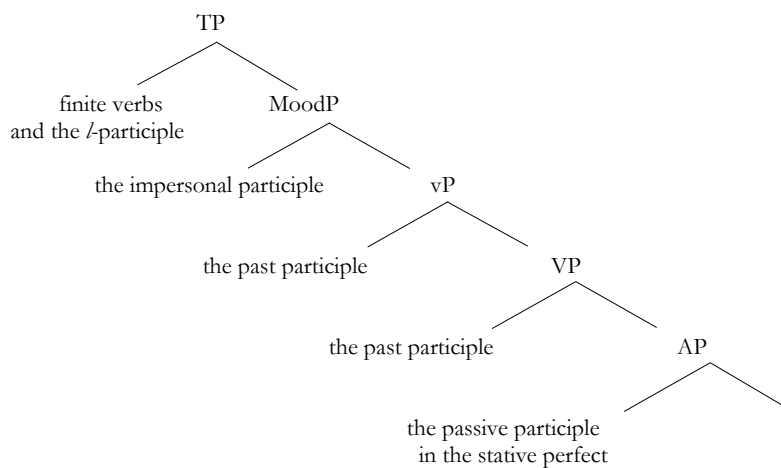
The chapter has also discussed movement of the past participle across the auxiliary 'have' in Macedonian. It was claimed that the operation corresponds to the well-known case of "VP-topicalization" in Germanic. The movement was contrasted with *l*-participle fronting across the auxiliary 'be' discussed in chapter 2. It was argued that even though they both involve XP-movement, these are different types of syntactic displacement. The *l*-participle raises to Spec, TP via A-movement in order to check the  $\varphi$ -features of T<sup>0</sup>. The past participle raises much higher than the *l*-participle, and it may pied-pipe a number of other constituents. It lands in Spec, FocP via A'-movement, which is triggered by a Focus feature.

Both the *l*-participle in the 'be'-perfect as well as the past participle in the 'have'-perfect derive from forms which were adjectival in nature. The *l*-participle has been uniformly verbalized across Slavic, and was claimed in chapter 2 to be able to project an external theta role and assign case to its arguments. The past participle, which originates from the passive participle, has been verbalized to various degrees in different languages. Slavic data discussed in this chapter indicate that if the past participle is morphologically the same as the passive participle, it is unable to assign case or an

external theta role. However, once its morphological make-up is differentiated, it may become further verbalized and eventually reanalyzed as a finite verb form, as in the case of the impersonal participle in Polish. This observation provides more support for the assumption made in chapter 2 that the past and passive participles represent the same grammatical category and should be analyzed in a uniform way.

To conclude, let me show how the verbalization of the passive participle may be represented syntactically. Following Jabłońska (2006), I would like to argue that the degree of verbalization of a category corresponds to the height of movement of this verbal form in the extended projection of the VP. The idea is schematized in (107) for the participial forms analyzed in this chapter.

(107)



The passive participle is located the lowest in the tree, because it is the most adjectival category among the ones marked in the phrase structure. The past participle, which is the main verb in 'have'-perfects, has been argued to be non-distinct from the passive participle, because it is unable to project an external theta role and assign accusative case. However, it accepts a wider spectrum of verbs than the passive participle, so it targets a higher position. Moreover, recall from section 3.6.3.2 that the past participle is generated higher (i.e. in  $V^0$ ) than the passive participle in the stative perfect. The impersonal participle must be able to move above vP, because it assigns structural case and the theta role to the covert subject. It can be derived from modal verbs, which means that is able to reach the MoodP level. Nevertheless, it always appears in a morphologically invariant form, which indicates it does not reach  $T^0$ . Finally, /-participles and finite verbs display morphological agreement with the subject, are able to project an external theta role and assign structural case to the object. Hence, they represent the highest degree of verbalization and are able to target the TP layer.





# Chapter 4 Clitics in South Slavic

## 4.1 Introduction

It was mentioned in the introduction to this dissertation that auxiliaries in Germanic and Romance languages often differ from main verbs in phonological and morphological impoverishment. Correspondingly, in many Slavic languages auxiliaries are clitics, whose distribution is subject to various phonological conditions. However, since they always cluster with pronominal clitics, it is necessary to examine all types of clitics together. The present chapter will discuss the properties of these elements in the three contemporary South Slavic languages analysed in this thesis. Since Slavic clitics have already received considerable attention in linguistics and the literature devoted to the topic is extensive (cf. Bošković 2001, to appear; Franks 1998; Franks & King 2000 for a detailed overview), the discussion is relatively brief. However, the investigation of the positions taken by clitics is relevant for the study of compound tenses not only because some of the auxiliaries are clitics. The Slavic languages have very free word order, but the distribution of clitics is exceptionally rigid, as they must always appear in designated positions. Therefore, clitics can be used as a criterion to determine the placement of other elements in the clause.

The chapter is organized as follows: after some expository remarks concerning the nature of clitics in section 4.2, section 4.3 will discuss the evolution of clitic positions in Old Church Slavonic. Section 4.4 will present the patterns of clitic placement in three contemporary South Slavic languages. The major division will be drawn between Serbo-Croatian (cf. section 4.4.1), in which clitics appear in the second position, and Macedonian (cf. section 4.4.2) and Bulgarian (cf. section 4.4.3), which have verb-adjacent clitics. The chapter will also show, taking recourse to Macedonian data, that the distribution and the inventory of auxiliary clitics may influence the nature of *l*-participle fronting investigated in chapter 2.

## 4.2 What are clitics?

Clitics are usually understood as small lexical elements that cannot form an independent prosodic domain.<sup>86</sup> They never bear stress lexically, and for reasons of prosody they always form an accentual unit with the preceding or the following word. The word they attach to is termed the “clitic host”. If a clitic is dependent on an element that follows it, it is referred to as “proclitic”. Clitics that are attached to the material preceding them are dubbed “enclitic”. Moreover, clitics may also adjoin to each other and form “clitic clusters”.

In some languages clitics are not specified for the direction of attachment, and they can be both enclitic and proclitic. For instance, in Macedonian the directionality of cliticization depends on the categorial nature of the clitic host: the clitics procliticize on tensed verbs (cf. 1), but encliticize on imperatives (cf. 2).<sup>87</sup>

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<sup>86</sup> For a detailed overview of properties of clitics based on non-Slavic data, see Van Riemsdijk (1999).

<sup>87</sup> Clitics are italicized in all examples included in this chapter.

- (1) a. *Mi go dade Vera včera*  
 me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PAST.3SG</sub> Vera yesterday  
 “Vera gave it to me yesterday”  
 b. \*Dade *mi go* Vera včera (Mac, Franks 1998)
- (2) a. Penkaloto kupuvaj *mi go!*  
 Pen-the buy<sub>IMPV.2SG</sub> me<sub>CL.DAT</sub> it<sub>CL.ACC</sub>  
 “Buy me the pen!”  
 b. \*Penkaloto *mi go* kupuvaj! (Mac, Franks 1998)

Given that clitic placement may be sensitive to the grammatical category of the host, and sometimes even to the specification of some grammatical features such as finiteness, the requirements of clitics are related not only to phonology, but also to other levels of representation, such as syntax, morphology and semantics.

Chomsky (1995: 249) argues that clitics are ambiguous categories, which share XP and X<sup>0</sup> properties. This is indicated by the fact that they move from argument positions within the VP, which are phrasal, and climb in order to attach to the inflectional head T<sup>0</sup>. Since the movement violates the Head Movement Constraint, Chomsky claims that the clitics raise as XPs and only the last step in the derivation involves head-adjunction. Bošković (2002) states that the ambiguous XP/X<sup>0</sup> status of clitics can be defined in syntactic terms by arguing that they are non-branching elements.

Ever since Zwicky (1977), two types of clitics have been distinguished: “simple” and “special” ones. Simple clitics have the same distribution as their non-clitic counterparts. For example, simple pronominal clitics pattern in the same way as pronouns and may exhibit no special phonological properties except for being unstressed. By contrast, the syntactic and the phonological behaviour of special clitics often differs from the behaviour of their non-clitic counterparts. For instance, special pronominal clitics may be located in the positions that are inaccessible to non-clitic arguments. Most of the clitics found in the South Slavic languages are of the “special” type.

More recently, Cardinaletti & Starke (1999) have scrutinized the traditional division of pronouns into clitic and strong pronouns and concluded that the binary distinction is not fine-grained enough. Therefore, they suggested a three-way distinction of pronouns into strong pronouns, weak pronouns, and clitics. Moreover, they proposed a “Minimise Structure” generalization, which states that the realization of a clitic is the most economical solution. The realization of a weak or a strong pronoun should be a last resort procedure. Section 4.4.2.4.2 will provide an analysis of cliticization in Macedonian, which is based on this proposal.

### 4.3 Diachrony of clitics in Slavic

This section will briefly outline the historical development of clitics in Slavic with respect to their morphological forms and their positions in the clause structure. The data presented here will be used later in the thesis to verify some claims concerning cliticization in contemporary Slavic languages.

### 4.3.1 Reduction of the copula/auxiliary ‘to be’

For convenience, the chart in (3) repeats the paradigm of the auxiliary ‘to be’ in Old Church Slavonic from chapter 1 (section 1.3.3.5.2.1). These are full, orthotonic forms.

(3) Orthotonic forms the auxiliary ‘to be’ in Old Church Slavonic

	singular	dual	plural
1	jesmь	jesvě	jesmь
2	jesi	jesta	jeste
3	jestь	jeste	sōtь

(OCS, cf. Lunt 1974)

Section 1.3.3.5.2 in chapter 1 showed that in Old Church Slavonic it was quite common for the 3<sup>rd</sup> person singular and plural forms to appear as reduced enclitics *je* and *sō*, respectively. When the reduced forms emerged, the orthotonic forms were maintained for an emphatic usage. The two forms differed in their distribution in the clause. The reduced variants had to appear in the 2<sup>nd</sup> position. The orthotonic forms could be found in other positions, also clause-initially. Their actual placement depended on the information structure of the clause (cf. Andersen 1987: 24–25).

Further reduction of the auxiliary ‘to be’ occurred in different ways in particular Slavic languages. According to Decaux (1955: 187–188), in Serbo-Croatian the change took place in two steps. First, a reduced vowel (a *jer*) was inserted to split the *-sm-* cluster in the Old Church Slavonic form *jesmь*. This gave the form *jesьmь*, which later changed into the variant *jesam*. Afterwards, the 1<sup>st</sup> and the 2<sup>nd</sup> person forms in the singular and the plural were reduced into clitics: *jesam, jesi, jesmo, jeste* > *sam, si, smo, ste*. However, the old full forms were retained alongside, and consequently, there are two paradigms of the auxiliary ‘to be’ in contemporary Serbo-Croatian (cf. section 4.4.1.1).

Most of the other South and West Slavic languages (including Bulgarian, Macedonian, Czech, Slovene, and Sorbian) followed the same path of the change, but the process went much further, because it additionally involved vowel reduction, as in the contemporary Bulgarian forms of *săm, si, sme, ste*. The reduction of the auxiliary ‘to be’ in Polish was the most complex in all the Slavic languages. It consisted in the reanalysis of the reduced variants as affixes on the *l*-participle and a creation of a new copula paradigm (cf. section 1.3.4.2.2.1 in chapter 1).

The reduction never took place in the East Slavic languages. The disyllabic forms were continuously preserved until they suddenly completely disappeared (cf. section 1.3.4.2.1 in chapter 1).

### 4.3.2 Reduction of the pronominal clitics

Pronouns appeared in 6 morphological cases in Old Church Slavonic, but only the dative and the accusative had clitic variants. The chart in (4) lists only the 1<sup>st</sup> and the 2<sup>nd</sup> person forms. For the 3<sup>rd</sup> person, suppletive variants of the demonstrative *j-* and *tb* were used (cf. Lunt 1974: 65; Schmalstieg 1983: 62–65). Just as the auxiliary forms, the clitic variants were derived via reduction of the full pronouns. However, Slawski (1946: 74) points out that pronominal clitics were reduced earlier than the auxiliary clitics.

## (4) Pronominal clitics in Old Church Slavonic

	1SG	2SG	1DUAL	2DUAL	1PL	2PL	REFL
ACC	mene/mę	tebe/tę	na/ny	va/vy	nasъ/ny	vasъ/vy	sebe/sę
DAT	mьně/mi	tebě/ti	nama/-	vama/-	namъ/ny	vamъ/vy	sebě/si

(OCS, Huntley 2002: 144)

### 4.3.3 Changes in the clitic positions

This section will analyse the positions occupied by clitics in the Old Church Slavonic clause structure. It will be shown that even though they had to occur in the second position, some violations of the requirement could be observed at later stages of the language development. According to traditional linguistic accounts (cf. Slawski 1946), these violations were due to diachronic changes in phonology. However, I will demonstrate that phonology cannot be the only reason why they occurred, because it is possible to define contexts in which only some types of clitics must move to the second position. Therefore, even though the placement of clitics is influenced by their prosodic deficiency, they still behave like syntactic units and undergo syntactically-constrained movements.

#### 4.3.3.1 Wackernagel's law

A number of diachronic studies have shown that clitics had to appear in the clause second position in the early Indo-European languages. Jakob Wackernagel was the first linguist to describe this tendency in his 1892 paper. He investigated Ancient Greek texts and observed that some accentless elements, such as personal pronouns, indefinite adverbs, indicative forms of 'be' and 'say' in the present tense, as well as some particles, had to appear immediately after the initial word in the sentence. He concluded that this was a general principle of word order in Proto-Indo-European, which is now referred to as "Wackernagel's law" (cf. Anderson 1993 for an overview of Wackernagel's proposal).

There are very few comprehensive diachronic studies of clitic positions in Slavic available. Slawski (1946) offers the most detailed investigation of the position of enclitics ranging from Old Church Slavonic to Modern Bulgarian.<sup>88</sup> Following Wackernagel's insights, he stresses the influence of prosody on word order and argues that in Old Church Slavonic the clitics had to always follow the first word bearing stress. Moreover, he investigates potential clitic hosts and concludes that even though many elements of different categories could lend support to the clitics, they had to be part of the same clause structure. For example, extra-sentential lexemes, such as conjunctions could not be clitic hosts (Slawski 1946: 25). Although the rule was by no means a Slavic invention, because exactly the same restrictions held in Sanskrit and Ancient Greek, it contrasts with cliticization in contemporary Bulgarian and Polish, in which coordinating conjunctions are eligible as phonological clitic hosts (cf. 4.4.3.2 and chapter 5, section 5.2.2).

Verbs were the most likely candidates for clitic hosts in Old Church Slavonic. Huntley (2002: 165) and Willis (2000) demonstrate that the clitics had to immediately

<sup>88</sup> A more recent diachronic account of clitic placement in Bulgarian can be found in Pancheva (2005).

follow the *l*-participle when it occurred at the beginning of a clause (cf. 5). Importantly, this pattern is not necessarily observed in the Ancient Greek sources of the Old Church Slavonic translations (Slawski 1946: 17, 29).

- (5) I     daľb            ti            bi            vodō živō  
 And give<sub>PART.MSG</sub> you<sub>DAT</sub> would<sub>3SG</sub> water living  
 “And he would give you the water of life” (OCS, *John* 4: 10, Willis: 2000: 333)

However, there was no adjacency requirement for the participle and the auxiliary when the participle followed an auxiliary clitic, as exemplified in (6), where the adverb *sъde* intervenes between the conditional auxiliary clitic *bi* and the *l*-participle *byľb*.

- (6) Ašte bi            съde byľb,            ne bi            bratrъ moi umrľľb  
 if would<sub>2SG</sub> here be<sub>PART.MSG</sub> NEG would<sub>3SG</sub> brother my die<sub>PART.MSG</sub>  
 “If you had been here, my brother would not have died”  
 (OCS, *John* 11: 21, Willis 2000: 328)

Consequently, the following combinations were possible.

- (7) a. Part – Aux  
 b. XP/X – Aux – (YP/Y) – Part

Outside the left periphery of the clause, the word order was relatively free. As shown in (8), the participle could be either followed or preceded by the auxiliary.

- (8) a. Jako varilъ            jestъ  
 as go-on-ahead<sub>PART.F.SG</sub> be<sub>AUX.3SG</sub>  
 “That he has gone ahead” (OCS, *Suprasliensis* 204.29, Huntley 2002: 165)  
 b. Jako-že jestъ            obyklъ  
 as+FOC be<sub>AUX.3SG</sub> become-accustomed<sub>PART.M.SG</sub>  
 “As he has become accustomed”  
 (OCS, *Suprasliensis* 382.24, Huntley 2002: 165)

The data presented in this section lead to two conclusions. First, the word order in Old Church Slavonic was rather free, but the clitics had to appear in designated positions. It could be argued that these positions correspond to different functional heads, whose features are spelt out by clitics. Second, the clitics often followed the *l*-participle, which served as the verbal host. Following the analysis developed in chapter 2, it might be postulated that the clause-initial *l*-participle targeted Spec, TP via locative inversion to check the  $\varphi$ -features of T.

#### 4.3.3.2 Violations of Wackernagel’s law in Old Church Slavonic

Even though the clitics in Old Church Slavonic had to appear in the second position, Slawski (1946: 29) observes that the clitics in some Old Church Slavonic texts showed a very strong tendency to appear immediately preceding or following the verb, even if this at times led to a violation of Wackernagel’s law. Slawski suggests that this tendency was a Slavic innovation, which in particular could be observed in the case of the reflexive clitic *se* (cf. 9a) and the conditional auxiliary clitic (cf. 9b).

- (9) a. Da byxъ pokajaъ sę kъ bogu  
 that would<sub>CL.ISG</sub> repent<sub>PART.M.SG</sub> CL.REFL to God  
 “In order that I might repent before God”  
 (OCS, *Suprasliensis* 167.2, Willis 2000: 333)
- b. Da ne prędanъ bimъ Ijudęomъ  
 that NEG handed-over<sub>PASS.M</sub> would<sub>CL.ISG</sub> Jews<sub>DAT</sub>  
 “That I might not be handed over to the Jews”  
 (OCS, *John* 18: 36, Willis 2000: 332)

Slawski’s study illustrates two directions in the development of the clitic positions in Old Church Slavonic. On the one hand, the clitics targeted the second position in the clause. On the other hand, the clitics aimed to stay adjacent to the verb. Even though the latter tendency was at odds with the strategies of clitic placement found in the original Ancient Greek sources of the Old Church Slavonic translations, it was widespread in many other Indo European languages, for instance in all Romance languages, Albanian, and Greek. Slawski (1946: 79) attributes it to the increased prominence of word stress as opposed to sentence stress.

However, the phonological change mentioned by Slawski was certainly not the only reason for the violations of Wackernagel’s law. Willis (2000) points out that the placement of clitics in Old Church Slavonic was often determined by their syntactic category. For instance, when the *l*-participle or some other predicative element showing subject agreement was clause-initial, all types of clitics would immediately follow it. This is illustrated for the pronominal clitic *mi* ‘me<sub>DAT</sub>’ in (10a) and for the sentential focus clitic *že* in (10b), which are right-adjacent to the passive participles *dana* ‘given’ and *rečeno* ‘said’, respectively.

- (10) a. Dana mi estъ vsęka vlastъ  
 give<sub>PASS.F.SG</sub> me<sub>CL.DAT</sub> be<sub>PRES.3SG</sub> every power  
 na neb[e]se i na zemi  
 on heaven and on earth  
 “Every power over heaven and earth is given to me”  
 (OCS, *Matt.* 28: 18, Willis 2000: 325)
- b. Rečeno že bystъ  
 say<sub>PASS.N.SG</sub> CL.FOC be<sub>AOR.3SG</sub>  
 “But it was said”  
 (OCS, *Matt.* 5: 31, Willis 2000: 325)

By contrast, when some other constituent was placed in front of the predicative element, the sentential clitics would move to the Wackernagel position, preceding the participle in this way, but the pronominal clitics would stay in situ. This is exemplified by the sentential clitic *že*, which occurs in the second position in the embedded clause in (11), and by the pronominal clitic *ę* ‘them’ in (12), which must follow the *l*-participle *sъvoritъ* ‘create’.

- (11) G[lagol]jō vamъ ěko nikotory že pror[o]kъ  
 say<sub>1SG</sub> you<sub>PL.DAT</sub> that no CL.FOC prophet  
 prijetenъ estъ vъ otečъstvii svoemъ  
 accept<sub>PASS.N.SG</sub> be<sub>3SG</sub> in homeland his  
 “I say to you that no prophet is accepted in his homeland”  
 (OCS, *Luke* 4: 24, Willis 2000: 326)

- (12) A    otъ    načęla    sъzъdaniju,...
- and from beginning creation<sub>DAT</sub>
- a.    mōža i    ženō    sъtvorilъ    ѣ    etsъ    b[og]ъ
- man and woman create<sub>PART.MSG</sub> them<sub>CL</sub> be<sub>3SG</sub> God
- “And from the beginning of creation, God created them man and woman”
- b. \*mōža i ženō ѣ sъtvorilъ etsъ b[og]ъ
- c. \*mōža ѣ i ženō sъtvorilъ etsъ b[og]ъ      (OCS, *Mark* 10: 6, Willis 2000: 326)

Following the ideas concerning *l*-participle fronting developed in chapter 2, I will assume that the *l*-participle *sъtvorilъ* in (12a) fills Spec, TP. This implies that the pronominal clitic *ѣ* is internal to the TP. However, the focus clitic *ѣ* in (11) must be higher than the TP layer, because it precedes the subject. This indicates that sentential and pronominal clitics could target different projections in Old Church Slavonic.

It is also possible to find examples in which the same clitic is hosted in different positions in the clause structure. For instance, Willis observes that the conditional auxiliary clitic had to be always right adjacent to the complementizer *a* (cf. 13), irrespectively of the ordering of the elements following the clitic (cf. 13b).<sup>89</sup> Conversely, the complementizer *da* did not have to be adjacent to the conditional clitic. This is shown in the two different translations of *Luke* 4: 42. In the first one in (14a) *bi* is separated from *da* by negation. In the second one in (14b) the two constituents are adjacent, and negation occurs to the right of the conditional auxiliary *bi*.

- (13) a. A    by    bylъ    sъde
- if COND.3SG be<sub>PART.MSG</sub> here
- “If he had been here”
- b. A by sъde bylъ
- c. A    by    bylъ    prorokъ
- if COND.3SG be<sub>PART.MSG</sub> prophet
- “If he had been the prophet”      (OCS, Vaillant 1977: 219)

- (14) a. Dръžaaхō i    da ne bi    oтъšelъ
- held<sub>3PL</sub> him that NEG COND.3SG leave<sub>PART.MSG</sub>
- oтъ    niхъ
- from them      (OCS, *Codex Marianus*, Willis 2000: 330)
- b. Dръžaaхō i    da    bi    ne oтъšлъ
- held<sub>3PL</sub> him that COND.3SG NEG leave<sub>PART.MSG</sub>
- oтъ    niхъ
- from them      (OCS, *Codex Zographensis*, Willis 2000: 330)
- “And they held him, so that he would not leave them”

Willis concludes that depending on their semantics, certain types of complementizers could attract clitics. The attraction was obligatory in the case of *a*, which introduced conditional sentences. Conversely, the complementizer *da*, which usually introduced indicative (declarative) clauses (cf. Bräuer 1957), did not attract clitics, so they did not have to be adjacent to it.

I would like to suggest that the variation in the position of the clitics indicates that some of them may be attracted by a Force feature, which specifies the clause type. I propose that this feature is in the functional head  $\Sigma$  (cf. Laka 1994). Clitics always have

<sup>89</sup> Willis (2000) does not provide any data with the complementizer *a*, so the examples in (13) are taken from Vaillant (1977).

to move to  $\Sigma$  whenever the sentence deviates from declarative. Thus, in (13) the clitic *by* has to raise to  $\Sigma$  because the sentence is marked as conditional. In (11)  $\xi_e$  raises to the second position in the embedded clause in order to licence a focus feature on the word *nikotory* ‘not a single one’, which is interpreted as emphatic. Correspondingly, the conditional auxiliary *byxb* in (9a) raises to  $\Sigma$  in order to licence the subjunctive interpretation of the clause, leaving the reflexive clitic *se* stranded behind, while (9a) is an instance of attraction of the passive participle by negation (cf. section 2.3.6.3.2 in chapter 2 for some discussion of negation in Old Church Slavonic).

I will return to the relation between the Wackernagel position of clitics and the Force marking in section 4.4.4.2. I will also show that clitic movement to  $\Sigma$  for Force licensing occurs in many contemporary Slavic languages as well (cf. 4.4.2.4.2.3 for a discussion of imperatives in Macedonian, and section 5.3.4.1 in chapter 5 for an analysis of enclitization in Polish).

Summarizing, this section has demonstrated that although clitics had to appear in the second position in Old Church Slavonic, there were contexts in which the rule was not obeyed. It is an empirical question whether the violations of Wackernagel’s law were due to a phonological or a syntactic condition. Irrespectively of the motivation, it has also been shown that although clitics are phonologically weak and need support from other elements in the structure, they behave like syntactic units: they can be attracted by formal features and undergo syntactic movements. This claim will be further substantiated in the discussion of cliticization in Serbo-Croatian presented in the next section.

## 4.4 Clitic positions in contemporary South Slavic languages

The following sections will overview the properties and positions of clitics in the three contemporary South Slavic languages discussed in this thesis. Even though these languages are very closely related, their clitic systems are surprisingly distinct: Serbo-Croatian has Wackernagel clitics; Bulgarian has enclitics that do not have to occur in the second position, whereas clitics in Macedonian are proclitic or enclitic depending on the type of host. In both Bulgarian and Macedonian clitics must be verb-adjacent, but this requirement is absent in Serbo-Croatian. It will be shown that these contrasts correspond to the ways clitics are arranged in the clause structure. The Wackernagel clitics in Serbo-Croatian will be argued to occupy specifiers of relevant functional projections, while the clitics in Bulgarian and Serbo-Croatian will be claimed to be adjoined to a single head.

In spite of the differences mentioned above, the ordering of clitics with respect to each other is the same in all South Slavic languages. The dative precedes the accusative, while the auxiliary clitics show an intriguing split concerning the positions of the 3<sup>rd</sup> person singular form, which must always appear as the last one in the clitic cluster.

- (15)  $li^{90} > \text{Mod} > \text{AUX (except 3<sup>rd</sup> SG)} > \text{REFL} > \text{DAT} > \text{ACC} > \text{3<sup>rd</sup> SG AUX}$   
(Tomić 1996a, Rivero 2005, Franks&King 2000: 45)

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<sup>90</sup> Recall from chapter 2 that *li* is an interrogative complementizer, and is commonly assumed to be in C.



## 4.4.1 Serbo-Croatian

I will begin the overview with an analysis of Serbo-Croatian, which is a prototypical example of a language observing Wackernagel's law. Along with all the other South Slavic languages, it shows a distinction between clitic and non-clitic forms in both the pronominal and the auxiliary systems.

### 4.4.1.1 The clitic paradigms

Serbo-Croatian distinguishes three cases in the pronominal paradigm: accusative, genitive, and dative. All of them have full and clitic forms, exemplified in (16).

(16) Pronominal forms

	Acc (full/clitic)	Gen (full/clitic)	Dat (full/clitic)
1SG	mene/me	mene/me	meni/mi
2SG	tebe/te	tebe/te	tebi/ti
3SG M/N	njega/ga	njega/ga	njemu/mu
3SG F	nju/je	nje/je	njoj/joj
1PL	nâs/nas	nâs/nas	nama/nam
2PL	vâs/vas	vâs/vas	vama/vam
3PL	njih/ih	njih/ih	njima/im
REFL	sebe/se	sebe/-	sebi/si

(S-C, Franks & King 2000: 19-24)

Likewise, the present tense auxiliaries may appear either in full or clitic forms, with a further division into affirmative and negative variants, as shown in (17). Both variants have been argued to be created in syntax by incorporation into a negative or a positive polarity head (cf. chapter 2, section 2.3.6.2.2).

(17) Auxiliary forms

	affirmative		negative	
	SG (full/clitic)	PL (full/clitic)	SG	PL
1	jesam/sam	jesmo/smo	nisam	nismo
2	jesi/si	jeste/ste	nisi	niste
3	jest(e)/je	jesu/su	nije	nisu

(S-C, Franks & King 2000: 19-24)

Some other functional verbs, such as the conditional form of the verb *biti* 'to be' and the future auxiliary *ht(j)eti* 'want', show a similar division into clitic and full forms. In addition, *ht(j)eti* has negative variants, which are always strong.

(18) Forms of the verb *ht(j)eti* ‘want’/‘will’

	positive		negative	
	SG (full/clitic)	PL (full/clitic)	SG negative	PL negative
1	hoću/ću	hoćemo/ćemo	neću	nećemo
2	hoćeš/ćeš	hoćete/ćete	nećeš	nećete
3	hoće/će	hoće/će	neće	neće

(S-C, Franks &amp; King 2000: 19-24)

## (19) Forms of the conditional auxiliary

	SG (full/clitic)	PL (full/clitic)
1	bih/bih	bismo/bismo
2	bi/bi	biste/biste
3	bi/bi	bi/bi

(S-C, Franks &amp; King 2000: 19-24)

Unlike clitics, the non-clitic auxiliaries are insensitive to any phonological constraints on their placement in the sentence; therefore they may appear clause-initially. Moreover, they do not have to occur in the same sentence positions as their clitic counterparts. For example, the non-clitic 2<sup>nd</sup> person plural variant *jeste* may precede the interrogative complementizer clitic *li* (cf. 20a), while its corresponding clitic form *ste* has to appear to the right of *li* (cf. 20b).

- (20) a. Jeste *li* *joj* *se* predstavili u sali?  
 be<sub>AUX.2PL</sub> Q her<sub>CL.DAT</sub> REFL introduce<sub>PART.M.PL</sub> in hall  
 “Did you introduce yourselves to her in the hall?” (S-C, Spencer 1991: 354)
- b. Dali *ste* *joj* *se* predstavili u sali?  
 COMP+Q be<sub>AUX.2PL</sub> her<sub>CL.DAT</sub> REFL introduce<sub>PART.M.PL</sub> in hall  
 (S-C, N. Miličević, p.c.)

Furthermore, strong auxiliary forms do not need to cluster with clitics. This is exemplified for *jeste* and *nije*, which are split from the pronominal clitics by the subject *Petar* in the embedded clauses in (21b).

- (21) Stefan tvrdi...  
 Stefan claim<sub>3SG</sub>
- a. da *mu* *ga* *je* Petar poklonio  
 that him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> be<sub>CL.AUX.3SG</sub> Petar give<sub>PART.M.SG</sub>  
 “Stefan claims that Petar has given it to him as a present”
- b. da *mu* *ga* Petar jeste/nije poklonio  
 that him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> Petar be<sub>AUX.3SG</sub>/NEG+<sub>AUX.3SG</sub> give<sub>PART.M.SG</sub>  
 “He claims that Petar *did*/didn’t give it to him as a present”  
 (S-C, cf. Caink 2000: 63)

#### 4.4.1.2 Properties and positions of the Serbo-Croatian clitics

The clitics in Serbo-Croatian are not selective about the category of their hosts; the only categories from which they may not receive phonological support are prepositions and conjunctions.<sup>91</sup> This is illustrated for the conjunction *i* in (22).

- (22) a. Ivan *je* vidio auto i kupio *je* *ga*  
 Ivan be<sub>AUX.3SG</sub> see<sub>PART.M.SG</sub> car and buy<sub>PART.M.SG</sub> be<sub>AUX.3SG</sub> it<sub>CL.ACC</sub>  
 ‘‘Ivan saw the car and bought it’’  
 b. \*Ivan *je* vidio auto i *je* *ga* kupio (S-C, Ćavar & Wilder 1999: 454)

Moreover, they do not have to be adjacent to elements of any specific grammatical category. For instance, they do not have to be adjacent to the *l*-participle (cf. 23) or the finite verb (cf. 24). The only requirement that they must observe is that they appear in the second position.

- (23) Vi *ste* *mu* *je* nesumnjivo  
 you be<sub>AUX.2PL</sub> him<sub>CL.DAT</sub> her<sub>CL.ACC</sub> undoubtedly  
 predstavili juče  
 introduce<sub>PART.M.PL</sub> yesterday  
 ‘‘You undoubtedly introduced her to him yesterday’’ (S-C, Bošković 1995)

- (24) a. Sutra *ga* deca ne-će videti  
 tomorrow him<sub>CL.ACC</sub> children NEG<sup>+</sup>FUT.3PL see<sub>INF</sub>  
 ‘‘The children will not see him tomorrow’’ (S-C, Progovac 1996: 425-426)  
 b. Koliko *im* ko daje?  
 How-much them<sub>CL.DAT</sub> who give<sub>PRES.3SG</sub>  
 ‘‘Who gives how much to them?’’ (S-C, Rivero 1991: 335)

In *yes-no* questions (cf. 25a), as well as in embedded clauses (cf. 25b-c), the clitics must be right adjacent to the complementizer *da*.

- (25) a. Da *li* *mi* *ga* daješ?  
 that Q me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PRES.2SG</sub>  
 ‘‘Are you giving it to me?’’  
 b. Kaže da *mi* *ga* *je* Petar dao  
 say<sub>PRES.3SG</sub> that me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> be<sub>AUX.3SG</sub> Petar give<sub>PART.M.SG</sub>  
 ‘‘He says that Petar has given it to me’’  
 c. \*Kaže da Petar *mi* *ga* *je* dao (S-C, Tomić 1996a: 818-819)

Placement of the clitics in any other position than the second, as well as splitting them from each other results in ungrammaticality.

<sup>91</sup> Conjunctions are possible clitic hosts in Bulgarian and Polish, as shown in sections 4.4.3 and in chapter 5 (section 5.2.2), respectively.

- (26) a. \*Mi Marijinoj prijateljici *smo* *ga* dali  
 we Marija's friend be<sub>AUX.1PL</sub> it<sub>CL.ACC</sub> give<sub>PART.MSG</sub>  
 "We gave it to Mary's friend"  
 b. \*Mi *smo* Marijinoj prijateljici *ga* dali (S-C, Stjepanović 1998: 528)

At first blush, the data might suggest that all the clitics target a designated clitic site together as a unit. In fact, this is what was proposed in the earliest generative accounts of cliticization in Serbo-Croatian, such as Wilder & Ćavar (1994), Progovac (1996), and Tomić (1996a), who suggest that clitics are all right-adjoined to  $C^0$  in the case of embedded clauses, or to the highest head in the structure available in the case of main clauses (cf. Franks 1998). However, there are theoretical and empirical shortcomings related to this proposal.

From a theoretical point of view, it is problematic to suggest that pronominal clitics raise to  $C^0$  directly. If they were to move as heads, this would mean crossing other heads on the way, such as the auxiliary *nije* in (27), and inducing the Head Movement Constraint violation.

- (27) ...da *gaj* Ivan nije udario t<sub>j</sub>  
 that him<sub>CL.ACC</sub> Ivan NEG+be<sub>PRES.SG</sub> hit<sub>PART.MSG</sub>  
 "...that Ivan didn't hit him" (S-C, Wilder & Ćavar 1994: 54)

In all fairness, it must be noted that each of the proponents of this analysis recognizes this theoretical problem; see Franks (1998) and Progovac (1996, 1999) for a discussion and potential solutions.

However, empirical facts also argue against the idea that both the auxiliary and pronominal clitics are located in the same position. For instance, this is demonstrated by the interpretation of certain adverbs in the presence of the two types of clitics.

- (28) a. Oni *su* pravilno odgovorili Mileni  
 they be<sub>AUX.3PL</sub> correctly answer<sub>PART.M.PL</sub> Milena<sub>DAT</sub>  
 "They did the right thing in answering Milena"  
 "They gave Milena a correct answer"  
 b. Oni *su joj* pravilno odgovorili  
 they be<sub>AUX.3PL</sub> her<sub>CL.DAT</sub> correctly answer<sub>PART.M.PL</sub>  
 "\*They did the right thing in answering her"  
 "They gave her a correct answer" (S-C, Bošković to appear)

The adverb *pravilno* 'correctly' is ambiguous and may have a sentential or a manner reading. The sentence in (28a), which contains only the auxiliary clitic *su*, is acceptable under both interpretations of the adverb. However, the string in (28b), which contains the auxiliary *su* followed by the dative clitic *joj*, permits only the manner-oriented reading of the adverb. Given the standard assumption that sentential adverbs reside higher in the structure than manner adverbs, this means that the auxiliary clitic *su* moves higher when it occurs on its own, as in (28a), than when it is accompanied by a pronominal clitic, as in (28b).

Stjepanović (1998, 1999) provides more evidence against the idea that the clitics always cluster in the same position. She observes that a part of the clitic cluster may be deleted under VP ellipsis, as illustrated in (29).

- (29) a. Mi *smo* *mu* *ga* predstavili, a we be<sub>AUX.1PL</sub> him<sub>CL.DAT</sub> him<sub>CL.ACC</sub> introduce<sub>PART.M.PL</sub> and  
i vi *ste* ~~*mu*~~ ~~*ga*~~ predstavili, (takodje)  
also you be<sub>AUX.2PL</sub> him<sub>CL.DAT</sub> him<sub>CL.ACC</sub> introduce<sub>PART.M.PL</sub> too  
“We introduced him to him, and you did, too”
- b. Mi *smo* *mu* *ga* predstavili, a i vi *ste* ~~*mu*~~ *ga* predstavili, (takodje)  
c. \*Mi *smo* *mu* *ga* predstavili, a i vi *ste* ~~*mu*~~ ~~*ga*~~ predstavili, (takodje)  
d. \*Mi *smo* *mu* *ga* predstavili, a i vi *ste* ~~*mu*~~ *ga* predstavili (takodje)  
e. \*Mi *smo* *mu* *ga* predstavili, a i vi ~~*ste*~~ ~~*mu*~~ ~~*ga*~~ predstavili (takodje)  
(S-C, cf. Stjepanović 1998, 1999)

The examples in (29) contain two conjoined sentences. In both of them the subject is immediately followed by the auxiliary clitic, which in turn is followed by two pronominal clitics: the indirect object *mu* and the direct object *ga*. The second part of the conjunct is affected by ellipsis. As indicated in (29a), both of the pronominal clitics can be deleted with the auxiliary clitic remaining overt. The sentences in (29b, c) demonstrate that it is also possible to elide one of the pronominal clitics, but it must be the one that is higher in the structure.

Adopting the standard assumption that only constituents may be deleted (cf. Lasnik 1995), the data in (29) show that the clitics in Serbo-Croatian do not cluster, but are positioned hierarchically with respect to each other: the auxiliary clitic *sm* is located higher than the pronominal clitics, and the dative clitic dominates the accusative clitic. If the accusative clitic were higher than the dative clitic, there should be a constituent that contains the dative clitic (in addition to the *l*-participle), but not the accusative clitic. This is not the case, as indicated by the ungrammaticality of (29c). These examples also suggest that the clitics may not be adjoined to each other, but rather each of them must be located in a separate maximal projection.

More support for the idea that clitics in Serbo-Croatian occupy maximal projections comes from Progovac’s (1993) investigation of clitic movement across different types of verbs. By applying a number of different syntactic criteria, Progovac draws a distinction between verbs that take “subjunctive-like” complements, and verbs that take “indicative-like” complements. For example, she shows that topics can raise from “subjunctive-like” complements (cf. 30b), but not from “indicative-like” complements (cf. 30a). Likewise, *wh*-movement is prohibited out of “indicative-like” complements (cf. 31a), but it freely occurs out of “subjunctive-like” complements (cf. 31b). Similarly, negative polarity items may extend their domain only in “subjunctive-like” complements (cf. 32b).

- (30) a. \*Pismo ne kažem da sam potpisao  
letter NEG say<sub>PRES.1SG</sub> that be<sub>AUX.1SG</sub> sign<sub>PART.M.SG</sub>  
“?The letter, I don’t say that I have signed”
- b. Pismo ne želim da potpišem  
letter NEG want<sub>PRES.1SG</sub> that sign<sub>PRES.1SG</sub>  
“The letter, I don’t want to sign”
- (31) a. ?\*Koga ne kažeš da voliš?  
who NEG say<sub>PRES.2SG</sub> that love<sub>PRES.2SG</sub>  
“Whom don’t you say that you love?”

- b. Koga ne želiš da voliš?  
 whom<sub>NEG</sub> wish<sub>PRES,2SG</sub> that love<sub>PRES,2SG</sub>  
 “Whom don’t you want to love?”
- (32) a. \*Ne kažem da vidim nikoga  
 NEG say<sub>PRES,1SG</sub> that see<sub>PRES,1SG</sub> nobody  
 “I do not say that I see anyone”  
 b. Ne želim da vidim nikoga  
 NEG wish<sub>PRES,1SG</sub> that see<sub>PRES,1SG</sub> nobody  
 “I do not wish to see anyone” (S-C, Progovac 1993)

Importantly, Progovac shows that clitic placement is sensitive to the same dichotomy between the two types of verbs. The examples in (33b) and (34b) demonstrate that clitics may climb out of “subjunctive-like” complements, but not out of “indicative-like” complements. The movement occurs for focus reasons.

- (33) a. Milan kaže da ga vidi  
 Milan says that him<sub>CL,ACC</sub> sees  
 “Milan says that he can see him”  
 b. \*Milan ga kaže da vidi
- (34) a. Milan želi da ga vidi  
 Milan wishes that him<sub>CL,ACC</sub> sees  
 “Milan wishes to see him”  
 b. ?Milan ga želi da vidi (S-C, Progovac 1993)

The outputs in (33) and (34) lead to two conclusions concerning the position of the clitics in the clause structure. First, they confirm the assumption made in section 4.3.3.2 that although clitics are phonologically deficient, they behave like syntactic units. Their placement adheres to syntactic locality conditions, which cannot be given a phonological or morphological explanation, because it is subject to the same constraints as the uncontroversially syntactic operations like *wh*-movement or topicalization.

Second, the sentence in (34b) exemplifies clitic climbing from an embedded clause to the main clause. The fact that this is possible supports the idea that the pronominal clitics in Serbo-Croatian occupy specifier positions and undergo XP movement. If they were heads, the movement of the dative clitic across the complementizer *da* would disobey the Head Movement Constraint.

Stjepanović (1999) evokes Progovac’s (1993) data and notices that if an embedded subjunctive clause contains two pronominal clitics, only the higher one may climb to the matrix clause. This is shown in (35), where only the dative clitic may raise.

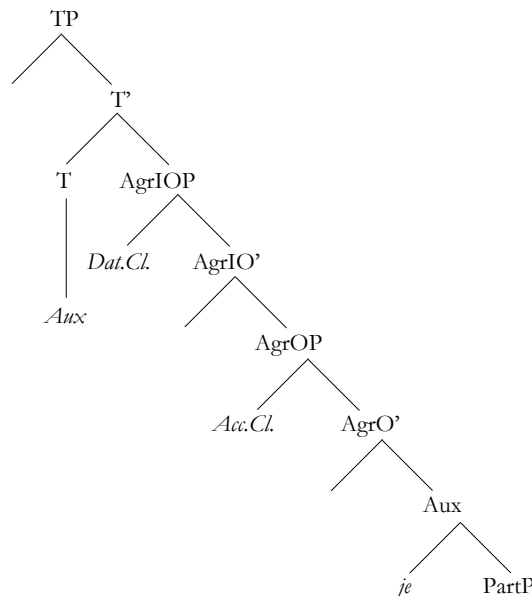
- (35) a. Marija želi da *mu* *ga* predstavi  
 Marija wish<sub>PRES,3SG</sub> that him<sub>CL,DAT</sub> him<sub>CL,ACC</sub> introduce<sub>PRES,3SG</sub>  
 “Marija wants to introduce him to him”  
 b. ?Marija *mu* želi da *ga* predstavi  
 Marija him<sub>CL,DAT</sub> wish<sub>PRES,3SG</sub> that him<sub>CL,ACC</sub> introduce<sub>PRES,3SG</sub>  
 c. \*Marija *ga* želi da *mu* predstavi (S-C, Stjepanović 1999)

The contrast between (35b and c) proves that the dative clitic is located higher than the accusative clitic. According to Stjepanović, the accusative clitic may not move across

the dative clitic, because this would lead to a violation of the Relativized Minimality condition.

Summarizing, the Serbo-Croatian examples discussed in this section suggest that the pronominal clitics target different XP-projections. There is no clitic doubling in this language, which means that the pronominal clitics are pronouns, rather than spell-outs of case or agreement features. They differ from full pronouns in their prosodic requirements. However, just as pronouns and other object DPs they must be generated in argument positions and receive  $\Theta$ -roles. I propose that they raise from their argument positions to specifiers of agreement projections in order to check case: the dative clitic moves to Spec, AgrIOP to check dative case, and the accusative clitic moves to Spec, AgrOP to check accusative case. Their arrangement is sketched in the phrase structure in (36).<sup>92</sup>

(36)



The skeleton correctly predicts that each of the pronominal clitics may be affected by deletion, as each of them is a constituent on its own (cf. the examples in 29). It also implies that if the pronominal clitics are part of an embedded clause, only the higher clitic may raise from Spec, AgrIO and move to the main clause (cf. the example in 35b). Climbing of the lower clitic would lead to a violation of Relativized Minimality condition. Since the dative clitic is an XP-element, the movement will observe the Head Movement Constraint.

<sup>92</sup> The third person singular auxiliary *je* heads its own projection AuxP, and is located lower than the remaining auxiliaries. I account for its exceptional distribution in the South Slavic languages in section 4.4.4.1. The structure in (36) follows general ideas concerning cliticization in Serbo-Croatian presented in Stjepanović (1999) and Bošković (2001).

#### 4.4.1.3 The second position effect in Serbo-Croatian: syntax or phonology?

The preceding sections have discussed the syntactic organization of the clitics in Serbo-Croatian. It was claimed that each of the pronominal clitics undergoes XP-movement and targets the specifier of the relevant Agreement Phrase. Moreover, it was shown that the clitics are not selective about the category of their host. The only requirement concerns their linear position in the structure, as they must immediately follow the first element in the clause. This raises important questions concerning the properties of the initial element: is it a syntactic constituent? If so, does it move to this position or is it base-generated there? And more generally, what is the motivation for the second position requirement – is it dictated by rules of syntax or prosody?

The next sections will provide tentative answers to these questions. Section 4.4.1.3.1 will investigate properties of the elements that lend support to the clitics. It will be argued that although the clitics may seem to follow an incomplete constituent, the placement of the initial element is always the result of a syntactic operation. Section 4.4.1.3.2 will discuss potential reasons for Wackernagel's position requirement.

##### 4.4.1.3.1 Apparent splitting of syntactic constituents by clitics in Serbo-Croatian

Even though the clitics in Serbo-Croatian must appear in the second position in the clause, it is not always entirely clear what counts as the “first position”. Tomić (1996a: 817) remarks that the first element that supports the clitics may be the first constituent of the clause (cf. 37a), the first phrase of the first clausal constituent (cf. 37b), or the first phonological word (cf. 37c).

- (37) a. Veoma lepu haljinu *si mi* kupio  
 very beautiful<sub>ACC</sub> dress<sub>ACC</sub> be<sub>AUX.2SG</sub> me<sub>CL.DAT</sub> buy<sub>PART.MSG</sub>  
 b. Veoma lepu *si mi* haljinu kupio  
 c. Veoma *si mi* lepu haljinu kupio  
 “You’ve bought me a very beautiful dress” (S-C, Tomić 1996a: 817)

The ability to split constituents is a problematic characteristic of the Serbo-Croatian clitics, which has led some researchers to propose that the clitic placement is determined by phonology. For example, Radanović-Kocić (1988) observes that ‘heaviness’ of a constituent may influence the position of a clitic cluster. She argues that in the case of DP-V sentence initial orders, clitics can follow the verb, such as *voleo* in (38) if the DP is “heavy” (cf. 38a and b), but not if it is “light” (cf. 38c).

- (38) a. Taj čovek voleo *je* Mariju  
 that man love<sub>PART.MSG</sub> be<sub>3SG</sub> Marija  
 “That man loved Mary”  
 b. Petar Petrović voleo *je* Mariju  
 Petar Petrović love<sub>PART.MSG</sub> be<sub>3SG</sub> Marija  
 “Petar Petrović loved Mary”  
 c. \*Petar voleo *je* Mariju  
 Petar love<sub>PART.MSG</sub> be<sub>3SG</sub> Marija (S-C, Zec & Inkelas 1990)



Radanović-Kocić claims that the notions of “heaviness or “lightness” cannot be defined syntactically, so the position of the clitic clusters in examples such as the ones in (38) may not be explained by syntactic means. However, Zec & Inkelas (1990) and Schütze (1994) argue that the elements preceding the clitics in (38a and b) are in fact topicalized or left-dislocated, and involve comma intonation. This implies that the elements *taj čovek* ‘this man’ and *Petar Petrović* are external to the clause, and this is also the reason why Wackernagel’s law is exceptionally not observed.

A more compelling argument for a phonological approach concerns the possibility of clitic placement after the first prosodic word; that is, inside a syntactic constituent. Some examples were already given in (37). Below I quote sentences in which the auxiliary clitic is placed between a demonstrative and a noun.

- (39) a. Taj čovjek je volio Milenu  
           this man be<sub>AUX.3SG</sub> love<sub>PART.MSG</sub> Milena  
           “That man loved Milena”  
       b. Taj je čovjek volio Milenu  
           this be<sub>AUX.3SG</sub> man love<sub>PART.MSG</sub> Milena (S-C, Bošković 2001: 12)

Halpern (1992) assumes that in (39b) the clitic appears at the beginning of the clause in syntax. Since this position is prohibited by phonological constraints, it is moved after the first stressed word through the operation of “prosodic inversion”, which preposes *taj* in front of *je* at PF.

Wilder and Čavar (1994) and Progovac (1996) challenge Halpern’s assumptions and argue that the demonstrative is separated from the noun as the result of left-branch extraction, which is widely available in the Serbo-Croatian syntax.<sup>93</sup> In fact, demonstratives in the Slavic languages are morphologically adjectival, so it is most likely that the clitic in (39b) is positioned after a phrase that has been extracted from a larger constituent. This proposal gains more support from the fact that the noun and its modifier can be split by non-clitic material, such as the object *Milena* and the verb *voljela/voli* in (40).

- (40) a. Tog je Milena voljela t<sub>i</sub> čovjeka  
           that be<sub>AUX.3SG</sub> Milena love<sub>PART.FSG</sub> man  
           “Milena loved that man”  
       b. Tog Milena voli čovjeka  
           that Milena love<sub>3SG</sub> man  
           “Milena loves that man” (S-C, Bošković 2001: 12)

Moreover, Progovac (1996) argues that clitics may not follow the first word, unless this word is a constituent that is independently able to undergo syntactic movement. This implies that there are prosodic words which can never support clitics. This is indeed the case, and is exemplified by prepositions, which may never be clitic hosts (cf. 41b), even when they are contrastively stressed (cf. 41c).<sup>94</sup>

<sup>93</sup> See Bošković (2005) for an extensive discussion of the left-branch extraction contexts in Slavic.

<sup>94</sup> Progovac (2005a: 138-139) tentatively suggests that the reason why prepositions must always immediately precede nouns is related to case assignment, which always takes place under adjacency.

- (41) a. Na sto *ga* ostavi  
 on table it<sub>CL,ACC</sub> leave  
 “Leave it on the table”  
 a'. \*Na *ga* sto ostavi  
 b. Prema Miodragu *ga* *je* Marija bacila,  
 toward Miodrag<sub>DAT</sub> it<sub>CL,ACC</sub> be<sub>AUX,3SG</sub> Marija throw<sub>PART.F.SG</sub>  
 a ne od njega  
 and not from he<sub>GEN</sub>  
 “Marija threw it toward Miodrag, and not away from him”  
 b'. \*Prema *ga je* Miodragu Marija bacila, a ne od njega  
 (S-C, Progovac 2005a: 137)

The restriction on the position of clitics in (41) cannot be due to prosodic reasons, but it rather follows from an independent syntactic principle which prohibits prepositions from being displaced from the complement NPs in Serbo-Croatian.

Furthermore, there are also other contexts in which the placement of clitics can be given only a syntactic, but not a prosodic account. The pair in (42) contains complex NPs in clause initial position.

- (42) a. [<sub>NP</sub> Roditelji uspešnih studenata] *su se* razišli  
 parents successful<sub>GEN</sub> students<sub>GEN</sub> be<sub>AUX,3PL</sub> REFL disperse<sub>PART.M.PL</sub>  
 “The parents of the successful students dispersed”  
 b. \*Roditelji *su se* uspešnih studenata razišli (S-C, Progovac 1996: 418)

The contrast between the two sentences in (42) indicates that clitics may only follow the full NP, but not the first word. This is unexpected if the clitic placement is motivated prosodically, because the head noun *roditelji* is a stress-bearer. However, from a syntactic point of view there is nothing exceptional about the ill-formedness of (42b), given that *roditelji* can neither raise independently, nor can it be questioned.

- (43) a. \*Roditelji *su se* razišli uspešnih studenata  
 parents be<sub>AUX,3PL</sub> REFL disperse<sub>PART.M.PL</sub> successful<sub>GEN</sub> students<sub>GEN</sub>  
 b. \*Ko *su se* uspešnih studenata razišli?  
 who be<sub>AUX,3PL</sub> REFL successful<sub>GEN</sub> students<sub>GEN</sub> disperse<sub>PART.M.PL</sub>  
 (S-C, Progovac 1996: 418)

Summarizing, it seems that there are serious empirical problems with phonological accounts of clitic placement (see also Bošković 2001 ch. 2; 2005, and Progovac 2005a for a more extensive discussion), which do not arise if syntactic solutions are adopted. It has been shown that all of the movements that have been proposed to take place in phonology can be given a straightforward syntactic explanation. This is a welcome result, because it is theoretically problematic to suggest that clitics raise from syntactically defined positions to phonologically defined landing sites. It is also unnecessary to equip the phonological component of grammar with movement operations that have never been ascribed to PF.

#### 4.4.1.3.2 Motivation for the second position requirement

The previous section has proved that phonology cannot govern the placement of the elements that precede clitics in Serbo-Croatian. However, it is still necessary to show why clitics must target Wackernagel’s position. Is the movement triggered by their

phonological deficiency, or does it take place for feature checking? This is a controversial issue, and I am not in the position to provide a conclusive solution, but at least I am able to give directions for future research. I will also come back to the problem in section 4.4.4.2 at the end of this chapter.

According to some approaches, the requirement that clitics appear in the second position is motivated syntactically. For instance, Franks (2000: 17-21) claims that Wackernagel's law follows from the hypothesis that all languages are verb second (V2) at some level of representation. This is possibly a property of Universal Grammar. The actual crosslinguistic differences boil down to the position where the finite verb is spelt out. Therefore, any account of V2 should be valid for the second position clitic placement. Since V2 is normally analysed as movement of the finite verb into the highest functional head in the phrase structure (cf. Den Besten 1989, Holmberg and Platzack 1995, Zwart 1997, and many others), the second position clitics should target the same projection as V2. However, there are important differences between V2 languages and Wackernagel languages such as Serbo-Croatian. For example, clitics are phonologically deficient, whereas finite verbs in V2 languages are not. Moreover, the second position requirement in V2 languages concerns only finite verbs. In the Slavic languages, the requirement holds not only for the auxiliary clitics, but also for the pronominal clitics, which have to move to the Wackernagel position even when they are not accompanied by an auxiliary or any other finite verb, as shown in (44).<sup>95</sup>

- (44) a. Sada *ga* Nada gleda  
 now him<sub>CL.DAT</sub> Nada watch<sub>PRES.3SG</sub>  
 "Nada is watching him now"
- b. Da *ga* sada kupi Nada  
 that him<sub>CL.DAT</sub> now buy<sub>PRES.3SG</sub> Nada  
 "That Nada is buying it now" (S-C, Fontana 1997: 208)

Therefore, it is difficult to pinpoint a syntactic feature that drives the movement, because the pronominal, auxiliary, and interrogative clitics do not form a uniform semantic class, and yet they all climb and cluster together.

It is certain that the phonological deficiency of the clitics cannot be the reason for their movement, because they can be suitably supported in their base positions (Progovac 1996: 425ff). However, Bošković (2000) argues that although the elements that precede clitics reach this site via a syntactic operation, the second position cliticization is phonological in nature. His main argument for this statement comes from sensitivity of clitic placement to intonation boundaries. He shows that clitics may not occur after a comma boundary (cf. 45a), so when it is present, they seem to appear in the "third" position (cf. 45b).

<sup>95</sup> Henk van Riemsdijk (p.c.) remarks that on a distributed spell-out account it might be possible to argue that in the Wackernagel clitic languages finite verbs raise together with clitics to the second position, but for reasons of prosody, only the clitics are pronounced there, whereas the verb is spelt out lower. However, if this idea is adopted, it is still necessary to specify the prosodic principles that prohibit the pronunciation of the finite verb in the Wackernagel position.

- (45) a. \*Svojim rodjacima po majci, *će* Rada prodati knjige  
 self's relatives after mother will<sub>CL.3SG</sub> Rada sell<sub>INF</sub> books  
 b. Svojim rodjacima po majci, Rada *će* prodati knjige  
 "To his/her maternal relatives, Rada will sell the books"  
 (S-C, Progovac 2005a: 140)

Consequently, Bošković (2001: 65) argues that clitic placement in Serbo-Croatian should be defined in prosodic terms, as the clitics must appear in the second position of their intonational phrase. This statement, however, is far from uncontroversial. For instance, Progovac (2000) claims that intonation patterns often reflect syntactic structure. If this is the case, the constituent followed by the comma boundary in (45) might be external to the rest of the clause, so that *Rada* in (45b) is actually the first constituent, which lends support to the Wackernagel clitic *će*. This hypothesis is confirmed by the fact that when comma intonation after the preposed phrase is absent, the clitic can be inserted immediately following the first word in this phrase, as shown in (46).

- (46) Svojim *će* rodjacima po majci Rada prodati knjige  
 self's will<sub>CL.3SG</sub> relatives after mother Rada sell<sub>INF</sub> books  
 "To his/her maternal relatives, Rada will sell the books" (*no pause*)  
 (S-C, Progovac 2000: 254)

Summarizing, this section has presented an analysis of cliticization in a Wackernagel clitic language, exemplified by Serbo-Croatian. It has been shown that although the clitics must always appear adjacent to each other, they land in separate projections: the auxiliary clitics raises to T or Aux, whereas the pronominal clitics target specifiers of agreement projections. They must always appear in the second position, but it is not clear whether this requirement is dictated by syntax or phonology.

## 4.4.2 Macedonian

The following section will provide an analysis of cliticization in Macedonian. Unlike Serbo-Croatian, Macedonian is not a Wackernagel position language, but it requires that clitics be verb-adjacent. The patterns of cliticization in Macedonian are fairly complex, but this section will offer some new insights into the issue. Section 4.4.2.1 will present the clitic paradigm, which will be followed by a description of clitic doubling in section 4.4.2.2. Section 4.4.2.3 will show that the type of cliticization is related to the case-assigning ability of the host. A new analysis of the cliticization patterns will be given in section 4.4.2.4

### 4.4.2.1 The clitic paradigms

Macedonian distinguishes only three cases on pronouns: nominative, dative and accusative. Just as in the other South Slavic languages, they have both clitic and non-clitic variants.

## (47) Pronominal forms

	singular		plural	
	Acc (full/clitic)	Dat (full/clitic)	Acc (full/clitic)	Dat (full/clitic)
1	mene/me	mene/mi	nas/nè	nam/ni
2	tebe/te	tebe/ti	vas/ve	vam/vi
3 M	nego/go	nemu/mu	niv/gi	nim/im
3 F	nea/ja	nejze/i		
REFL	sebe (si)/se	sebe (si)/si		

(Mac, Franks &amp; King 2000: 71)

Even though Macedonian has lost most of the morphological cases on nouns, it still distinguishes nominative, oblique, and vocative on non-clitic DPs. Admittedly, the non-nominative variants are always optional; they are found only with masculine human nouns, and there is a tendency to eliminate them altogether (cf. Friedman 2002: 263), but the loss of nominal declension in Macedonian is not as complete as it is in Bulgarian. This is also evident in the clitic paradigm: in Macedonian the dative full forms are still part of colloquial speech, whereas they are considered archaic in Bulgarian. The dative can be also replaced by the preposition *na* ‘to’ followed by the accusative full forms.

The present tense copula/auxiliary forms of the verb ‘to be’ are clitics, whereas the past tense forms are not.

## (48) The copula/auxiliary forms of the verb ‘to be’

	Present tense clitic forms		Past tense forms	
	SG	PL	SG	PL
1	sum	sme	bev	bevme
2	si	ste	beše	bevte
3	(e)	(se)	beše	bea

(Mac, cf. Franks &amp; King 2000: 71; Friedman 2002: 281)

The distribution of the 3<sup>rd</sup> person singular and plural clitic forms depends on whether they function as an auxiliary or as a copula. As shown in (49), the copula is morphologically expressed, whereas the auxiliary is not. For this reason, *e* and *se* are given within parentheses in the paradigm in (48).

- (49) a. *Mu*           \*(e)   skinato   paltoto  
him<sub>CL.DAT</sub>   be<sub>3SG</sub>   torn<sub>PASS.N.SG</sub>   coat<sub>N</sub>+the  
‘His coat is torn’
- b. *Mu*           *se*    (\*e)   skinalo   paltoto  
him<sub>CL.DAT</sub>   REFL   be<sub>AUX.3SG</sub>   torn<sub>PART.N.SG</sub>   coat<sub>N</sub>+the  
‘Reportedly, his coat got torn’
- (Mac, Tomić, forthcoming)

Furthermore, the clitic template for Macedonian differs slightly from the one representing the other South Slavic languages in (15), as *both* the singular and plural clitic forms of the verb ‘to be’ occur at the end of the cluster, following all the other clitics.

- (50) *li* Mod > AUX (except 3<sup>rd</sup> SG&PL) > DAT > ACC > *e/se*  
 (Mac, Franks & King 2000: 81)

#### 4.4.2.2 Clitic doubling

Macedonian requires objects to be doubled by clitics, but the environments in which the doubling occurs are different for direct and indirect objects. Direct objects are obligatorily doubled when they are definite, therefore the object *šefot* ‘the boss’ in (51) must be doubled by the pronominal clitic *go*.

- (51) \*(*Go*) vidov šefot  
 him<sub>CL,ACC</sub> see<sub>PAST,3SG</sub> boss-the  
 “I saw the boss” (Mac, Tomić, forthcoming)

Indirect objects are doubled only if they are specific. Therefore, if the same definite noun *šefot* appears as the indirect object, it is doubled only when it has a specific interpretation, as in (52a).

- (52) a. *Mu* dadov cveća na šefot  
 him<sub>CL,DAT</sub> give<sub>PAST,1SG</sub> flowers to boss-the  
 “I gave flowers to (the specific person who is) the boss”  
 b. Dadov cveća na šefot  
 give<sub>PAST,1SG</sub> flowers to boss-the  
 “I gave flowers to (whoever is) the boss” (Mac, Tomić, forthcoming)

Clitic doubling is required not only for full object DPs, but also for strong pronouns, such as *nego* in (53). This is to be expected, given that pronouns are always definite.

- (53) a. Ljupka *go* poznavá nego  
 Ljupka him<sub>CL,ACC</sub> know<sub>PRES,3SG</sub> him<sub>ACC</sub>  
 “Ljupka knows him”/“It is him that Ljupka knows”  
 b. \*Ljupka poznavá nego  
 c. Ljupka *go* poznavá  
 Ljupka him<sub>CL,ACC</sub> know<sub>PRES,3SG</sub>  
 “Ljupka knows him” (Mac, cf. Berent 1980; L. Grujoska p.c.)

*Nego* is a strong pronoun, which can be used to indicate focus or emphasis (cf. 53a). It must occur with the corresponding doubled clitic *go* (cf. 53b). However, the accusative clitic *go* can also function as the object of the verb, but then its reference is interpreted as any noun of the same gender and number in a given context.

DPs and strong pronouns can be used as objects of prepositions, and then they are not doubled by clitics, even when they are definite (cf. 54a). The only exception is the preposition *na* ‘to’, which always occurs with dative objects (cf. 54b).<sup>96</sup>

<sup>96</sup> In section 4.4.2.4.2 I propose that clitic doubling is a means of case checking. In this scenario clitic doubling is not required in (54a and b) because case is assigned to the object by the preposition. The fact that it is obligatory in (54c) shows that *na* is not a preposition, but rather an alternative case realization (cf. section 2.3.3.2.1.4 in chapter 2).

- (54) a. (\**Im*) zboruvav za decata  
 them<sub>CL.DAT</sub> talk<sub>PAST.1SG</sub> about children-the  
 “I was talking about the children”  
 b. *Im* zboruvav na decata  
 them<sub>CL.DAT</sub> talk<sub>PAST.1SG</sub> to children-the  
 “I was talking to the children” (Mac, Berent 1980: 174)

So far it has been standardly assumed that the doubled clitics are in AgrIO and AgrO (cf. Rudin 1997, Tomić 2000, forthcoming). I will present an alternative account of clitic doubling in Macedonian in section 4.4.2.4.2. Before I do that, I will examine the way Macedonian clitics interact with different clitic hosts.

### 4.4.2.3 Direction of cliticization in Macedonian

The patterns of cliticization in Macedonian are fairly complicated. Depending on the type of hosts, clitics are proclitics (cf. section 4.4.2.3.1) or enclitics (cf. section 4.4.2.3.2). They are unable to cliticize on certain categories, and then they appear in postposition (cf. section 4.4.2.3.3).

#### 4.4.2.3.1 Proclisis

Proclisis is required if the clitic host is instantiated by a finite (tensed) verb, such as *raduvame* in (55), or an *l*-participle, such as *dale* in (56). As indicated in (55/56a), proclitics do not have to appear in the second position. Moreover, they do not need to be preceded by any overt material and can freely occur clause initially (cf. 55/56b). However, they must be immediately left-adjacent to their host. Placement of an adverb or any other category between the clitics and the finite verb (cf. 55c) or the *l*-participle (cf. 56c) results in ungrammaticality. Furthermore, since they are proclitic, they may only precede the tensed verb and the *l*-participle (cf. 55d and 56d), and in contrast to Bulgarian (recall the data concerning participle fronting in Bulgarian in chapter 2) neither of the verbs may move in front of the clitics. Yet, the subject or any other non-verbal form may precede the clitics, as in (55a and b) and (56a and b).

- (55) a. (Nie) mnogu *si se* raduvame na vnučevo  
 we very much REFL.DAT REFL.ACC rejoice<sub>PRES.1PL</sub> to grandson-the<sub>PROX</sub>  
 “This grandson of ours is giving us a lot of pleasure”  
 b. (Nie) *si se* raduvame na vnučevo mnogu  
 c. \*Nie *si se* mnogu raduvame na vnučevo  
 d. \*Raduvame *si se* mnogu na vnučevo (Mac, Tomić 1999: 10)
- (56) a. (Vie) včera *ste im go* dale proektot  
 you<sub>PL</sub> yesterday be<sub>AUX.2PL</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.PL</sub> project-the  
 “As reported, you gave them the project only/already yesterday”  
 b. (Vie) *ste im go* dale proektot včera

- c. \*Vie *ste im go* včera dale proektot  
 d. \*Dale *ste im go* včera proektot (Mac, Tomić 1999: 10)

#### 4.4.2.3.2 Enclisis

Clitics must encliticize on imperatives (cf. 57) and gerunds (cf. 58). Proclisis on these categories is prohibited, even when the clitics are supported by another word to their left (cf. 57/58b).

- (57) a. Penkaloto kupuvaj *mi go!*  
 Pen-the buy<sub>IMPV.2SG</sub> me<sub>CL.DAT</sub> it<sub>CL.ACC</sub>  
 “Buy me the pen!”  
 b. \*Penkaloto *mi go* kupuvaj! (Mac, Franks 1998)
- (58) a. Nemarno pišuvajki *go* pismoto,...  
 carelessly writing<sub>GER</sub> it<sub>CL.ACC</sub> letter-the  
 “Carelessly writing the letter, ...”  
 b. \*Nemarno *go* pišuvajki pismoto (Mac, Franks & King 2000: 84)

In Standard Macedonian the pattern does not change in the presence of negation, as exemplified in (59a) for imperatives and in (59b) for gerunds. However, some speakers of the Skopje dialect allow proclisis on imperatives in the presence of negation, but only in colloquial speech.

- (59) a. Ne (*%mi go*) nosi *mi go!*  
 NEG me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> bring<sub>IMPV.2SG</sub> me<sub>CL.DAT</sub> it<sub>CL.ACC</sub>  
 “Don’t bring it to me!”  
 b. Ne (*\*mi go*) donesuvajki *mi go* toa na vreme,...  
 NEG me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> bringing<sub>GER</sub> me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> that on time  
 “Not bringing it to me on time...” (Mac, cf. Franks & King 2000: 83-84)

#### 4.4.2.3.3 Postposition

The third strategy of clitic placement in Macedonian, which I will refer to as “postposition” following Alexandra Cornilescu’s suggestion (p.c.), applies in copula constructions with non-verbal predicative XPs, such as DPs (cf. 60 and 61), APs (cf. 62), and passive participles (cf. 63). In these environments clitics require a phonological host to their left, which can be either a single word or a phrasal element (cf. 61b).<sup>97</sup>

- (60) a. \**Mu e* tatko (na deteto)  
 him<sub>CL.DAT</sub> be<sub>3SG</sub> father to child-the  
 b. Tatko *mu e* na deteto  
 father him<sub>CL.DAT</sub> be<sub>3SG</sub> to child-the  
 “He is the father of this child (so he has to take care of him)!?”

<sup>97</sup> All native speakers reject clause-initial clitics in the presence of nouns (cf. 60). The distribution of clitics with adjectives and passive participles is subject to speaker and dialectal variation. In the Western dialects clitics may both precede and follow adjectives and passive participles. The latter strategy prevails in the Eastern dialects (Olga Tomić, p.c.).



- c. Toj *mu* *e* tatko  
 he him<sub>CL.DAT</sub> be<sub>3SG</sub> father  
 “He is his father (and not anyone else!)”  
 (Mac, cf. Tomić 2000: 295-296; L. Grujoska, p.c.)
- (61) a. \**Si* ubava žena  
 be<sub>2SG</sub> pretty woman  
 b. Ubava žena *si*  
 c. Ubava *si* žena  
 d. Ti *si* ubava žena  
 You be<sub>2SG</sub> pretty woman  
 “You are a pretty woman” (Mac, Franks & King 2000: 86-87)
- (62) a. ??*Si* mu mil  
 be<sub>2SG</sub> him<sub>CL.DAT</sub> dear<sub>MSG</sub>  
 “He likes you”  
 b. Mil *si mu*  
 “You are dear to him”  
 c. Ti *si mu* na našion sin mnogu mil  
 you be<sub>2SG</sub> him<sub>CL.DAT</sub> to our-the<sub>PROX</sub> son very dear<sub>MSG</sub>  
 “You are very dear to our son!” (Mac, Tomić 2001a: 664)
- (63) a. ?*Mu* *e* rečeno da bide točen poveće pati  
 him<sub>CL.DAT</sub> be<sub>3SG</sub> tell<sub>PASS.N</sub> to be<sub>SUBJ.3SG</sub> punctual more times  
 “He was told to be punctual more than once”  
 b. Rečeno *mu* *e* da bide točen poveće pati  
 tell<sub>PASS.N</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> to be<sub>SUBJ.3SG</sub> punctual more times  
 c. Na Petreta *mu* *e* poveće pati rečeno  
 to Peter<sub>DAT</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> more times tell<sub>PASS.N</sub>  
 da bide točen  
 to be<sub>SUBJ.3SG</sub> punctual  
 “Peter was told to be punctual more than once” (Mac, Tomić 2000: 296)

Unlike in the contexts with finite verbs and the *l*-participle, the clitics do not have to be adjacent to the adjective (cf. 62d) or the passive participle (cf. 63c), as they can be separated from these categories by some overt material. Furthermore, the examples in (61) show that the clitics may be preceded by a full DP (cf. 61b), an adjectival head (cf. 61c), or the subject pronoun (cf. 61d). Baerman & Billings (1998: 20) state that these facts indicate that they do not procliticize or encliticize on these categories, and that they need them only for phonological support.

The position of the postpositive clitics with respect to their hosts needs to be addressed in detail. In the presence of adjectives and nouns, they always appear in the second position (cf. Tomić 2000: 300). Yet, their distribution is more complex with the passive participle, such as *rečeno* in (63). Sentence (63c) demonstrates that the clitic do not have to be left-adjacent to it. Moreover, when they are preceded by elements other than the passive participle, they need not appear in the Wackernagel position, and in fact may occur rather low in the structure, as long as they are to the left of the participle (cf. 64). Native speakers inform me that the phrases preceding the cluster *mu e* are not separated by pauses, which indicates that the clitics may move quite freely in the clause.

- (64) a. Na Petreta (*mu e*) od strana nakomisijata  
 to Peter<sub>DAT</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> from side of commission-the  
 (*mu e*) poveќе pati (*mu e*) rečeno  
 him<sub>CL.DAT</sub> be<sub>3SG</sub> more times him<sub>CL.DAT</sub> be<sub>3SG</sub> tell<sub>PASS.N</sub>  
 da bide točen  
 to be<sub>SUBJ.3SG</sub> punctual  
 “Peter was more than once told by the commission to be punctual”  
 (Mac, cf. Tomić 2000: 299)
- b. Na Petreta (*mu e*) poveќе pati (*mu e*) jasno  
 to Peter<sub>DAT</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> more times him<sub>CL.DAT</sub> be<sub>3SG</sub> clear  
 i glasno (*mu e*) rečeno da dojde  
 and loudly him<sub>CL.DAT</sub> be<sub>3SG</sub> tell<sub>PASS.N</sub> to come<sub>SUBJ.3SG</sub>  
 “Peter was loudly and clearly told to come more than once”  
 (Mac, cf. Franks & King 2000: 86; L. Grujoska, p.c.)

However, when the passive participle is the clause initial element, the clitics must immediately follow it, and appear in the second position.

- (65) a. Rečeno *mu e* poveќе pati (*\*mu e*)  
 tell<sub>PASS.N</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> more times him<sub>CL.DAT</sub> be<sub>3SG</sub>  
 da bide točen  
 to be<sub>SUBJ.3SG</sub> punctual  
 “He was told to be punctual more than once” (Mac, O. Tomić p.c.)

Observe that the passive participle always agrees with the subject of the clause. The sentence in (65) has an impersonal meaning; therefore the participle is specified for singular neuter. In view of the contrast between (64) and (65), and the arrangement of the clitics with nouns and adjectives, I would like to make the generalization that the distribution of the postpositive clitics is quite free. However, when the clause opens with a non-verbal predicative element that shows subject agreement (a DP, an AP, or a passive participle), the clitics must appear in the second position.

Summarizing, it has been established that there are three ways in which clitics are positioned with respect to their host in Macedonian. They must procliticize on *l*-participles and tensed verbs. They are encliticized on imperatives and gerunds. They do not cliticize on non-verbal predicative XPs, such as adjectives, nouns, and passive participles, but must then occur in postposition.

#### 4.4.2.3.4 The relation between types of cliticization and stress assignment

The present section will demonstrate that the patterns of cliticization described above have a phonological reflex, as they may affect the distribution of lexical stress.

In Standard Macedonian word stress falls on the antepenultimate syllable (cf. 66a and b). If a word has fewer than three syllables, the first syllable is stressed (cf. 66c). The stressed syllables are capitalized in the examples below.

- (66) a. DOnesi!  
 bring<sub>IMPV.2SG</sub>  
 “Bring!”

- a'. doNEsuvaš  
bring<sub>PRES,2SG</sub>  
“You are bringing” (Mac, Rudin et al 1999: 551-552)
- b. (TOJ) PROdal MNOgu JAbolka  
he sell<sub>PART,MSG</sub> many apples  
“He has reportedly sold a lot of apples” (Mac, Tomić 2001a: 648)

Placement of clitics at the end of a word may have an influence on stress assignment. For instance, in (67) the addition of each monosyllabic clitic after the imperative shifts the stress rightward by one syllable.

- (67) a. DOnesi!  
“Bring!”
- b. doNEsi go<sub>CL,ACC</sub>!  
“Bring it!”
- c. doneSI mi<sub>CL,DAT</sub> go<sub>CL,ACC</sub>!  
“Bring it to me!” (Mac, Rudin et al 1999: 551; Baerman & Billings 1998: 20)

The situation is less clear with gerunds, as there are additional complications concerning discrepancies between the prescribed literary norm and the actual practice, which follow from diachronic phonological reinterpretations. Franks (1998) reports that gerunds have fixed lexical stress, which remains the same even when clitics are added. He contrasts cases of imperatives, in which clitics always enter the calculation of stress (cf. 68a) with gerunds (cf. 68b), which supposedly resist the stress shift even when enclitics are added.<sup>98</sup>

- (68) a. KupuVAJ mi<sub>CL,DAT</sub> go<sub>CL,ACC</sub>!  
“Buy it for me!”
- b. KupuVAJki mi<sub>CL,DAT</sub> go<sub>CL,ACC</sub> ...  
“Buying it for me...” (Mac, cf. Franks 1998)

However, Baerman & Billings (1998: 20) claim that the stress recalculation may affect gerunds as well. This pattern is beyond the normative standard, but has been recognized by normative linguists.

Proclisis, which occurs with *l*-participles and tensed verbs, does not affect stress placement. Hence, the clitic *go* in (69) is not stressed.

- (69) (JAS) *sum* *ti* *go* KAžal  
I be<sub>AUX,ISG</sub> you<sub>CL,DAT</sub> it<sub>CL,ACC</sub> say<sub>PART,MSG</sub>  
“I have told it to you” (Mac, Rudin et al 1999: 553)

A similar distribution is observed when clitics occur with non-verbal predicative XPs, such as adjectives, nouns (cf. 70a), and passive participles (cf. 70b). Clitics never form prosodic units with these categories, so they do not alter stress placement. This is to be expected, because clitics do not cliticize onto these categories.

<sup>98</sup> The gerund in (68) is stressed on the penultimate syllable. Baerman & Billings (1998: 21) claim that this is the result of the collapse of two vowels into a diphthong in the history of Macedonian: *ku.pu.VA.e. ki* → *ku.pu.VAJ. ki*.

- (70) a. TAtko *si* *mu*  
 father be<sub>2SG</sub> him<sub>CL.DAT</sub>  
 “You are his father (so you have to take care of him)!”  
 a’. \*TatKO *si mu*  
 b. REčeno *mu* *e* da DOjde  
 tell<sub>PASS.N</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> to come<sub>SUBJ.3SG</sub>  
 “He was told to come”  
 b’. \*RečeNO *mu e* da DOjde (Mac, cf. Tomić 2001a: 664-665)

The pattern becomes more complex in the presence of negation. In (71) the negation operator *ne* forms a single antepenultimately stressed unit with the clitics and the verb to its right. As a result, the clitic *gi* in (71b) carries stress, too. This means that negation is able to shift stress in the same way as imperatives do.<sup>99</sup>

- (71) a. (TOJ) ne *gi* PROdava jaBOLkata  
 he NEG them<sub>CL.ACC</sub> sell<sub>PRES.3SG</sub> apples-the  
 “He is not selling the apples”  
 b. (TI) ne *si* *mu* *GI* dala jaBOLkata  
 you NEG be<sub>AUX.2SG</sub> him<sub>CL.DAT</sub> them<sub>CL.ACC</sub> give<sub>PART.F.SG</sub> apples+the  
 “Reportedly, you haven’t given him the apples” (Mac, Tomić 2001a: 649)

As can be expected, stress is shifted with negated imperatives as well, as shown for the singular form in (72a) and the plural one in (72b).

- (72) a. Ne daVAJ *mu* *go!*  
 NEG give<sub>IMPV.2SG</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub>  
 “Don’t give it to him!”  
 b. Ne davajTE *mu* *go!*  
 NEG give<sub>IMPV.2PL</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> (Mac, cf. Tomić 2001b: 165)

To sum up, it has been demonstrated that only imperatives, negation, and (in some registers) gerunds trigger stress shift in Macedonian. The presence of *l*-participles or tensed verbs as clitic hosts leaves the stress arrangement unaffected. Correspondingly, non-verbal predicative XPs do not alter the stress assignment, either. I take these facts to be syntactically significant, and I will return to the issue in section 4.4.2.4.2.3.

#### 4.4.2.4 Towards an analysis of cliticization in Macedonian

The subsequent sections will develop an alternative analysis of cliticization and its directionality in Macedonian, and is organized as follows. Section 4.4.2.4.1 will briefly overview some previous accounts. Section 4.4.2.4.2 will present a new proposal, which argues that cliticization is possible only with case-assigning hosts. Section 4.4.2.4.2.4 will postulate a division of pronominal clitics in Macedonian into clitics proper and weak forms.

<sup>99</sup> Recall from chapter 2, section 2.3.6.3.3 that a similar pattern is observed in Bulgarian, in which negation assigns stress to the element that follows it, even when it is a clitic.

#### 4.4.2.4.1 A note on previous scholarship

There have been a few attempts to capture the direction of cliticization in Macedonian in the literature. For example, Joseph (1983) argues that proclisis occurs on finite verbs. However, there are a few problems with this generalization. It suggests a distinction between finite and non-finite forms of verbs, even though contemporary Macedonian does not have infinitives. Moreover, it stipulates that *l*-participles are finite, which cannot be correct. Another problem is the fact that Joseph does not address the impossibility of cliticization with passive participles, adjectives, and nouns (see also Tomić 1997 for an overview of Joseph's account).

Undoubtedly, the behaviour of the Macedonian clitics ties in with the morphological properties of the different types of hosts. Tomić (1997) handles the variation by decomposing the clitic hosts into feature pairs  $[\pm V]$  and  $[\pm N]$ , as in (73).

(73)		V	N
	tensed verbs	+	-
	<i>l</i> -participles	+	-
	passive participles	+	+
	adjectives	+	+
	nouns	-	+

Tomić claims that the direction of cliticization depends on the saliency of verbal properties of the host. Hence, nouns, which are described as  $[-V]$  categories, may never serve as hosts for proclitics (cf. 60). *L*-participles and tensed verbs have positive values for V, negative for N, so clitics may procliticize on them (cf. section 4.4.2.3.1). Adjectives and passive participles, which are specified for  $[+V, +N]$  features, exhibit indeterminate distribution (cf. 61, 62, and 63). Only some speakers accept them as potential hosts for proclitics.

Tomić's insights with respect to the relation between degree of verbal properties and cliticization are certainly correct. However, the problem is that she does not provide a feature decomposition of gerunds and imperatives, which always trigger enclisis (cf. section 4.4.2.3.2). Consequently, it is not clear how they fit into her system. Moreover, she assumes that nouns, adjectives, and passive participles are clitic hosts. It has been shown that they are not, because clitics do not have to be adjacent to these categories.

Furthermore, Tomić describes the cliticization patterns, but as far as I can see, she does not explain why they hold. For instance, it seems crucial to find a reason why proclisis is possible only with tensed verbs and *l*-participles, and enclisis only with imperatives and gerunds. Correspondingly, it is necessary to explain why cliticization does not occur with non-verbal predicative XPs.

As far as the syntactic arrangement of clitics in the clause is concerned, Tomić (1997, 2000) argues that they head relevant functional projections. For instance, sentence (74a), which contains the *l*-participle *dadela* as the host, has the structure given in (74b): the negative particle heads NegP, the modal clitic is generated in Mod, and the auxiliary clitic resides in Tense/AgrS. The dative and accusative clitics head AgrIOP and AgrOP, respectively.

- (74) a. *Ne će sum mu go dadela proektot*  
 not will<sub>CL.MOD</sub> be<sub>AUX.1SG</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.F.SG</sub> project+the  
 “Rumour has it, I would be unwilling to give the project to him”  
 (Mac, Tomić 2000: 301)
- b. [Neg Ne [Mod će [T/AgrS sum [AgrIO mu [AgrO go [VP dadela [DP proektot]]]]]]]

If a clitic cluster contains the third person auxiliary clitic in the singular or in the plural, it is hosted below all the other clitics in the head of AuxP (cf. 75).

- (75) a. *Će mu e izpraznet stanot*  
 will<sub>CL.MOD</sub> him<sub>CL.DAT</sub> be<sub>AUX.3SG</sub> empty<sub>PASS.M.SG</sub> apartment+the  
 “His apartment will be vacated”  
 (Mac, Tomić 2000: 302)
- b. [Mod će [T/AgrS [AgrIO mu [Aux e [VP izpraznet [DP stanot]]]]]]]

On Tomić’s approach, the first person singular auxiliary clitic projects a different head in (74b) than the third person auxiliary clitic in (75b). The proposal reflects the order of the clitics in the cluster, but the reason why the auxiliaries pattern in this way remains unclear.

Tomić follows Bošković (1997 ch. 5), who argues that crosslinguistically participles must check the [Aux] feature. This is done by head adjunction of the participle to a Mood (Mod) or Tense (T) head. In the spirit of this proposal, Tomić (1999: 17) suggests that the clauses with passive and past participles are derived as in (76b): the passive participle *rečeno* raises as a head from VP and lands in T/AgrS.

- (76) a. *Rečeno mu e da bide točen poveće pati*  
 tell<sub>PASS.N</sub> him<sub>CL.DAT</sub> be<sub>AUX.3SG</sub> to be<sub>SUBJ.3SG</sub> punctual more times  
 “He was told to be punctual more than once”
- b. [T/AgrS Rečeno]<sub>i</sub> [AgrIO mu [Aux e [VP t<sub>j</sub> [XP da bide točen poveće pati]]]]]

Notice that this derivation induces multiple Head Movement Constraint violations, because the passive participle crosses head positions occupied by the clitics on its way to T/AgrS.

Tomić (1997) assumes that if a clause contains predicative adjectives or nominals, they are left-adjoined to Mod or Tense/AgrS and check the [Aux] feature. Accordingly, she proposes the derivation (77b) for the sentence with the adjective *mil* in (77a).

- (77) a. *Mil mi e*  
 dear<sub>M.SG</sub> me<sub>CL.DAT</sub> be<sub>3SG</sub>  
 “He is dear to me”  
 (Mac, Tomić 1997)
- b. [T/AgrS mil]<sub>i</sub> [AgrIO mi [Aux e [PredP t<sub>j</sub>]]]]]

The derivation is problematic in a number of ways. First, nouns or adjectives should be unable to check the [Tense] or the [Aux] feature, because they are not specified morphologically for it. Second, as in the case of (76), the head movement of the predicative element *mil* violates the Head Movement Constraint, as it crosses two heads on its way. Finally, the head movement analysis of (77) is not on the right track, because nouns that precede the clitic cluster can be premodified, as in (61b) repeated below in (78), so they clearly undergo XP-movement.

- (78) a. Ubava žena si  
pretty woman be<sub>2SG</sub>  
“You are a pretty woman!” (Mac, Franks & King 2000: 86-87)

#### 4.4.2.4.2 An alternative analysis of cliticization in Macedonian

It has been established that clitic placement in Macedonian hinges on the type of host. Clitics must procliticize on tensed verbs and *l*-participles, and encliticize on imperatives and gerunds. They normally do not cliticize on non-verbal predicative XPs. In what follows I will present a new analysis of the phenomenon, which is based on the following two assumptions:

i) Cliticization is obligatory with those hosts that are able to assign case. Since both finite verbs and *l*-participles are case assigners, they always trigger proclisis. Likewise, imperatives and gerunds are also case-assigners. However, for reasons to be explained in section 4.4.2.4.2.3, they induce enclisis.

ii) Pronominal clitics in Macedonian do not form a uniform class. They comprise weak and clitic forms, in the sense of Cardinaletti and Starke (1999). Weak forms occur with the elements that are unable to assign case, such as passive participles, adjectives and nouns.

##### 4.4.2.4.2.1 Proclisis with case-assigning verbs

Following some insights of Rudin’s (1997) and Tomić’s (2000, forthcoming) proposals, I submit that clitics must cliticize by raising to Agreement projections. These projections are located above the *l*-participle or the finite verb (cf. 79).

- (79) [TP [T *ste* [<sub>AGRIO</sub> *mu* [<sub>AGRO</sub> *go* [<sub>VP</sub> *dale* proektot na Petko]]]]]  
be<sub>2PL</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.PL</sub> project-the to Petko  
“You have reportedly given the project to Petko” (Mac)

Since proclisis occurs only in the presence of case assigning hosts, it seems natural to assume that clitics check case features. This is what is normally proposed in the literature. However, an alternative might be that clitics check the  $\varphi$ -features of the objects. Let me briefly explain why the latter option should be rejected.

Berent (1980: 174-175) observes that Macedonian distinguishes a class of neuter diminutive forms which are derived from feminine nouns referring to female human beings, such as *ženče* ‘little woman’ (derived from *žena*), *devojiče* ‘little girl’ (derived from *devojka*), *kerkiče* ‘little daughter’ (derived from *kerka*). The basic (non-diminutive) variants are doubled by feminine clitics, as shown in (80) for direct and indirect objects.

- (80) a. *Ja* sakam devojkata  
her<sub>CL.ACC</sub> like<sub>PRES.ISG</sub> girl-the  
“I like this girl”  
b. *Ā* dadov podarok na devojkata  
her<sub>CL.DAT</sub> give<sub>PAST.ISG</sub> gift to girl-the  
“I gave a gift to the girl” (Mac, Berent 1980:175)

If a sentence contains a corresponding neuter diminutive, there are two possibilities. There are no neuter clitic forms available (cf. the chart in 47), so in Standard

Macedonian neuter nouns are doubled by the masculine clitic *go* (cf. 81a). However, some speakers employ the natural gender with the neuter indirect object forms and double the diminutive indirect object by using the feminine dative clitic *ì*, as in (81b).

- (81) a. *Go* sakam devojčeto  
 him<sub>CL,ACC</sub> like<sub>PRES,1SG</sub> little-girl-the  
 “I like the little girl”  
 b. *Ì* dadov podarok na devojčeto  
 her<sub>CL,DAT</sub> give<sub>PAST,1SG</sub> gift to little-girl-the  
 “I gave a gift to the little girl” (Mac, Berent 1980:175)

This shows that the doubled clitic cannot possibly check the  $\varphi$ -features of the object for two reasons. First, there are no neuter clitics to check the  $\varphi$ -features of neuter objects. Second, native speakers may apply clitic doubling even when there is a feature mismatch between the clitic and its associate (cf. 81).

Moreover, notice that doubling of the accusative clitic is impossible with passive participles, even though it is required in the constructions with the *l*-participle (cf. 82b). Both the passive and the *l*-participle carry the same set of  $\varphi$ -features, but passive participles are unable to assign accusative case, and thus are incompatible with clitic doubling (cf. 82a).

- (82) a. *(\*Gì)* bea naredni na tezgata  
 them<sub>CL,ACC</sub> be<sub>PAST,3PL</sub> place<sub>PASS,PL</sub> on counter+the  
 čašite za vino i rakija  
 glasses+the for wine and rakija  
 “The glasses for wine and rakija were placed on the counter”  
 b. *\*(Gì)* bea naredile čašite  
 them<sub>CL,ACC</sub> be<sub>PAST,3PL</sub> place<sub>PART,PL</sub> glasses+the  
 za vino i rakija na tezgata  
 for wine and rakija on counter+the  
 “The glasses for wine and rakija had been placed on the counter”  
 (Mac, L. Grujoska, p.c.)

Hence, the contrast between (82a) and (82b) conclusively shows that clitic doubling is related to case checking.

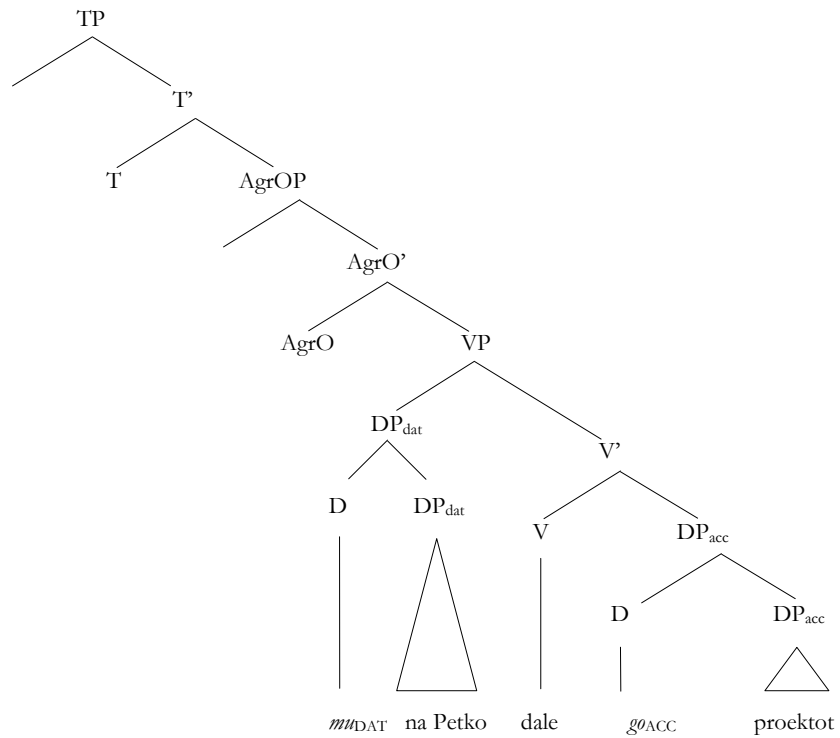
With this assumption in mind, let me spell out my analysis in detail. Recall from section 4.4.2.1 that Macedonian has largely lost morphological case on nouns. However, case distinctions are uniformly retained on pronominal clitics, which are the only elements that show a full case inflection paradigm. Following Belletti’s (1999) seminal analysis of cliticization in Italian, I will assume that this means that clitics bear a strong case feature, which must be checked syntactically (via movement). The case checking occurs under the Spec-head relation, so the clitics must move along with their associates (that is, the direct and indirect objects) to agreement projections.

Furthermore, recall from section 4.4.2.2 that clitic doubling in Macedonian is contingent on definiteness or specificity of the doubled object. I will take it to mean that only DPs can be doubled and not NPs. Correspondingly, following Uriagereka (1995), I will assume that clitics are D-heads, and that they constitute a DP together



with their associates. This means that the base form of the sentence in (79), repeated for convenience in (83a), is as in (83b).<sup>100</sup>

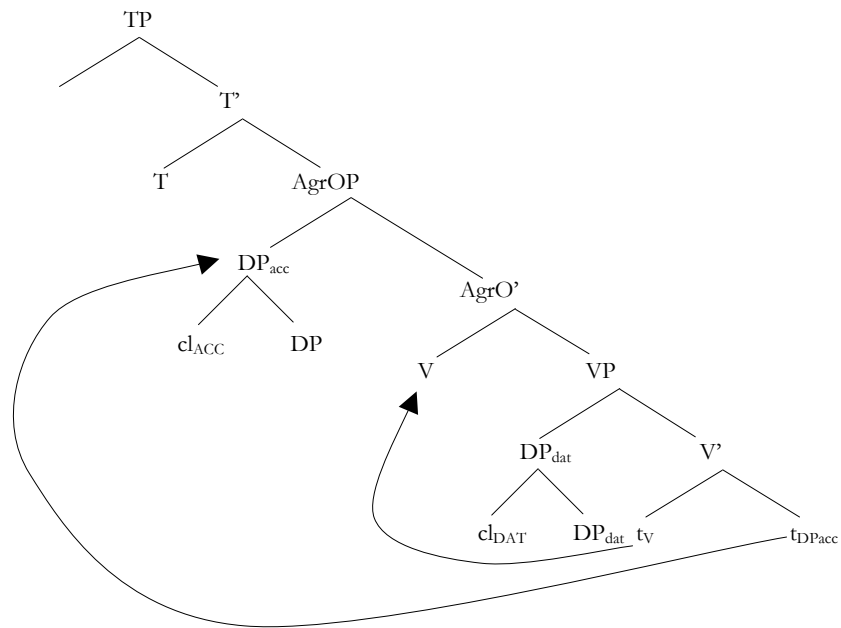
- (83) a. *Ste mu go dale proektot na Petko*  
 be<sub>2PL</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.PL</sub> project-the to Petko  
 “You have reportedly given the project to Petko” (Mac)
- b.



The finite verb or the *l*-participle raises to AgrO. The movement of the verb creates equidistance, and as a result the direct object may move and check accusative case in Spec, AgrOP.

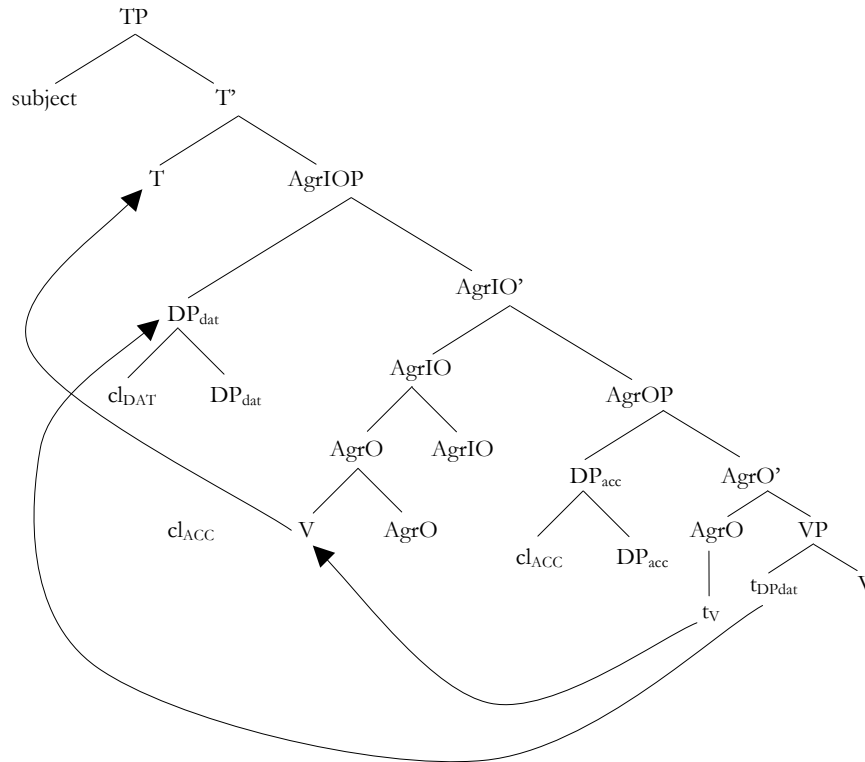
<sup>100</sup> Observe that in contrast to Bulgarian and Serbo-Croatian, in Macedonian the *l*-participle *dale* targets a head position. I will account for the lack of the XP-movement at the end of section 4.4.2.4.2.2.

(84)



Next, the verb continues to move from AgrO to AgrIO by head movement. This creates equidistance and the indirect object DP may move to Spec, AgrIOP to check dative case. Finally, the verb moves to T.

(85)



However, the clitics must still procliticize onto the verb in T. Why does this happen? A number of proposals have been made in the literature. According to Belletti (1999: 550), this is due to PF considerations: Agreement projections are not strong heads, so they may not contain any material that needs a PF interpretation. Therefore, they must be emptied before Spell-Out. In Nash and Rouveret's (2002: 177) view, the proclisis on T occurs because clitics must raise onto a "substantive" (lexical) category endowed with active  $\varphi$ -features. Independently of these proposals it has been claimed (cf. Bošković 2002) that clitics in Macedonian and Bulgarian cliticize by adjoining to a single head (such as T in 85). In this way they contrast with Wackernagel clitics in Serbo-Croatian, which target the specifiers of the relevant Agreement projections, and never cluster in a single head (cf. section 4.4.1.2). Some evidence for this idea will be given in section 4.4.3.4.3 on the basis of Bulgarian. The subsequent section will present more supportive arguments, which have not been raised in the literature so far. They will follow from the fact that Macedonian observes the Person Case Constraint.

4.4.2.4.2.2 *Explaining the Person Case Constraint*

The derivation in (85) indicates that the *l*-participle head-adjoins to T, together with the pronominal clitics. This section will explain the mechanics of this process and will demonstrate that by adjoining to T, the pronominal clitics check the  $\varphi$ -features of T.

Suitable evidence for this idea comes from the observance of the Person Case Constraint (PCC) in Macedonian.

The PCC was first described by Perlmutter (1971), who noticed a restriction in the occurrence of pronominal clitics in ditransitive constructions: if an accusative clitic co-occurs with a dative clitic, the accusative must carry the 3<sup>rd</sup> person feature. The constraint is attested only with weak elements, such as clitics, weak pronouns, and agreement affixes. Moreover, it does not hold for constructions without an external argument, such as unaccusatives or passives. The constraint is illustrated by means of the Swiss German data in (86) that Anagnostopoulou (1999) attributes to Henk van Riemsdijk.

- (86) a. D'Maria zeigt mir *en*  
 the Maria shows to me him  
 "Mary shows him to me"
- b. \*D'Maria zeigt em *mich*  
 the Maria shows to him me  
 "Mary shows me to him" (Swiss German, Anagnostopoulou 1999: 267)

Example (86a) is grammatical, because the 1<sup>st</sup> person dative clitic is accompanied by the 3<sup>rd</sup> person accusative clitic. However, the sentence in (86b) is ill-formed, because the 3<sup>rd</sup> person dative co-occurs with the 1<sup>st</sup> person accusative.

The effects of the constraint have been observed in a number of unrelated languages, and according to Bonet (1994), the constraint is universal. Bonet's assumption is incorrect, though, because the PCC is not operative in Serbo-Croatian (cf. 87), Czech (cf. 88) and Polish (cf. 89), where non-3<sup>rd</sup> person accusative clitics may co-occur with dative clitics.<sup>101</sup>

- (87) Ja *im* *te* preporučujem  
 I them<sub>CL.DAT</sub> you<sub>CL.ACC</sub> recommend<sub>PRES.ISG</sub>  
 "I am recommending you to them" (S-C, N. Milićević, p.c.)

- (88) Jestliže *mu* *vás* předám živou a zdravou  
 if him<sub>CL.DAT</sub> you<sub>CL.ACC.PL</sub> bring<sub>PRF.PRES.ISG</sub> alive and healthy  
 "If I can bring you to him safe and sound" (Czech, Lenartová 2001)

- (89) a. Dał-*by* *mu* *cię* za żonę  
 give<sub>PART.MSG+COND.ISG</sub> him<sub>CL.DAT</sub> you<sub>CL.ACC</sub> for wife  
 bez wahania  
 without hesitation  
 "I would give you to him as a wife without hesitation"  
 (Pl, cf. Cetnarowska 2003)

Rivero (2005: 1093) notices that the PCC is observed in Bulgarian. Thus, a non-3<sup>rd</sup> person accusative clitic is incompatible with a dative clitic, as shown in (90a). The dative clitic accepts only accusative clitics marked for the 3<sup>rd</sup> person, as indicated in (90c). Yet, if a strong form of the dative pronoun is used, the result is grammatical (cf. 90b).

<sup>101</sup> See Anagnostopoulou (1999) for examples of other languages where the PCC does not hold.

- (90) a. \*Az *im* *te* preporučvam  
 I them<sub>CL.DAT</sub> you<sub>CL.ACC</sub> recommend<sub>PRES.1SG</sub>
- b. Az *im* preporučvam na tjax  
 I them<sub>CL.DAT</sub> recommend<sub>PRES.1SG</sub> to them<sub>DAT</sub>  
 “I am recommending you to them”
- c. Az *im* *ja* preporučvam  
 I them<sub>CL.DAT</sub> her<sub>CL.ACC</sub> recommend<sub>PRES.1SG</sub>  
 “I am recommending her to them” (Bg, cf. Hauge 1999)

I would like to point out the PCC is observed in Macedonian as well, as shown in (91), which correspond to the Bulgarian examples in (90).

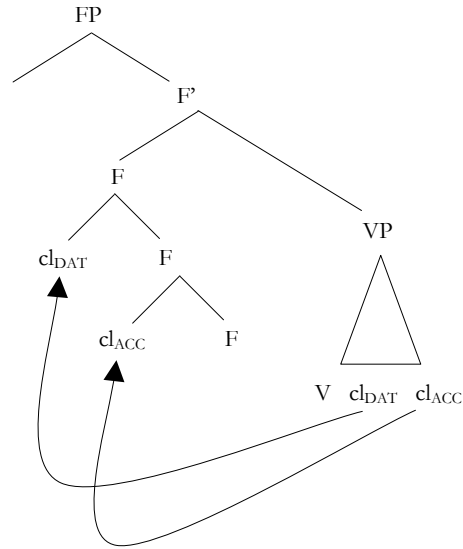
- (91) a. \*Jas *im* *te* preporačuvam  
 I them<sub>CL.DAT</sub> you<sub>CL.ACC</sub> recommend<sub>PRES.1SG</sub>
- b. Jas *te* preporačuvam na niv  
 I you<sub>CL.ACC</sub> recommend<sub>PRES.1SG</sub> to them<sub>CL.ACC</sub>  
 “I am recommending you to them”
- c. Jas *im* *ja* preporačuvam  
 I them<sub>CL.DAT</sub> her<sub>CL.ACC</sub> recommend<sub>PRES.1SG</sub>  
 “I am recommending her to them” (Mac, L. Grujoska p.c.)

Following Anagnostopoulou (1999: 287ff), I will assume that the constraint is the result of the incompatibility of person and number feature checking in the syntactic configuration sketched in (92). Suppose that the head F contains number and person features, which must be checked. The Person Case Constraint holds when a dative clitic raises first from its base position within the VP in order to check a person feature of F, whereas the accusative clitic moves second to check the remaining number feature on F, tucking in beneath the dative clitic.<sup>102</sup> The derivation converges only if the accusative clitic carries just a number feature, and not a person feature, because the latter has already been checked by the dative. On the assumption that the 3<sup>rd</sup> person pronouns contain only a number feature, they are the only eligible candidates for the movement. If a non-3<sup>rd</sup> person pronominal clitic raises, then the derivation will crash, because the person feature on the accusative will remain unchecked.

<sup>102</sup> Hans Broekhuis (p.c.) remarks that Anagnostopoulou’s account presupposes that the dative clitic is unable to check the number feature on T, which might be problematic. However, according to many proposals (cf. Taraldsen 1995, Boeckx 1997, Chomsky 2000) datives do not enter into complete agreement and hence do not check the number feature, but only the person feature of T. One of the examples that support this claim are quirky subjects constructions in Icelandic, in which dative subjects do not agree in number with the verb, while nominative objects induce number agreement. See Anagnostopoulou (1999: 275ff) for a detailed discussion. Rivero (2005) observes that Bulgarian, which observes the PCC, patterns with Icelandic: the singular dative subject *na Ivan* occurs with the verb marked for the plural, which agrees in person with the nominative object.

- (i) a. Na Ivan mu se zelvaxa devojki  
 Ivan<sub>DAT</sub> him<sub>CL.DAT</sub> REFL kiss<sub>PAST.3PL</sub> girls<sub>NOM</sub>  
 “Ivan felt like kissing girls”
- b. \*Na Ivan mu se zelvaxme nie  
 Ivan<sub>DAT</sub> him<sub>CL.DAT</sub> REFL kiss<sub>PAST.1PL</sub> we<sub>NOM</sub>  
 “Ivan felt like kissing us” (Bg, Rivero 2005: 1095)

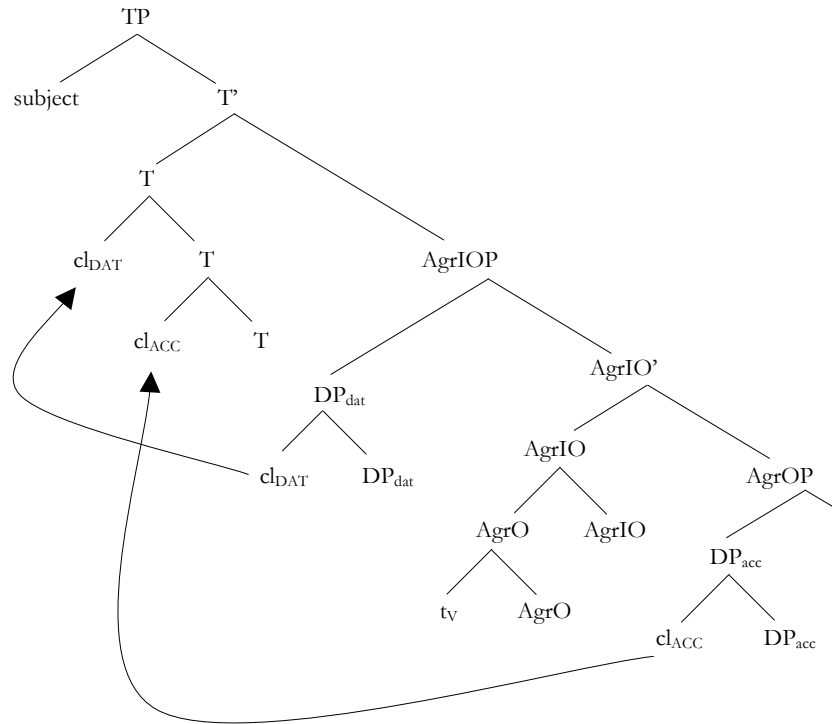
(92)



Let us turn to Macedonian and see how the Person Case Constraint effect can be derived in this language. I take the T head in (93) to be the equivalent of Anagnostopoulou's F head in (92), which contains a person and number feature. Furthermore, I assume that clitics undergo head movement in Macedonian. This is justified by the fact that they are D-heads.

Thus, in (93) the dative clitic raises first to T, in which the *l*-participle is located, in order to check a person feature there. The accusative clitic will move second and will tuck in beneath the dative to check the remaining number feature on T. However, as in (92), the derivation will converge only if the accusative clitic carries just a number feature, and not a person feature, because the latter has already been checked by the dative. Consequently, only the 3<sup>rd</sup> person pronoun may move there, as it contains a number feature and a null person feature. The derivation will crash if a non-3<sup>rd</sup> person pronominal clitic raises, because the person feature on the accusative will remain unchecked.

(93)



After the clitic adjunction, the constituent in T is specified for 3rd person and either the singular or plural number. The derivation converges if the feature specification of the subject is the same. In case it is different than the 3<sup>rd</sup> person, it is necessary to insert the 1<sup>st</sup> or the 2<sup>nd</sup> person auxiliary.<sup>103</sup> I suggest that the auxiliary is left-adjoined to the complex head in T.<sup>104</sup> This explains why auxiliaries in Macedonian are overt only in the 1<sup>st</sup> and the 2<sup>nd</sup> person (cf. 94a).

<sup>103</sup> This implies that the subject by default carries the 3<sup>rd</sup> person feature, so in fact has a null person feature. It has a non-3<sup>rd</sup> person feature only when the subject is realized by the first or second person pronoun, and it is only then that an auxiliary is needed (H. Broekhuis, p.c.).

<sup>104</sup> Additional support for the idea that the auxiliary and the pronominal clitics are left-adjoined to the *l*-participle and form a complex head comes from the fact that in Macedonian the *l*-participle always moves as a unit together with the clitics, for instance when it is raised to the left of the question particle *li*. I assume that the complex head *si+mu+gi+dal* in (ia) is left adjoined to *li*.

- (i) a. *Si mu gi dal li parite?*  
 be<sub>CL2SG</sub> him<sub>CLDAT</sub> them<sub>CLACC</sub> give<sub>PART.MSG</sub> Q money-the  
 “Did you give him the money?”  
 b. \**Dal si mu gi li parite?* (Mac, Rudin et al. 1999: 544)

- (94) a. Jas *sum* *mu* *go* dal pismoto  
 I be<sub>AUX.1SG</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.M.SG</sub> letter-the  
 ne edno dete  
 to a child  
 “I gave the letter to a child”
- b. Jana *mu* *go* dala pismoto ne edno dete  
 Jana him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.F.SG</sub> letter-the to a child  
 “Jana gave the letter to a child” (Mac)

Finally, the subject may raise from Spec, vP to Spec, TP and check the  $\varphi$ -features of T.

The derivation proposed here describes compound tenses constructed with the *l*-participle. However, in the case of simple tenses, formed with a finite verb such as *prodava* in (95), the derivation will be the same up to the stage represented in (93), at which the pronominal clitics adjoin to the *l*-participle in T. In the case of finite verbs, however, there will be no need to generate an auxiliary in T, because unlike the *l*-participle, they always specify tense and person features. Thus, the finite verb will move directly to T, and the clitics will left-adjoin to it.

- (95) (Toj) prodava jabolka  
 he sell<sub>PRES.3SG</sub> apples  
 “He sells apples” (Mac)

Summarizing, I have described the mechanism of proclisis on finite verbs and *l*-participles. Before concluding the section, I will briefly explain the relevance of the proposed derivation for *l*-participle fronting in Macedonian.

As was mentioned in chapter 2, section 2.1, *l*-participle movement across the auxiliary ‘to be’ is impossible in Macedonian and results in strong ungrammaticality.

- (96) a. (Jas) sum javil na pregled  
 (I) be<sub>AUX.1SG</sub> appear<sub>PART.M.SG</sub> for examination  
 “I have appeared for examination”
- b. \*Javil sum na pregled (cf. Mac, Friedman 1977)

In Migdalski (2005) I claimed that the ill-formedness of (96b) results from the proclitic status of the auxiliary *sum*. Since the auxiliary does not need to be supported by overt material to its left, participle movement is unnecessary, and hence prohibited. However, if this explanation were correct, placement of *any* element in front of the auxiliary should be disallowed. For instance, sentence (96a), in which the auxiliary is preceded by the subject, should be equally ungrammatical, contrary to fact.

I suggest here that the proclitic character of *sum* is irrelevant for participle movement. What is crucial is that Macedonian lacks the 3<sup>rd</sup> person auxiliary, which occurs as the last element in the clitic cluster in Bulgarian and Serbo-Croatian, following the pronominal clitics marked with AgrO and AgrIO in the template in (97).

- (97) [TP T<sub>[+ $\varphi$ ]</sub> ... [Aux (BE<sub>1/2</sub>) [AgrIO(P) [AgrO(P) [Aux (BE<sub>3</sub>) [vP subject<sub>[+ $\varphi$ ]</sub> v [PartP Part<sub>[+ $\varphi$ ]</sub> object]]]]]]]]

In Bulgarian and Serbo-Croatian the *l*-participle is attracted by the  $\varphi$ -features of T. The only way to check them is by XP-movement into Spec, TP. Head movement of the *l*-participle is blocked by the 3<sup>rd</sup> person auxiliary clitic above PartP, which occupies Aux<sup>0</sup>.



However, this slot is not filled in Macedonian, so the participle may be attracted by the feature of Aux<sup>105</sup> and move there by head movement. From this projection it may raise to other head positions, such as AgrO (cf. the derivation in 84).

The suggestion that the XP-movement of the *l*-participle is contingent on the presence of the 3<sup>rd</sup> person auxiliary is quite powerful. In chapter 5 (section 5.3.4.2.5) I will show that it is one of the reasons for the lack of the movement in Polish and in Czech (in the initial stage of the derivation).

#### 4.4.2.4.2.3 Enclisis with imperatives and gerunds

Recall from section 4.4.2.3.2 that imperatives (cf. 98a) and gerunds (cf. 98b) must be left-adjacent to clitics in Macedonian.

- (98) a. Daj *mi* *ja* knjigata!  
 give<sub>IMPV.2SG</sub> me<sub>CL.DAT</sub> her<sub>CL.ACC</sub> book-the  
 “Give me the book!”  
 a’. \**Mi ja* daj knjigata  
 b. Davajki *mi* *ja* knjigata, me bakna  
 giving<sub>GER</sub> me<sub>CL.DAT</sub> her<sub>CL.ACC</sub> book-the me<sub>CL.ACC</sub> kissed<sub>3SG</sub>  
 “Giving me the book, (s)he kissed me”  
 b’. \**Mi ja* davajki knjigata, me bakna (Mac, Tomić 1996a: 824)

These categories induce enclisis in many different languages, such as Greek, Italian, and Spanish (cf. Rivero & Terzi 1995, Rooryck 1992, Terzi 1999, Zanuttini 1997), so Macedonian is not exceptional in this respect. On a par with tensed verbs and *l*-participles, gerunds and imperatives are case-assigners. However, they have severely reduced morphology. Gerunds do not show any agreement morphology at all, which makes them similar to infinitives. Imperatives, though, exhibit an invariant specification for the 2<sup>nd</sup> person. They also make a distinction between the singular and the plural, as shown in (99), where plural morphology is manifested by the suffix *te*.

- (99) a. čita+j  
 read+<sub>IMPV+2SG</sub>  
 b. čita+j+te  
 read+<sub>IMPV+2PL</sub> (Mac, Tomić forthcoming)

There have been some attempts to capture the morphological impoverishment of gerunds and imperatives in syntactic terms. For example, Beukema and Coopmans (1989) suggest that imperatives have a [-Tense] Infl.<sup>106</sup> Correspondingly, Belletti (1999: 569) proposes that if a clause contains an imperative, T is not able to check the imperative morphology. Likewise, Terzi (1999: 94) argues that imperative clauses have weak V features of T, which is unable to attract verbs. Still, even if verbs in imperative clauses may not target T, there must be a way to assign an imperative interpretation to

<sup>105</sup> In section 4.4.4.1 I suggest that Aux contains Number feature. Note that if Aux is occupied by the 3<sup>rd</sup> person auxiliary clitic in Bulgarian and Serbo-Croatian, this projection does not have the Specifier, on the assumption due to Bošković (2002) that clitics are non-branching elements. Hence, the *l*-participle may not land in Spec, AuxP.

<sup>106</sup> This suggests that the feature specification of imperatives is identical to infinitives. Rooryck (1992) shows that the idea is difficult to maintain crosslinguistically. For instance, Latin has a future imperative morpheme.

them. Belletti (1999) suggests that this is done by an (Imp)erative Operator, located in the CP-area. The syntactic function of this Operator is to bind an empty category that fills the subject position in imperative sentences and to assign it a value that corresponds to [2<sup>nd</sup> person, singular/plural]. Since Belletti is not specific about the location of this operator, I would like to claim that it may be related to the presence of the functional head  $\Sigma$ , which is responsible for licensing negation, polarity, and in general, Illocutionary Force (cf. chapter 2, section 2.3.6.2.2, and sections 4.3.3.2 and 4.4.4.2 in the present chapter). Some support for this assumption comes from Spanish, where imperatives are incompatible with negation (cf. 100a), and infinitives or imperatives must be used in these contexts instead (cf. 100b and c).

- (100) a. \*No leel  
           NEG read<sub>IMPV.2SG</sub>  
       b. No leas!  
           NEG read<sub>SUBJ.2SG</sub>  
           “Don’t read!”  
       c. No leer!  
           NEG read<sub>INF</sub>  
           “Don’t read!” (Spanish, cf. Laka 1994)

Consequently, Laka (1994) proposes that imperatives are located in  $\Sigma$ , which in her system is the same projection that hosts negation. Tomić (2001b), however, shows that in Macedonian negative imperatives are possible, which in her view indicates that negation and imperatives head different projections, which she terms NegP and ModP, respectively.

- (101) Ne čitaj go!  
       NEG read<sub>IMPV.2SG</sub> it<sub>ACC</sub>  
       “Don’t read it!” (Mac, Tomić 2001b: 160)

I suggest that the postulation of two separate projections is unnecessary. It seems plausible that there is a single operator related to Force licensing located in  $\Sigma$ , which specifies both negation and imperative features. Whether both negation and imperative morphology can be spelt out simultaneously might be subject to a parametric variation.

Negation and imperatives are semantically related, because both of them are assigned under scope. Moreover, an additional argument for the uniform treatment of these categories comes from stress shift. I mentioned in section 4.4.2.3.4 that in Macedonian stress falls on the antepenultimate syllable (cf. 102a). In the context of imperatives (cf. 102b and c) and negation (cf. 103) stress is shifted rightward onto the following elements and calculated across word boundaries.

- (102) a. DOnesi!  
           “Bring!”  
       b. doNEsi go<sub>CL.ACC</sub>!  
           “Bring it!”  
       c. doneSI mi<sub>CL.DAT</sub> go<sub>CL.ACC</sub>!  
           “Bring it to me!” (Mac, Rudin et al 1999: 551; Baerman & Billings 1998: 20)

- (103) Ne *si* *mu* *GI* dala jaBOLkata  
NEG be<sub>AUX.2SG</sub> him<sub>CL.DAT</sub> them<sub>CL.ACC</sub> give<sub>PART.F.SG</sub> apples+the  
 “Reportedly, you haven’t given him the apples” (Mac, Tomić 2001b: 649)

I propose that imperatives and negation are the only elements that are able to shift lexical stress, because only the elements that target the  $\Sigma$  projection are able to do that. This is not surprising in view of Cardinaletti & Starke’s (1999: 225 fn 64) observation that since affirmation and negation always produce special stress patterns,  $\Sigma$  may contain both polarity and accentuation features.

In contrast to imperatives, gerunds normally retain their fixed lexical stress when they are accompanied by enclitics (cf. 104).

- (104) KupuVAJ*ki* *mi*<sub>CL.DAT</sub> *go*<sub>CL.ACC</sub>, ...  
 “Buying it for me...” (Mac, cf. Franks 1998)

On the assumptions that  $\Sigma$  contains both the Force and accentuation features, this property receives a straightforward explanation. The semantics of gerunds is not related to polarity or Illocutionary Force, which means that they are not licensed by  $\Sigma$ . The only formal property they share with imperatives is the reduced morphology. Therefore, gerunds do not target  $\Sigma$ , but a lower projection above TP I will term GerundP for convenience.

I propose that the enclisis requirement results from the fact that T is “inactive” in imperative and gerundive clauses, so it does not attract verbs. Correspondingly, pronominal clitics, which must normally raise to a “substantive” category endowed with  $\varphi$ -features (cf. Nash & Rouveret 2002) may not check their  $\varphi$ -features against T. Instead they are attracted directly into the closest projection above T without violating the Minimal Link Condition (Chomsky 1995):  $\Sigma^0$  in the case of imperatives, and Gerund<sup>0</sup> in the case of gerunds. As an illustration, (105) presents the derivation of (102c).<sup>107</sup> It shows that the pronominal clitics *mi* and *go* left-adjoin to  $\Sigma^0$  (cf. 105b). Subsequently, the verb *donesi* left-adjoins to the clitics in  $\Sigma^0$ , and checks a Force-related imperative feature there (cf. 105c). As a result, it ends up to the left of the clitics.

- (105) a.  $[\Sigma^0 [\Sigma [\text{AgrOP} [\text{DP } mi]_k [\text{AgrIO } donesi_i [\text{AgrOP} [\text{DP } go]_j [\text{AgrO } t_i [\text{VP } t_k [V t_j [\text{DP } t_j]]]]]]]]]]]$   
 b.  $[\Sigma^0 [\Sigma mi_k + go_j + \Sigma [\text{AgrOP } t_k [\text{AgrIO } donesi_i [\text{AgrOP } t_j [\text{AgrO } t_i [\text{VP } t_k [V t_j [\text{DP } t_j]]]]]]]]]]]$   
 c.  $[\Sigma^0 [\Sigma donesi_i + mi_k + go_j + \Sigma [\text{AgrOP } t_k [\text{AgrIO } t_i [\text{AgrOP } t_j [\text{AgrO } t_i [\text{VP } t_k [V t_j [\text{DP } t_j]]]]]]]]]]]$

The derivation of a clause containing a gerund will proceed in largely the same way, the only difference being that instead of  $\Sigma^0$ , the clitics and the verb will adjoin to Gerund<sup>0</sup>.

Summarizing, the preceding sections have analyzed cliticization in the presence of case-assigning hosts. The subsequent sections will investigate the ways pronominal forms behave when there are no case-assigning hosts available.

<sup>107</sup> Since enclisis proceeds in the same way as proclisis up to the stage in (84), I do not present the derivation in (105) from the very beginning. Moreover, note that since the pronominal clitics are moving in (105) by themselves (without the DP associates), they can undergo XP-movement.

4.4.2.4.2.4 *Patterns with non-case-assigning categories*

This section provides arguments for the proposal that the class of clitics in Macedonian instantiates two types of deficient elements: clitics and weak pronouns, in the sense of Cardinaletti and Starke (1999), henceforth C&S.

4.4.2.4.2.4.1 *Cardinaletti and Starke's (1999) division of deficient elements*

C&S analyze the standard distinction between clitics and strong pronouns, and on the basis of crosslinguistic investigations they conclude that a theory of tripartitions is needed, with a division into strong elements, weak elements, and clitics. These forms are exemplified by means of the Slovak data in (106/107). *Jemu* in (106/107a) instantiates a strong pronoun, which can be coordinated and appear clause initially. *Ono* in (106/107b), which is a weak pronoun, may occur at the beginning of a clause, but it may not be coordinated. *Mu* in (106/107c) is a clitic, and allows neither coordination nor the clause-initial occurrence.

- (106) a. Jemu to bude pomáhat  
 him<sub>DAT</sub> it<sub>NOM</sub> will help<sub>INF</sub>  
 b. *Ono mu* to bude pomáhat  
 it<sub>NOM</sub> him<sub>CL.DAT</sub> it<sub>NOM</sub> will help<sub>INF</sub>  
 c. \**Mu* to bude pomáhat  
 him<sub>CL.DAT</sub> it<sub>NOM</sub> will help<sub>INF</sub>
- (107) a. Jemu a Milanovi to bude pomáhat  
 him<sub>DAT</sub> and Milan<sub>DAT</sub> it<sub>NOM</sub> will help<sub>INF</sub>  
 b. \**Ono* a to druhe mu bude pomáhat  
 it<sub>NOM</sub> and this other him<sub>DAT</sub> will help<sub>INF</sub>  
 c. \**Mu* a jej to bude pomáhat  
 him<sub>CL.DAT</sub> and her<sub>CL.DAT</sub> it<sub>NOM</sub> will help<sub>INF</sub>
- (Slovak, Cardinaletti & Starke 1999: 166)

Both weak and strong elements are argued to occupy XP positions, while clitics reside in heads. Clitics must move to case assigning positions in order to recover case. Moreover, C&S claim that for reasons of economy, an element with the least structure possible should be realized. This is captured by the “Minimise Structure” (Cardinaletti & Starke 1999: 198) principle. It states that weak or strong forms are selected only if the realization of a clitic element is independently ruled out. This means that the realization of weak pronouns or strong pronouns should be the last resort procedure.

4.4.2.4.2.4.2 *Weak and clitic forms in Macedonian*

I submit that a similar tripartite division holds for pronominal forms in Macedonian. Strong forms were presented in the chart in (47). Since they have the same syntactic distribution as object DPs, they are not discussed here. Weak pronouns are morphologically the same as clitics, but they have a different distribution. Clitics must cliticize on case assigning hosts, such as tensed verbs and *l*-participles and may appear in clause-initial positions. Conversely, weak pronouns, such as *mu* in (108), which are found with nouns, adjectives, and passive participles, do not pro- or encliticize. However, they are prosodically deficient, so they always occur with other deficient

elements, such as the copula clitic *e* in (108), and require phonological support to their left, so they may not be positioned clause-initially.

- (108) a. \**Mu* *e* tatko (na deteto)  
 him<sub>CL.DAT</sub> be<sub>3SG</sub> father to child-the  
 b. Tatko *mu* *e* na deteto  
 father him<sub>CL.DAT</sub> be<sub>3SG</sub> to child-the  
 “He is the father of this child (so he has to take care of him)!”  
 c. Toj *mu* *e* tatko  
 he him<sub>CL.DAT</sub> be<sub>3SG</sub> father  
 “He is his father (and not anyone else)!”  
 (Mac, cf. Tomić 2000: 295-296; L. Grujoska, p.c.)

I argued in section 4.4.2.4.2 that clitics in Macedonian must move to agreement projections in order to check case. In the constructions with passive participles, adjectives, and nouns there are no agreement projections available, because these categories are not case assigners. Therefore, clitics may not be selected, because they are unable to check case, and there is no case to be recovered. As a result, in line with the *Minimize Structure* principle, weak pronouns must be realized. Notice that weak pronouns always carry dative (cf. 108 and 109), which is an inherent case. This is expected, as inherent case is purely semantic, related to thematic structure, so it does not have to be checked, as it can be interpreted at LF.

Weak pronouns need phonological support to their left. However, as XPs they have more structure than clitics, so they are more independent than clitics with respect to their position in the clause. As example (109) indicates, they need not occur in the second position, nor do they have to be verb-adjacent. They may scramble quite freely in the clause.<sup>108</sup>

- (109) Na Petreta (*mu* *e*) od strana na komisijata  
 to Peter<sub>DAT</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> from side of commission-the  
 (*mu* *e*) poveќе pati (*mu* *e*) rečeno  
 him<sub>CL.DAT</sub> be<sub>3SG</sub> more times him<sub>CL.DAT</sub> be<sub>3SG</sub> tell<sub>PASS.N</sub>  
 da bide točen  
 to be<sub>SUBJ.3SG</sub> punctual  
 “Peter was more than once told by the commission to be punctual”  
 (Mac, cf. Tomić 2000: 299)

It was noted in section 4.4.2.3.3 that the weak forms only have to appear in the second position when they are preceded by predicative hosts, such as nouns, adjectives, and passive participles (cf. 110), which agree in  $\varphi$ -features with the subject.

- (110) Rečeno *mu* *e* poveќе pati (\**mu* *e*)  
 tell<sub>PASS.N</sub> him<sub>CL.DAT</sub> be<sub>3SG</sub> more times him<sub>CL.DAT</sub> be<sub>3SG</sub>  
 da bide točen  
 to be<sub>SUBJ.3SG</sub> punctual  
 “He was told to be punctual more than once” (Mac, O. Tomić p.c.)

<sup>108</sup> Chapter 5 will demonstrate that deficient pronouns in Polish, which are commonly argued to be weak forms as well (cf. Franks & King 2000) have the same distribution.

The second position effect stems from the fact that all the weak forms raise to T, whereas the predicative hosts move to Spec, TP in order to check the  $\varphi$ -features of T. Consequently, there is only one element that precedes them, which is the occupant of Spec, TP. As an illustration, (111) provides a derivation of (110).<sup>109</sup>

(111) [TP Rečeno<sub>r</sub> [T mu+e [P<sub>redP</sub> t<sub>i</sub> [XP da bide točen ]

In chapter 2 I showed that in Bulgarian and Serbo-Croatian the *l*-participle may raise to Spec, TP and check the  $\varphi$ -features of T. Even though Macedonian does not have this option because of the lack of an overt 3<sup>rd</sup> person auxiliary and different cliticization strategies (cf. section 4.4.2.4.2.2), it exhibits a similar process of predicate (locative) inversion, exemplified in (111), in which the predicative element *rečeno* raises to Spec, TP and checks the  $\varphi$ -features of T.

To sum up, this section has analysed strategies of cliticization in Macedonian. I have suggested that three types of patterns can be distinguished: proclisis, enclisis, and postposition. Proclisis and enclisis always involve cliticization of heads in the presence of hosts that are case assigners. Postposition is found with non-case assigning categories, such as adjectives, nouns, and passive participles. It affects weak pronouns, which I have shown are XPs.

### 4.4.3 Bulgarian

The chapter will conclude with an analysis of the inventory of clitics in Bulgarian. It will be shown that they form a natural class with Macedonian clitics, as they also have to be verb-adjacent. However, they have different prosodic properties, and they never undergo movement together with the *l*-participle or the finite verb. This part of the chapter is organized as follows. Section 4.4.3.1 presents the paradigm of the clitics, while section 4.4.3.2 describes their distribution. Section 4.4.3.3 discusses clitic doubling. Section 4.4.3.4 briefly overviews previous accounts of cliticization in Bulgarian. The alternative analysis given in section 4.4.3.4.3 argues that the pronominal and auxiliary clitics in Bulgarian are adjoined to T. The section concludes with a comparison between cliticization in a Wackernagel clitic language, exemplified by Serbo-Croatian, and in a verb-adjacent clitic language, exemplified by Bulgarian.

#### 4.4.3.1 The clitic paradigms

As in the other Balkan Slavic languages, the clitics in Bulgarian must occur in the order given in (112).

(112) *li* > Mod > *šte* > AUX (except 3<sup>rd</sup> SG *e*) > DAT > ACC > *e*  
(Bg, cf. Tomić 1996a, Franks&King 2000, Rivero 2005)

Just as Macedonian, Bulgarian distinguishes only between dative and accusative pronominal clitics. All clitic forms have non-reduced counterparts, but the dative full

<sup>109</sup> It is still necessary to explain why the pronominal clitic always raises together with the copula. I tentatively suggest this happens due to the phonological weakness of these elements. Note that *mu* does not procliticize on *e* the way pronominal clitics do on finite verbs and *l*-participles, because it may not appear clause-initially.

forms are perceived as archaic, and are usually replaced by the preposition *na* ‘to’ followed by an accusative full form.

## (113) Pronominal forms

	Singular		Plural	
	Acc (full/clitic)	Dat (full/clitic)	Acc (full/clitic)	Dat (full/clitic)
1	men(e)/me	mene/mi	nas/ni	nam/ni
2	teb(e)/te	tebe/ti	vas/vi	vam/vi
3M	nego/go	nemu/mu	tjax/gi	tjam/im
3F	neja/ja	nej/i		
REFL	sebe si/ se	sebe si/si		

(Bg, Franks and King 2000:52)

The auxiliary verbs in the present tense are also clitics, but the past tense auxiliary verbs are not.

## (114) Auxiliary forms

	Present		Past	
	SG	PL	SG	PL
1	sùm	sme	bjax	bjaxme
2	si	ste	beše	bjaxte
3	e	sa	beše	bjaxa

(Bg, cf. Krapova 1999a)

Bulgarian has two other types of clitics, which do not show any inflectional distinctions in the paradigm.

- (115) the interrogative complementizer *li* (cf. section 2.3.6.3.3 in chapter 2)  
the future auxiliary proclitic *šte* (cf. section 2.3.5.3 in chapter 2)

#### 4.4.3.2 Properties and positions of the Bulgarian clitics

The Bulgarian clitics do not have to appear in the second position, but their placement has to satisfy the divergent phonological and syntactic conditions given in (116).

- (116) The Bulgarian clitics are:  
a. Phonologically enclitic, so they need a phonological host to their left  
b. Syntactically proclitic, so they require a verbal host to their right

Requirement (116b) is suspended if the verb is in the clause initial position. The workings of the two conditions are exemplified in the outputs in (117).

- (117) a. Vera *mi go* dade včera  
Vera me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> gave<sub>3SG</sub> yesterday  
‘Vera gave it to me yesterday’  
b. Včera *mi go* dade Vera  
c. Včera Vera *mi go* dade  
d. \*Vera *mi go* včera dade

- e. \**Mi go* dade Vera včera  
 f. \*Vera dade *mi go* včera  
 g. Dade mi go *Vera včera* (Bg, Franks and King 2000: 63)

Sentence (117c) indicates that the Wackernagel law is not operative in Bulgarian, as the clitics are preceded by two constituents. In (117d) the clitic cluster is not left-adjacent to the verb, which violates condition (116b), while in (117e) it is clause initial, which is at odds with condition (116a) and results in ungrammaticality. The sentence in (117f) proves that the clitics are syntactically proclitic, so they must precede the verb, if possible. If the verb is clause-initial, as in (117g), the clitics may follow it, as otherwise the phonological requirement in (116a) is not met.

The pronominal clitics in Bulgarian clearly opt for the preverbal position, and appear there if there is *any* element preceding them. The examples in (118) show that even the conjunctions *i* and *a* suffice to supply pronominal and auxiliary clitics with necessary phonological support to their left.

- (118) a Toj napisa pismo na majka *si*  
 he wrote<sub>3SG</sub> letter to mother self<sub>CL.DAT</sub>  
 i *i* *go* izprati  
 and her<sub>CL.DAT</sub> it<sub>CL.ACC</sub> sent<sub>3SG</sub>  
 “He wrote a letter to his mother and sent it to her”  
 (Bg, Franks and King 2000: 52, 63)
- b. Tova myasto *e* tolkova krasivo, a *sım* bil  
 this place be<sub>3SG</sub> so beautiful but be<sub>AUX.ISG</sub> be<sub>PART.MSG</sub>  
 tam samo vednuž  
 there only once  
 “This place is so beautiful but I have been there only once”  
 (Bg, S. Marinov, p.c.)

Apart from Polish (cf. chapter 5 section 5.2.2), the cliticization strategy in (118) is not possible in any other Slavic language, nor was it attested in Old Church Slavonic. Slawski (1946: 25, 62) claims that the enclisis on conjunctions became available only in the first half of the 19<sup>th</sup> century. The property reveals an important characteristic of the Bulgarian cliticization. Given that conjunctions are outside the syntactic domain of the clause, and certainly much higher than the TP level, it seems that the requirement of the enclisis in Bulgarian is purely phonological in nature. In other words, the requirement of phonological adjacency does not imply syntactic adjacency.

This insight is confirmed by the fact that *li*, which is also enclitic, may not be supported by a conjunction.

- (119) \*I *li ti* *go* dade Petko včera?  
 and Q you<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PAST.3SG</sub> Petko yesterday  
 “And did Petko give it to you yesterday?”  
 (Bg, Franks and Bošković 2001: 179)

However, this is to be expected, because *li* can be a focus licenser, which attracts and puts the constituent to its left in focus (cf. chapter 2, section 2.3.6.3.3). It may not be preceded by a conjunction, because conjunctions are never focused.

*Li* is also the only enclitic in Bulgarian that does not require adjacency to the verb (cf. 120).



- (120) a. Včera *li* Penka *ja* *e* dala  
 yesterday Q Penka her<sub>CL.ACC</sub> be<sub>AUX.3SG</sub> give<sub>PART.F.SG</sub>  
 knjigata na Petko?  
 book-the to Petko
- b. Penka včera *li* *ja* *e* dala  
 Penka yesterday Q her<sub>CL.ACC</sub> be<sub>AUX.3SG</sub> give<sub>PART.F.SG</sub>  
 knjigata na Petko?  
 book-the to Petko

“Was it yesterday<sub>FOC</sub> that Penka<sub>TOP</sub> gave the book to Petko?”

(Bg, Tomić 1996a: 833)

The fact that it can be separated from the other clitics by the subject *Penka* in (120a) indicates that it is located higher than the other clitics. It is usually claimed to be hosted in C (cf. Rivero 1993, 1994a, Bošković 1995, and others), because it is in complementary distribution with complementizers, such as *če* ‘that’ (cf. 121a), although just as the other complementizers, it may appear with the subjunctive marker *da* (cf. 121b).

- (121) a. Mislja, *če* *šte* *se* vurne (\**li*) dovečera  
 think<sub>1SG</sub> that will REFL return<sub>3SG</sub> Q tonight  
 “I think that he will come back tonight”
- b. Da *se* vurne *li* dovečera?  
 Da REFL return<sub>3SG</sub> Q tonight  
 “Should s/he come back tonight?”

(Bg, Rudin 1986: 66)

Section 2.3.6.3.3 in chapter 2 thoroughly analyzed negated questions. They are formed with the negated particle *ne*, which attracts the highest clitic in the cluster, and the two elements become left-adjoined to *li*. As a reminder, the construction is exemplified in (122).

- (122) Ne *go* *li* *e* viždal?  
 NEG him<sub>CL.ACC</sub> Q be<sub>3SG</sub> see<sub>PART.M.SG</sub>  
 “Didn’t he see him?”

(Izvorski et al 1997: 191)

#### 4.4.3.3 Clitic doubling in Bulgarian

In Bulgarian clitic doubling is possible with direct and indirect objects when they are both specific and topicalized. It is not a uniform phenomenon and is subject to a great deal of dialectal and stylistic variations (see Arnaudova 2003, Franks & Rudin 2005, Rudin 1997, Schick 2000, Tomić *forthcoming* for details). It seems to be always dependent on discourse factors. In this way it differs from clitic doubling in Macedonian (cf. section 4.4.2.2), which is obligatory with all definite direct objects (cf. 124). As (123) shows, this requirement does not hold for Bulgarian.

- (123) a. Petūr prodade kolata  
 Peter sell<sub>PAST.3SG</sub> car-the  
 “Peter sold his car”
- b. Petūr *ja* prodade kolata  
 Peter it<sub>CL.ACC</sub> sell<sub>PAST.3SG</sub> car-the  
 “As for Peter, he has sold his car”

(Bg, Vačkov 1998: 166)

- (124) a. Petar *\*(ja)* prodade kolata  
 Peter it<sub>CL,ACC</sub> sell<sub>PAST,3SG</sub> car-the  
 “Peter sold his car” (Mac, Vačkov 1998: 166)

There are two contexts, though, in which clitic doubling is always required. The first instance concerns oblique subjects, which are usually Experiencers.

- (125) a. Na mene ne *\*(mi)* e studeno  
 to me<sub>DAT</sub> NEG me<sub>CL,DAT</sub> be<sub>3SG</sub> cold  
 “I am not cold”  
 b. Nego *\*(go)* boli stomaxūt  
 him<sub>DAT</sub> him<sub>CL,DAT</sub> hurt<sub>3SG</sub> the-stomach  
 “His stomach hurts” (Bg, Franks & Rudin 2005: 106)

The other case involves left-dislocated topicalized objects, which are specific, but do not have to be definite (cf. 126b).

- (126) a. Pismata Marija vinagi *gi* prašta s zakasnenie  
 letters-the Mary always them<sub>CL,ACC</sub> send<sub>3SG</sub> with delay  
 “Mary is always sending letters with a delay”  
 b. Edin paket *go* izgubixa po pogreška  
 one package it<sub>CL,ACC</sub> lose<sub>PAST,3PL</sub> by mistake  
 “They lost a package by mistake” (Bg, Arnaudova 2003: 163)

Since clitic doubling in Bulgarian does not seem to be a uniform syntactic phenomenon, which largely depends on specific discourse structure requirements that need to be defined in future research, I will not discuss it here any further.

#### 4.4.3.4 Towards an analysis of cliticization in Bulgarian

It has been shown that unlike in Serbo-Croatian, Bulgarian clitics need not appear in the Wackernagel position. As in Macedonian, they must be verb-adjacent.<sup>110</sup> The main difference between Bulgarian and Macedonian clitics is related to their prosodic requirement. In Bulgarian, they are always enclitic, so they may never appear clause-initially. In Macedonian, clitics may be proclitic or enclitic, depending on the type of host onto which they cliticize. The minimal pair in (127) illustrates the contrast.

- (127) a. *Mi go* dade Vera včera (\*Bg, √Mac)  
 me<sub>DAT</sub> it<sub>ACC</sub> gave Vera yesterday  
 “Vera gave it to me yesterday”  
 b. Dade *mi go* Vera včera (√Bg, \*Mac)  
 gave me<sub>DAT</sub> it<sub>ACC</sub> Vera yesterday (Franks 1998)

In the subsequent sections I will show that these prosodic differences have syntactic motivations; for example, I will demonstrate that unlike in Macedonian, finite verbs and participles in Bulgarian do not undergo movement together with the pronominal clitics. Before I develop a theory of clitic placement in Bulgarian, I will briefly overview some previous accounts. Section 4.4.3.4.1 will discuss the analyses which postulate that clitics

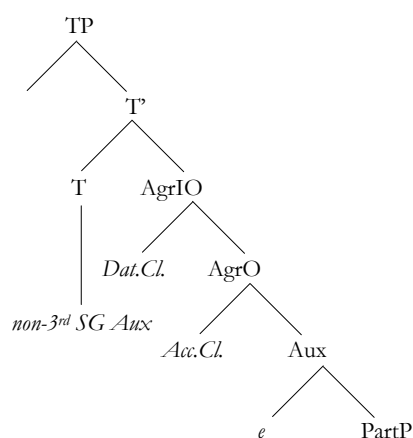
<sup>110</sup> Recall from section 2.3.5.1.2 in chapter 2 though, that there is a small class of aspectual adverbs that may intervene between the auxiliary clitic and the *l*-participle.

occupy head positions. Section 4.4.3.4.2 will outline Bošković's (2001) account, which proposes that clitics target specifiers.

#### 4.4.3.4.1 Clitics are in head positions

Most of the analyses of cliticization in Bulgarian (cf. Franks 1998, Franks & King 2000, Rudin 1997, Tomić 1996a, 1997, 2000 and others) claim that clitics reside in separate functional heads, as schematized in (128).

(128)



These analyses assume that the clitics must cluster with each other. The cluster is formed by formation of a complex head through a series of successive cyclic rightward head adjunctions. For instance, the clitic cluster in the sentence in (129a) is formed as shown in (129b-c).

- (129) a. Petko *mi* *go* *dade*  
 Petko me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PAST.3SG</sub>  
 ‘Petko gave it to me’
- b. [<sub>AgrIOP</sub> *mi* [<sub>AgrOP</sub> *go+dade<sub>j</sub>* [<sub>VP</sub> *t<sub>j</sub>*]]]
- c. [<sub>AgrIOP</sub> *mi*+ [<sub>AgrOP</sub> *go+dade<sub>j</sub>* ]<sub>j</sub> [<sub>AgrOP</sub> *t<sub>j</sub>* ]]] (Bg, cf. Bošković 2002)<sup>111</sup>

The finite verb *dade* raises as a head from VP and right-adjoins to the accusative clitic in AgrO (cf. 129b), forming a complex head. The complex head raises to AgrIO, and right adjoins to the dative clitic *mi*.

The construction of a clitic cluster in a clause that contains the *l*-participle proceeds as sketched in (130).

<sup>111</sup> Bošković (2002) does not assume the derivation presented here. I only quote his overview of the previous accounts.

- (130) a. *Ti si mu gi dal*  
 you be<sub>2SG</sub> him<sub>CL.DAT</sub> them<sub>CL.ACC</sub> give<sub>PART.MSG</sub>  
 “You have given them to him”  
 b. [TP si [<sub>AgriOP</sub> mu [<sub>Agrop</sub> gi+dal<sub>i</sub> [VP t<sub>i</sub> ]]]]  
 c. [TP si [<sub>AgriOP</sub> mu+ [gi+dal<sub>i</sub> ]<sub>j</sub> [<sub>Agrop</sub> t<sub>j</sub> [VP t<sub>j</sub> ]]]]  
 d. [TP si+ [mu+ [gi+dal<sub>i</sub> ]]<sub>k</sub> [<sub>AgriOP</sub> t<sub>k</sub> [<sub>Agrop</sub> t<sub>j</sub> [VP t<sub>j</sub> ]]]] (Bg, cf. Bošković 2002)

The *l*-participle is claimed to undergo head movement from V to AgrO, where it right-adjoins to the accusative clitic *gi*. Next, the complex head formed in this way raises to AgrIO, and right-adjoins to the dative clitic *mu*. Finally, the complex of pronominal clitics and the *l*-participle right-adjoins to the auxiliary in T.

If Kayne’s (1994) LCA is adopted, the analysis is problematic from a theoretical point of view, because it makes use of rightward adjunction. Moreover, the assumption that *l*-participle fronting occurs via head movement has the drawbacks mentioned in chapter 2, section 2.2.

#### 4.4.3.4.2 Clitics are in specifier positions

An alternative view on cliticization is taken by Bošković (2002), who claims that both auxiliary and pronominal clitics in Bulgarian and Macedonian are located in specifiers of null heads. Along with Chomsky (1995: 249), he argues that clitics are both maximal and minimal elements; that is, they are generated in non-head positions, but may move as heads.

I will consider his approach on the basis of the example in (131a). On the assumption that all clitics are in specifiers, the string in (131) will have the structure as in (131b) before the clitic cluster is formed.

- (131) a. *Ti si mi go dal*  
 you be<sub>AUX.2SG</sub> me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.MSG</sub>  
 “You have given them to me” (Bg, Bošković 2002)  
 b. [TP si [TP [<sub>AgriOP</sub> mi [<sub>AgriO</sub> [<sub>Agrop</sub> go [<sub>Agro</sub> [VP dal]]]]]]]]]

Bošković proposes that the participle *dal* moves cyclically as a head past each of the clitics to the heads immediately above them. Subsequently, the clitics themselves raise from a specifier and adjoin to the left of the *l*-participle as a head. Thus, the participle first adjoins to AgrO (cf. 132a). Next, AgrO together with the participle adjoins to AgrIO, and *dal* lands above the specifier that hosts the accusative clitic *go*. *Go* moves as a head, and adjoins to AgrIO (cf. 132b). Assuming with Kayne (1994) that adjunction is always to the left, *go* is placed to the left of the participle *dal*. At this point AgrIO contains the string *go dal* and moves on past the dative clitic *mi* to T. This enables *mi* to adjoin to *go dal* as a head (cf. 132c). Now T contains *mi go dal* and moves past *si* to a higher functional head called F. Finally, the auxiliary clitic *si* raises from Spec, TP and adjoins to the left of F (cf. 132d).

- (132) a. [TP si [TP [<sub>AgriOP</sub> mi [<sub>AgriO</sub> [<sub>Agrop</sub> go [<sub>Agro</sub> dal<sub>i</sub> [VP t<sub>j</sub> ]]]]]]]]  
 b. [TP si [TP [<sub>AgriOP</sub> mi [<sub>AgriO</sub> [go<sub>j</sub> + dal<sub>j</sub>] [<sub>Agrop</sub> t<sub>j</sub> [<sub>Agro</sub> t<sub>j</sub> [VP t<sub>j</sub> ]]]]]]]]  
 c. [TP si [TP mi<sub>i</sub> + [go<sub>j</sub> + dal<sub>j</sub>]<sub>k</sub> [<sub>AgriOP</sub> t<sub>k</sub> [<sub>AgriO</sub> t<sub>k</sub> [<sub>Agrop</sub> t<sub>j</sub> [<sub>Agro</sub> t<sub>j</sub> [VP t<sub>j</sub> ]]]]]]]]  
 d. [F si<sub>n</sub> + [mi<sub>i</sub> + [go<sub>j</sub> + dal<sub>j</sub>]<sub>k</sub>]<sub>m</sub> [TP t<sub>n</sub> [TP t<sub>m</sub> [<sub>AgriOP</sub> t<sub>i</sub> [<sub>AgriO</sub> t<sub>k</sub> [<sub>Agrop</sub> t<sub>j</sub> [<sub>Agro</sub> t<sub>j</sub> [VP t<sub>j</sub> ]]]]]]]]]]

Since the clitic cluster is created by left-adjoining the verb to the clitics, Bošković’s analysis is in line with Kayne’s (1994) LCA and avoids the problematic idea of right

adjunction of some previous approaches. The positioning of AgrIOP higher than AgrOP in the structure secures the desired dative-accusative-verb order.

However, Franks & Rudin (2005) and Franks (forthcoming) point out that Bošković's account faces empirical problems. Namely, it is possible to split the auxiliary clitic from the pronominal clitics in Bulgarian with a small class of aspectual adverbs (cf. chapter 2, section 2.3.5.1.2). This is wrongly predicted not to be possible in his approach.

- (133) Az *sǎm*        veče    *ti*        *ja*        dala  
 I   be<sub>AUX.ISG</sub>    already   you<sub>CL.DAT</sub>   it<sub>CL.ACC</sub>   give<sub>PART.F.SG</sub>  
 "I have already given it to you" (Bg, Franks forthcoming)

Moreover, Bošković argues that the auxiliary clitic originates in Spec, TP, which is a strange suggestion, because auxiliaries are never analyzed as elements that undergo XP-movement. Furthermore, he claims that his proposal is valid for all verb-adjacent clitic languages, which includes Macedonian. However, it seems to me that his approach may not predict the variable behaviour of the Macedonian clitics, which procliticize only when the clitic host is a finite verb or an *l*-participle. In fact, Bošković (to appear, fn 42) acknowledges disregarding these diverging contexts.

#### 4.4.3.4.3 An alternative analysis

As in the case of Macedonian, the analysis of cliticization in Bulgarian that I am developing relates to the Person-Case Constraint (PCC), which is observed in Bulgarian as well. This is indicated by the examples in (134), which correspond to the Macedonian outputs in (90).

- (134) a. \*Az *im*        *te*        preporučvam  
 I   them<sub>CL.DAT</sub>   you<sub>CL.ACC</sub>   recommend<sub>ISG</sub>  
 b. Az *te*        preporučvam    na   *tjax*  
 I   you<sub>CL.ACC</sub>   recommend<sub>ISG</sub>   to   them<sub>ACC</sub>  
 "I am recommending you to them"  
 c. Az *im*        *ja*        preporučvam  
 I   them<sub>CL.DAT</sub>   her<sub>CL.ACC</sub>   recommend<sub>ISG</sub>  
 "I am recommending her to them" (Bg, cf. Hauge 1999)

Sentence (134a) shows that a non-3<sup>rd</sup> person accusative clitic is incompatible with a dative clitic. However, if a strong form of the accusative pronoun *tjax* preceded by the preposition *na* is used, the result is grammatical (cf. 134b). The dative clitic is compatible only with accusative clitics marked for the 3<sup>rd</sup> person, as indicated in (134c).

I suggest that the Bulgarian clitic cluster is derived along the lines of Anagnostopoulou's (1999: 287) account for the PCC languages. Since I have already presented Anagnostopoulou's approach in section 4.4.2.4.2.2, I will outline the analysis in a somewhat simplified form.

I propose that the auxiliary clitics are merged in two positions in Bulgarian: the 3<sup>rd</sup> person singular *e* originates in the head of AuxP. I will provide some motivations for this idea in section 4.4.4.1. All the other auxiliary forms are merged in T. The pronominal clitics are generated as phrasal arguments within the VP, but they land in head positions. The dative clitic raises first, lands in T adjoining to the auxiliary or the finite verb if they are present there, and checks the person feature of T. The accusative

clitic moves next and checks the remaining number feature on T, adjoining to the dative clitic. However, the derivation converges only if the accusative clitic carries just a number feature, and not a person feature, because the latter has already been checked by the dative. On the assumption that the 3<sup>rd</sup> person pronouns represent only a number feature, they are the only eligible candidates for the movement. If a non-3<sup>rd</sup> person pronominal clitic raises, the derivation will crash, because the person feature on the accusative will remain unchecked. Finally, if the construction contains the 3<sup>rd</sup> person auxiliary *e* instead of some other finite verb merged in T, it remains in its base generated position in Aux if there are pronominal clitics present, or raises to T, if it is the only clitic in the cluster.

(135) [IP [T <cl<sub>DAT</sub>><sub>i</sub> + <cl<sub>ACC</sub>><sub>j</sub> + T] ... [Aux (*e*) [VP V t<sub>i</sub> t<sub>j</sub>]]

The derivation given in (135) is considerably simpler than in Bošković's (2002) proposal. It also avoids the potentially problematic idea of right-adjunction of the previous head movement accounts discussed in section 4.4.3.4.1. Finally, it handles the PCC effect straightforwardly.

In order to provide more support for the analysis developed here, let me juxtapose some properties of cliticization in Bulgarian and Macedonian, which represent languages with verb-adjacent clitics, with Serbo-Croatian, which is a Wackernagel position clitic language.

I mentioned in section 4.4.2.4.2 that Serbo-Croatian does not observe the Person Case Constraint. It seems that in general the constraint does not hold in Wackernagel position clitic languages (apart from Serbo-Croatian, also in Czech, Slovak, and Slovene) as well as in the languages which have weak pronouns, rather than clitics (e.g. in Polish and Russian; cf. the discussion in section 5.2.2, chapter 5). In section 4.4.1.2 I claimed, following the insights of Bošković's (2001, to appear) and Stjepanović's (1999) analyses, that pronominal clitics do not cluster in a single head in Serbo-Croatian. Rather, the dative clitic resides in Spec, AgrIOP, and the accusative clitic is hosted in Spec, AgrOP. Since the PCC holds only when pronominal clitics are adjoined to a single head, the fact that it is not operative in Serbo-Croatian follows straightforwardly.

The assumption that clitics do not cluster in a single head in the Wackernagel clitic languages allows us to account for a few more differences between Serbo-Croatian on the one hand, and Bulgarian and Macedonian on the other hand. For instance, I mentioned in section 4.4.1.2 that a higher part of the pronominal clitic cluster may be deleted in VP-ellipsis in Serbo-Croatian (cf. 136b).

- (136) a. Mi *smo* *mu* *ga* dali,  
 we be<sub>AUX.1PL</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.M.PL</sub>  
 a i vi *ste* ~~*mu*~~ ~~*ga*~~ ~~*dali*~~, (takodje)  
 and also you be<sub>AUX.2PL</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.M.PL</sub> too  
 "We gave it to him, and you did, too"
- 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, cf. Stjepanović 1998, 1999)

Bošković (2002) points out that a similar operation in Bulgarian or Macedonian gives rise to strong ungrammaticality.

- (137) a. \*Nie *sme* *mu* *go* *dali*, *i* *vie* *ste*  
 we be<sub>AUX.1PL</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> give<sub>PART.PL</sub> and you be<sub>AUX.2PL</sub>  
~~*mu* *go* *dali*~~ (*sušto*)  
 him<sub>CL.DAT</sub> him<sub>CL.ACC</sub> give<sub>PART.MPL</sub> too  
 “We gave it to him, and you did too”
- b. \*Nie *sme mu go dali*, *i* *vie ste mu go dali* (*sušto*)  
 c. \*Nie *sme mu go dali*, *i* *vie ste go mu dali* (*sušto*) (Bg, Bošković 2002: 331)

This is to be expected if the pronominal clitic cluster in Bulgarian is located in the same head, and forms a single constituent as a whole.

Likewise, I reported an observation due to Progovac (1993), who claims that clitics may climb from an embedded subjunctive clause (cf. 138) but not out of an embedded indicative clause (cf. 139).

- (138) a. Milan *želi* *da ga* *vidi*  
 Milan wish<sub>3SG</sub> that him<sub>CL.ACC</sub> see<sub>3SG</sub>  
 “Milan wishes to see him”
- b. ?Milan *ga želi da vidi* (S-C, Progovac 1993)
- (139) a. Milan *kaže* *da ga* *vidi*  
 Milan say<sub>3SG</sub> that him<sub>CL.ACC</sub> see<sub>3SG</sub>  
 “Milan says that he can see him”
- b. \*Milan *ga kaže da vidi* (S-C, Progovac 1993)

In Bulgarian clitics may never raise from an embedded clause to the main clause, whether they move out of a subjunctive clause introduced by the subjunctive complementizer *da* (cf. 140) or an indicative clause headed by the indicative complementizer *če* (cf. 141).

- (140) a. Manol *iska* *da go* *vidi*  
 Manol wish<sub>3SG</sub> that him<sub>CL.ACC</sub> see<sub>3SG</sub>  
 “Manol wishes to see him”
- b. \*Manol *go iska da vidi* (Bg, S. Marinov, p.c.)
- (141) a. Manol *kazva* *če go* *vižda*  
 Manol say<sub>3SG</sub> that him<sub>CL.ACC</sub> see<sub>3SG</sub>  
 “Manol says that he can see him”
- b. \*Manol *go kazva če vižda* (Bg, S. Marinov, p.c.)

The contrast receives a straightforward explanation once it is assumed that clitics in Bulgarian target a single head position. Their movement across the complementizer would lead to a Head Movement Constraint violation, so it is prohibited. The climbing is unproblematic in Serbo-Croatian, in which clitics target specifiers and undergo XP-movement.

Finally, more evidence for the claim made in this section comes from the way clitics pattern with negation. As shown in (142) and (143), negation attracts pronominal clitics in Bulgarian, but not in Serbo-Croatian, where it attracts the verb instead. It was claimed in chapter 2 (section 2.3.6.3.2) that these elements incorporate into negation. Since negation is a head, it may incorporate into other heads. Therefore, it may incorporate into the finite verb in Serbo-Croatian, but not into the pronominal clitics, which occupy XP-positions.

- (142) a. Ne *me* boli  
NEG me<sub>CL,ACC</sub> hurt<sub>3SG</sub>  
 “It doesn’t hurt me”  
 a’. \*Ne boli *me*  
 b. Ne *mi* *se* struva, če ...  
NEG me<sub>CL,DAT</sub> REFL seem<sub>3SG</sub> that  
 “It doesn’t seem to me that...”  
 b’. \*Ne struva *mi se*, če... (Bg, S. Marnov, p.c.)
- (143) a. Ne boli *me*  
NEG hurt<sub>3SG</sub> me<sub>CL,ACC</sub>  
 “It doesn’t hurt me”  
 a’. \*Ne *me* boli  
 b. Ne *cini* *mi* *se* da...  
NEG seem<sub>3SG</sub> me<sub>CL,DAT</sub> REFL that  
 “It doesn’t seem to me that...”  
 b. \* Ne *mi se* *cini* da... (S-C, N. Milićević, p.c.)

#### 4.4.4 Concluding remarks

The following two sections will give some general remarks concerning cliticization in all the South Slavic languages analyzed in this chapter. Section 4.4.4.1 will try to provide an account for the ordering of the 3<sup>rd</sup> person auxiliary, which always follows the other clitics. Section 4.4.4.2 will discuss potential motivations for clitic climbing.

##### 4.4.4.1 Ordering of the clitics

As has been mentioned throughout this chapter, clitics in South Slavic follow the ordering given in (144).<sup>112</sup>

- (144)  $\bar{i}$  > Mod > AUX (apart from *(j)e*) > DAT > ACC > *(j)e*

It has been demonstrated that the clitics are syntactically active. For example, the highest clitic may be attracted by negation in Bulgarian, whereas in Serbo-Croatian the dative clitic may be raised from an embedded clause to the main clause. This clearly indicates that the sequence in which they appear is the result of a syntactic operation.

The previous sections have investigated the ways pronominal clitics are inserted in the syntactic structure. However, I still have not explained why the 3<sup>rd</sup> person auxiliary occurs in a different position than the other auxiliary forms. This will be done in the subsequent sections. Section 4.4.4.1.1 will briefly review an account due to Bošković (2001; to appear). Section 4.4.4.1.2 will discuss Tomić’s (1996a) view on the topic. Section 4.4.4.1.3 will give some alternative suggestions.

##### 4.4.4.1.1 Bošković (2001, in press)

According to Bošković (2001: 125ff), the final position of *je* in the clitic cluster is phonologically conditioned. One of his main arguments for this claim comes from the

<sup>112</sup> I disregard the fact that in Macedonian both singular and plural variants of the 3<sup>rd</sup> person auxiliary appear last in the cluster. Their distribution was accounted for in section 4.4.2.4.2.1.



behaviour of different auxiliary forms, such as *je* in (145a) and *su* in (145b) in sentences interrupted by intonation pauses.

- (145) a. ?#On *je*, # kao šte *sam vam* rekla#,  
 he be<sub>AUX.3SG</sub> as be<sub>1SG</sub> you<sub>CL.DAT</sub> say<sub>PART.F.SG</sub>  
 predstavio *se* Petru#  
 introduce<sub>PART.M.SG</sub> self<sub>ACC</sub> Peter<sub>DAT</sub>  
 ‘‘He, as I told you, introduced himself to Peter’’
- a’. \*#On *se*, # kao šte *sam vam* rekla#, predstavio *je* Petru
- b. ?#Oni *su*, # kao šte *sam vam* rekla#,  
 they be<sub>AUX.3PL</sub> as be<sub>1SG</sub> you<sub>CL.DAT</sub> say<sub>PART.F.SG</sub>  
 predstavili *se* Petru#  
 introduce<sub>PART.M.PL</sub> self<sub>ACC</sub> Peter<sub>DAT</sub>  
 ‘‘They, as I told you, introduced themselves to Peter’’
- b’. \*#Oni *se*, # kao šte *sam vam* rekla#, predstavili *su* Petru#

(S-C, Bošković 2001: 126)

Even though the two pairs in (145) contain different auxiliaries, they have the same syntactic distribution, and both *je* and *su* must precede the pronominal clitics. According to Bošković, this means that all the auxiliary clitics occupy the same position in syntax, and it is only at PF that *je* is spelt out at the end of the cluster.

Furthermore, Bošković observes that both *su* and *je* may precede sentential adverbs. However, when *je* co-occurs with pronominal clitics, it may not do that. This is indicated by the meaning of the ambiguous adverb *pravilno* ‘cleverly’. It permits the sentential reading only when it is preceded by the auxiliaries alone.

- (146) a. On *je* pravilno odgovorio Mileni  
 he be<sub>AUX.3SG</sub> correctly answer<sub>PART.M.SG</sub> Milena<sub>DAT</sub>  
 ‘‘He did the right thing in answering Milena’’  
 ‘‘He gave Milena a correct answer’’
- a’. On *joj* *je* pravilno odgovorio  
 he her<sub>CL.DAT</sub> be<sub>AUX.3SG</sub> correctly answer<sub>PART.M.SG</sub>  
 ‘‘\*He did the right thing in answering Milena’’  
 ‘‘He gave Milena a correct answer’’
- b. Oni *su* pravilno odgovorili Mileni  
 they be<sub>AUX.3PL</sub> correctly answer<sub>PART.M.PL</sub> Milena<sub>DAT</sub>

(S-C, Bošković 2001: 126-127)

This shows that both *je* and *su* are located higher than the pronominal clitics. The fact that *je* is normally spelt out lower is, in Bošković’s view, due to a PF filter, which forces the clitic to be pronounced in this position. It is not entirely clear what kind of PF requirement prohibits the pronunciation of *je* in the higher position. Bošković refers to the ‘‘process of losing cliticness’’ by *je* as the responsible factor, which prevents it from occurring outside the edges of the cluster. I find the explanation inconclusive. It is not entirely clear why the loss of cliticness should involve the pronunciation at the end of a cluster, rather than, say, in the middle of it. Moreover, the loss of clitic properties is often intermediated by the reanalysis of a clitic as an affix (cf. the discussion of Polish in chapter 1, section 1.3.4.2.2.1), which in fact implies that the clitic *je* should occur as close to the verb as possible, rather than at the end of the cluster, following the pronominal clitics.

#### 4.4.4.1.2 Tomić (1996a)

According to Tomić (1996a: 839-841), the exceptional placement of the 3<sup>rd</sup> person auxiliary is due to its mixed clitic and root-like properties. The clitic function is assumed when *je* is placed at the end of a cluster (cf. 147a). The root-like behaviour is observed when *je* adjoins into another auxiliary clitic, such as *sam* (cf. 147b). This results in the creation of a strong auxiliary form, with *je* being the root, and *sam* a person/number affix.<sup>113</sup>

- (147) a. On *mu* *ih* *je* *dao*  
 he him<sub>CL.DAT</sub> them<sub>CL.ACC</sub> be<sub>CL.3SG</sub> give<sub>PART.MSG</sub>  
 “He gave them to him”  
 b. Ja *jesam* *mu* *ih* *dao*  
 I be<sub>1SG</sub> him<sub>CL.DAT</sub> them<sub>CL.ACC</sub> give<sub>PART.MSG</sub>  
 “I gave them to him indeed” (S-C, cf. Tomić 1996a)

However, this proposal does not explain the idiosyncratic behaviour of *je* in front of the question particle *li*. As demonstrated in (148a), *je* is the only auxiliary clitic which may appear clause-initially. It is actually preferred over the strong form in this position (cf. 148a<sup>?</sup>). The other clitic variants, such as *si* in (148b) are prohibited in this context, and may only occur as strong forms (cf. 148b<sup>?</sup>).

- (148) a. *Je* *li* *ga* *našao?*  
 be<sub>CL.3SG</sub> Q him<sub>CL.ACC</sub> find<sub>PART.MSG</sub>  
 “Did he find him?”  
 a<sup>?</sup> \**Jest(e)* *li* *ga* *našao?*  
 be<sub>3SG</sub> Q him<sub>CL.ACC</sub> find<sub>PART.MSG</sub>  
 b. \**Si* *li* *ga* *našao?*  
 be<sub>CL.2SG</sub> Q him<sub>CL.ACC</sub> find<sub>PART.MSG</sub>  
 b<sup>?</sup> *Jesi* *li* *ga* *našao?*  
 be<sub>2SG</sub> Q him<sub>CL.ACC</sub> find<sub>PART.MSG</sub>  
 “Did you find him?” (S-C, Tomić 1996a)

#### 4.4.4.1.3 Some alternative suggestions

I agree with Tomić (1996a) that there are two instances of *je*. However, I would like to claim that while one of them is the 3<sup>rd</sup> person auxiliary, the other one is the morphological realization of the  $\Sigma$ -head, which contains features related to polarity, focus, and Illocutionary Force. This morphological realization is present not only in the verbal domain, as it is also found on strong pronominal forms in some West Slavic languages. For example, the clitic variant of the masculine accusative pronoun ‘him’ in Polish *go* has the strong counterpart *jego* (cf. chapter 5, section 5.2.1 for a discussion of Polish pronouns, and Cardinaletti & Starke 1999 for an analysis of related Slovak data).

As for the auxiliary function of *je*, let me point out that the situations in which some person clitic forms occur in different positions than other clitics in the cluster have also been attested outside the South Slavic languages. For example, Poletto (2000: 30ff) observes similar distribution of subject clitics in Northern Italian dialects, which show disjoint occurrences in the structure according to their person marking. She

<sup>113</sup> In chapter 2, section 2.3.6.2.2 this form was claimed to be created via incorporation of the auxiliary clitic into *je*, which was argued to be the head of the Polarity Phrase.

suggests capturing their distribution by assuming that they encode [ $\pm$ speaker] and [ $\pm$ hearer] distinctions syntactically, with the former corresponding to the 1<sup>st</sup> person, and the latter to the 2<sup>nd</sup> person. I am not sure whether a similar division could be made in Slavic. I leave the issue for future research, and for the time being I assume that *je* specifies only the [number] feature, while the other auxiliaries additionally carry [person] distinctions. I will provide more arguments for this idea in section 5.3.4.2.4.1 in chapter 5, where I discuss the position of auxiliaries in Polish.

#### 4.4.4.2 Why do clitics climb?

It has been shown that in each of the Slavic languages studied in this chapter clitics must raise out of their base positions within the VP. Subsequently, they move to different projections, such as Spec, AgrOP and Spec, AgrIOP in Serbo-Croatian, and T in Bulgarian and Macedonian. They may undergo head or phrasal movement, and check either case or  $\varphi$ -features. The movement affects all types of clitics, which eventually end up as a cluster, usually in a designated position. The important question is what drives the movement. Certainly, their phonological deficiency cannot be the reason, because the clitics can receive phonological support in their base positions as well. The movement cannot be triggered by a single syntactic feature, either, given that it affects a number of categorially unrelated elements with a different morphological content.

As far as climbing of the pronominal clitics is concerned, it has sometimes been argued that this is motivated by discourse structure requirements (cf. Halpern 1992; Uriagereka 1995). Pronominal forms always carry old information, and are specific and referential; therefore they may be forced to appear outside the VP, in line with Diesing's (1990) Mapping Hypothesis. The way the movement actually proceeds varies across languages. In a Wackernagel clitic language, such as Serbo-Croatian, pronominal clitics land in XP positions. In verb-adjacent clitic languages, such as Bulgarian, they raise as XPs from the argument positions within the VP, but become adjoined to T as heads.

The clitics in Serbo-Croatian must appear in the second position. It was noted in section 4.4.1.3 that the requirement is reminiscent of the verb second effect, but the exact motivation for this phenomenon is undetermined. In Bulgarian and Macedonian the clitics are always verb-adjacent, which may be interpreted as a gradual shift towards affixhood. Chapter 5 will provide more evidence for this assumption, which will be based on properties of cliticization in Polish. In each of these languages clitics may be attracted by the functional head  $\Sigma$ , which encodes polarity features (assertion and negation), features related to Illocutionary Force marking, as well as focus.

By means of summary, the chart in (149) presents properties of the pronominal clitics in the languages discussed in this chapter.

## (149) Properties of pronominal clitics in South Slavic

	Bulgarian/	Macedonian	Serbo-Croatian
position	verb-adjacent, enclitic	verb-adjacent, proclitic or enclitic depending on the host	Wackernagel enclitic
ordering	Dat-Acc	Dat-Acc	Dat-Acc
pronominal clustering	yes	yes	no
type of movement	X <sup>0</sup>	X <sup>0</sup>	XP
the Person Case Constraint	yes	yes	no

# Chapter 5 The status of clitics and compound tenses in Polish

## 5.1 Introduction

It was mentioned in chapter 1 that the syntax of compound tenses displays a considerable typological variation across Slavic. Diachronically, the main reason for this diversity was the imbalanced and uneconomical system of expressing tense and aspect distinctions inherited from Proto-Slavic, which was simplified in different ways in each language group. For instance, the South Slavic languages enhanced the system mainly through a semantic reanalysis of superfluous constructions, but their compound tenses largely retained their morphological and syntactic make-up.

The present chapter is devoted to Polish, which is a West Slavic language. In comparison to South Slavic, the inventory of tenses in Polish is quite reduced: the language has lost the aspectual tenses and the pluperfect, and the former present perfect is used as the default past tense. Importantly, the impoverishment of the temporal distinctions has been accompanied by a reduction of the auxiliary forms into affixes. It will be demonstrated that this morphological process has direct consequences for the syntax of the ‘/-participle+auxiliary’ constructions.

The chapter will begin, however, with a brief overview of pronominal clitics in section 5.2. Their properties will be compared to the characteristics of clitics in South Slavic. It will be shown that the pronominal forms in Polish enjoy a greater autonomy in the clause. A review of the auxiliary clitics in section 5.3 will demonstrate that they, conversely, are gradually turning into affixes.

## 5.2 The pronominal forms

This section will describe pronominal forms in Polish. It will be shown that Polish has strong and weak pronouns, but it does not have pronominal clitics. The pronominal system in Polish will be compared to those found in the South Slavic languages.

### 5.2.1 The paradigm of pronouns

The paradigm of the pronominal clitics in Polish is presented in (1). The chart indicates that both pronouns and clitics may appear in three different cases. In comparison with nouns, which distinguish seven morphological cases, the case declension on clitics is quite reduced.

## (1) Pronominal forms in Polish

	Accusative		Genitive		Dative	
	strong	clitic	strong	clitic	full	clitic
1SG	mnie	mię (dated)	mnie	mię (dated)	mnie	mi
2SG	ciebie	cię	ciebie	cię	tobie	ci
3SG.M	jego (niego)	go	jego (niego)	go	jemu (niemu)	mu
3SG.F	ją (nią)	ją	jej (niej)	jej	jej (niej)	jej
3SG.N	je (nie)	je	jego (niego)	go	jemu (niemu)	mu
1PL	nas	nas	nas	nas	nam	nam
2PL	was	was	was	was	wam	wam
3PL.VIR	ich (nich)	ich	ich (nich)	ich	im (nim)	im
3PL.NV	je (nie)	je	ich (nich)	ich	im (nim)	im
REFL	siebie	się	siebie	się	sobie	(se) (dialectal)

(Pl, cf. Spencer 1991: 367, Franks&amp;King 2000: 150)

Some of the pronouns have an additional variant which begins with the letter *n*. These forms are used if the pronoun is the object of a preposition.

- (2) Jan pisze [do niego/\*jego]  
 Jan write<sub>PRES.3SG</sub> to him<sub>CL.ACC</sub>/him<sub>ACC</sub>  
 “Jan is writing to him” (Pl)

It has been noticed in the literature that the pronominal forms in Polish are losing their clitic status and that they increasingly tend to pattern like strong pronouns (cf. Cetnarowska 2003, Franks & King 2000, and Witkoś 1998). This observation is most often drawn from the positions occupied by the pronouns in the clause structure (cf. section 5.2.2 for details). However, the decline of the clitics is also evident in the pronominal paradigm, in which the morphological forms of some clitic and non-clitic variants are very similar. For instance, the clitic and full forms of the 1<sup>st</sup> and 2<sup>nd</sup> person plural *nas* and *nam* are orthographically the same; they only differ in their prosody: the clitics are deaccented, whereas the strong forms receive sentence stress. Moreover, some clitic forms are falling out of use and are replaced by strong variants. For example, the 1<sup>st</sup> person accusative and genitive clitic *mię* is nowadays considered archaic and the form *mnie* is normally selected instead.

## 5.2.2 The positions occupied by the pronominal forms

The distribution of pronominal forms in Polish differs from the pattern found in the South Slavic languages. In chapter 4 I noted that in Serbo-Croatian clitics must always appear in the Wackernagel position, whereas in Bulgarian and Macedonian they are verb-adjacent. In Polish pronominal clitics do not have to appear in the second (cf. 3a) or in any other specific position. Their placement is largely conditioned by information structure and prosodic factors. They are enclitic, so they need a phonological host to

their left. Therefore, in contrast to strong pronouns, they normally may not appear at the beginning of a clause (cf. 3b), and are also avoided in sentence-final contexts (cf. 3c and d). According to Franks (1998: 83), the latter restriction is due to a constraint against ending a prosodic phrase with a clitic. However, the pronominal clitics may occur at the end of a clause if there is only one other constituent in the clause available apart from them. Then the only option of avoiding the initial placement is to appear clause-finally (cf. 3e).

- (3) a. Często spotykam *go* na ulicy  
 often meet<sub>PRES.1SG</sub> him<sub>CL.ACC</sub> on street  
 “I often meet him in the street”
- b. Jego/*\*go* spotykam, ale z nim nie rozmawiam  
 him<sub>ACC</sub>/him<sub>CL.ACC</sub> meet<sub>PRES.1SG</sub> but with him<sub>INSTR</sub> NEG converse<sub>PRES.1SG</sub>  
 “HIM, I meet, but I never talk to him”
- c. ??Często spotykam *go*  
 often meet<sub>PRES.1SG</sub> him<sub>CL.ACC</sub>
- d. Spotykam *go* często  
 meet<sub>PRES.1SG</sub> him<sub>CL.ACC</sub> often  
 “I meet him often”
- e. Spotykam *go*  
 “I meet him (regularly)” (Pl, cf. Spencer 1991: 367-368)

Pronominal clitics accept a wide range of phonological hosts. They may even be hosted by extra-clausal elements, such as unaccented coordinating conjuncts *i* and *a* (cf. 4). This is a very rare pattern, which in South Slavic is found only in Bulgarian.<sup>114</sup> It indicates that the pronominal enclisis in Polish is a purely phonological requirement. It is sufficient for the pronominal clitics to be supported by any phonologically overt material, regardless of its grammatical category or feature specification.

- (4) Janek poszedł do tego pana  
 Janek *go*PART.MSG to this man  
 i *mu* wszystko powiedział  
 and him<sub>CL.DAT</sub> everything tell<sub>PART.MSG</sub>  
 “Janek went to that man and told him everything” (Pl, Rappaport 1988: 321)

As far as the ordering of the pronominal clitics with respect to each other is concerned, Polish differs from the South Slavic languages as well. In chapter 4 I showed that clitics in South Slavic cluster and always appear in a specific order, which may never be changed. For instance, the dative pronominal clitic must precede the accusative pronominal clitic, and it is impossible to reverse their ordering.

- (5) *li* Mod > AUX (except 3<sup>rd</sup> SG) > DAT > ACC > AUX 3<sup>rd</sup> SG

In Polish both the “dative-accusative” and the “accusative-dative” patterns are possible. Cetnarowska (2003) observes that the choice of a particular ordering may reflect the requirements of theme-rheme articulation. This is exemplified in (6b), which lists answers to the question in (6a).

<sup>114</sup> I will show in section 5.3.2 that in contrast to Bulgarian, auxiliary clitics may not be supported by extracausal elements in Polish, though.

- (6) a. Czy Tomek pożyczył Joannie swój samochód?  
if Tomek lend<sub>PART.MSG</sub> Joanna<sub>DAT</sub> his-own car<sub>ACC</sub>  
“Did Tomek lend his car to Joanna?”
- b. Tak, w końcu jej go pożyczył, mimo że  
yes, in end her<sub>CL.DAT</sub> it<sub>CL.ACC</sub> lend<sub>PART.MSG</sub> although  
Basi pożyczyć go nie chciał  
Basia<sub>TOP.DAT</sub> lend<sub>INF</sub> it<sub>CL.ACC</sub> NEG want<sub>INF</sub>  
“Yes, eventually he lent it to her, even though he didn’t want to lend it to Basia”
- b.’ Tak, w końcu go jej pożyczył, mimo że  
yes, in end it<sub>CL.ACC</sub> her<sub>CL.DAT</sub> lend<sub>PART.MSG</sub> although  
roweru pożyczyć jej nie chciał<sup>115</sup>  
bicycle<sub>TOP.GEN</sub> lend<sub>INF</sub> her<sub>CL.DAT</sub> NEG want<sub>INF</sub>  
“Yes, eventually he lent it to her, even though he didn’t want to lend her a bicycle” (Pl)

The two variants in (6b and b’) are synonymous. However, (6b) is concerned with Joanna (referred to as *jej* ‘her<sub>CL.DAT</sub>’), who is interpreted as the topic and contrasted with Basia. The sentence in (6b’) is about Tomek’s car (referred to as *go* ‘it<sub>CL.ACC</sub>’), which is contrasted with his bicycle. In both cases, the topics occur first in the pronominal clitic cluster.

The contrast between South Slavic and Polish is related not only to the ordering of clitics, but also to their clustering. In Bulgarian and Macedonian pronominal clitics always cluster with each other. In Polish they tend to cluster as well, but a sequence of pronominal forms can be disrupted when it is necessary to prepose one of the clitics for topic or focus reasons (cf. 7b).

- (7) a. Jan chce mu go wypożyczyć  
Jan want<sub>3SG</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> lend<sub>INF</sub>  
“Jan wants to lend it to him”
- b. Jan mu chce go wypożyczyć a nie sprzedać  
Jan him<sub>CL.DAT</sub> want<sub>3SG</sub> it<sub>CL.ACC</sub> lend<sub>INF</sub> and not sell<sub>INF</sub>  
“Jan wants to lend it to him rather than sell it” (Pl)

Moreover, in the South Slavic languages pronominal clitics are adjacent not only to each other, but also to the auxiliary clitics. In Polish pronominal clitics may be split from auxiliaries by some other constituents, such as the *l*-participle (cf. 8a) or an adverb (cf. 8b).

- (8) a. Kiedyś widział go ostatnim razem?  
when<sup>+</sup><sub>AUX.2.SG</sub> see<sub>PART.M.PL</sub> him<sub>CL.ACC</sub> last time  
“When did you see him last time?”
- b. Kiedyś naprawdę go kupił?  
when<sup>+</sup><sub>AUX.2.SG</sub> really him<sub>CL.ACC</sub> buy<sub>PART.M.PL</sub>  
“When did you really buy it? (Pl, cf. Rappaport 1988: 320-321)

The data in (6) through (8) demonstrate that pronominal clitics enjoy a remarkable freedom of placement in the clause structure in Polish. This indicates that they undergo

<sup>115</sup> The object *roweru* occurs in genitive, rather than accusative, because it is affected by the rule of ‘Genitive of Negation’, which is discussed in section 5.3.4.2.2.3.



phrasal movement and target XP positions (cf. Franks 1998), on a par with weak pronouns in Macedonian.

The proposal receives additional support from the fact that pronominal clitics in Polish do not observe the Person Case Constraint.

- (9)            *Dala-by-m*                                 *mu*                 *cię*  
 give<sup>PART,ESG</sup>+COND<sup>+</sup>AUX,1SG     him<sup>CL,DAT</sup>     you<sup>CL,ACC</sup>  
 za    żonę    bez            wahania  
 as    wife    without    hesitation  
 ‘I would give you to him as a wife without hesitation’  
(Pl, cf. Cetnarowska 2003)

The languages in which the Person Case Constraint is active require that the accusative clitic following the dative appear in the 3<sup>rd</sup> person. In (9) the accusative clitic is specified for the 2<sup>nd</sup> person, which means that the constraint does not hold in Polish. In chapter 4 I suggested that the constraint is observed only if the clitics adjoin to a single head. This is what happens in Bulgarian and Macedonian, but not in Serbo-Croatian, where each of the pronominal clitics is located in the specifier of separate agreement projections. The well-formedness of (9) therefore strengthens the proposal developed on the basis of the examples in (6) through (8) that pronominal clitics target different XP positions in Polish, and that they may not become adjoined to a single head.

The only restriction concerning the placement of pronominal clitics mentioned so far concerns their occurrence at the beginning of a clause. However, this does not mean that their position in the clause structure is determined solely by prosodic requirements. Witkoś (1998: 159) specifies the following sites that can be occupied by pronominal clitics in Polish.

- (10)    A    an adjacent postverbal position  
           B    an (adjacent) preverbal position

In other words, they have to be adjacent to the verb when they follow it (cf. 11a). They do not have to be verb-adjacent when they precede it (cf. 11b).

- (11)    a.    *Widział-em*                 *go*                 *wczoraj*     *na*    *koncercie*  
           see<sup>PART,MSG</sup>+AUX,1SG    him<sup>CL,ACC</sup>    yesterday    on    concert  
           ‘I saw him yesterday at a concert’  
           a.’    ??*Widziałem wczoraj go na koncercie*<sup>116</sup>  
           b.    *Wczoraj*    *go*                 *wszyscy*    *widzieli*     *na*    *koncercie*  
           yesterday    him<sup>CL,ACC</sup>    everyone    see<sup>PART,VIR,PL</sup>    on    concert  
           ‘Everyone saw him at the concert yesterday’  
(Pl)

I propose to capture the adjacency condition in (11a’) by arguing that the clitic *go* must reach Spec, AgrO, which is located immediately below the position occupied by the verb, in order to check accusative case. A detailed phrase structure of the Polish clause will be provided in section 5.3.4.2.4.2, after the system of auxiliary forms is examined.

To conclude, the chart in (12) presents the most important differences between the pronominal clitics in Polish and South Slavic.

<sup>116</sup> The acceptability of the sentence improves when the adverbial *na koncercie* is contrastively focused.

## (12) Properties of pronominal clitics in Polish and South Slavic

	Bulgarian	Macedonian	Serbo-Croatian	Polish
position	verb-adjacent, enclitic	verb-adjacent, usually proclitic	Wackernagel enclitic	enclitic
ordering	Dat-Acc	Dat-Acc	Dat-Acc	Dat-Acc and Acc-Dat
pronominal clustering	yes	yes	no	no
adjacent to the verb	yes	yes	no	only in the postverbal position
type of movement	X <sup>0</sup>	X <sup>0</sup>	XP	XP
the Person Case Constraint	yes	yes	no	no

The chart indicates that the pronominal forms in Polish enjoy a greater autonomy in the clause structure than their South Slavic counterparts. This makes them seem to be more like weak pronouns than clitics. They do not need to cluster or be adjacent to the verb. They undergo phrasal movement and may surface in different orderings with respect to each other.

### 5.3 The auxiliary forms and the syntax of compound tenses

The present section will discuss the syntax of compound tenses in Polish and is organized as follows. Section 5.3.1 will analyse the status of auxiliaries in Polish. Section 5.3.2.1 and 5.3.2.1 will show that the perfect and conditional auxiliaries can be either clitics or affixes, and that the latter option is a more recent diachronic development. Section 5.3.3 will discuss some previous accounts of the syntax of compound tenses in Polish, while section 5.3.4 will present an alternative analysis.

#### 5.3.1 The paradigm of the auxiliaries

Polish has two types of auxiliary clitics: perfect and conditional. The paradigm of the perfect auxiliary forms is presented in (13). Just as in other West Slavic languages and Macedonian, the singular and plural variants of the 3<sup>rd</sup> person are morphologically null.

## (13) Perfect auxiliaries in Polish

	SG	PL
1	-m	-śmy
2	-ś	-ście
3	-	-

Apart from the forms in (13), Polish has a conditional auxiliary *by*. This auxiliary carries the same inflectional endings as the perfect auxiliaries in (13).

## (14) Conditional auxiliaries in Polish

	SG	PL
1	by-m	by-śmy
2	by-ś	by-ście
3	by	by

Polish has also a future auxiliary *będzie*. It is a perfective form of the verb ‘be’, with the same person/number inflection as finite verbs in Polish (cf. section 5.3.4.2.4.1 for an explanation of differences between finite verb inflection and the person/number marking on the auxiliary clitics).

## (15) Future auxiliaries in Polish

	SG	PL
1	będę	będziemy
2	będziesz	będziecie
3	będzie	będą

The future auxiliary is not a clitic. It is accompanied by an infinitive or an *l*-participle as the main verb. The choice of either form of verb does not influence the meaning of the sentence.<sup>117</sup>

- (16) a. Janek będzie parzył kawę  
 Janek be<sub>PRF.1SG</sub> brew<sub>PART.IMP.F.MSG</sub> coffee<sub>ACC</sub>  
 “Janek will brew coffee” / “Janek will be brewing coffee”  
 b. Janek będzie parzyć kawę  
 Janek be<sub>PRF.1SG</sub> brew<sub>INF.IMP.F</sub> coffee<sub>ACC</sub> (PI)

*Będzie* imposes aspectual restrictions on the main verb, and it may appear only with imperfective forms. Hence, the variants of (16) constructed with the *l*-participle or the infinitive marked for perfective aspect are ungrammatical (cf. 17a). In order to render a future meaning with a perfective verb, the verb must be used in the present tense (cf. 17b).

- (17) a. \*Janek będzie zaparzał/zaparzać kawę  
 Janek be<sub>PRF.1SG</sub> brew<sub>PART.PRF.M.SG/brewINF.PRF</sub> coffee<sub>ACC</sub>  
 b. Janek zaparzy kawę  
 Janek brew<sub>PRF.PRES.3SG</sub> coffee<sub>ACC</sub>  
 “Janek will brew coffee” (PI)

The fact that *będzie* is followed by the infinitive might give an impression that this is a bi-clausal construction. However, Grenoble (1995) argues that this is not the case,

<sup>117</sup> Nitsch (1956) and Mikoś (1985: 454) observe that the use of the *l*-participle following *będzie* is the most common when the subject of the clause is masculine. The infinitive is found more often when the subject is plural or feminine. Both of them claim that the choice of the variant of the main verb is dictated by stylistic considerations. See Whaley (2000a: 53ff) for more discussion.

because the future auxiliary cannot form double negatives (cf. 18a). In this way it differs from modal verbs, such as *móc* ‘be able to’, which admit two negatives.<sup>118</sup>

- (18) a. Janek nie będzie (\*nie) chodzić do szkoły  
 Janek NEG be<sub>PRF.1SG</sub> NEG go<sub>INF</sub> to school  
 b. Janek nie może nie chodzić do szkoły  
 Janek NEG can<sub>1SG</sub> NEG go<sub>INF</sub> to school  
 “It is not the case that Janek may not go to school” (Pl)

Since *będzie* is not a clitic, it patterns like other finite verbs in Polish. Therefore, I postpone discussion of its syntactic behaviour to section 5.3.4.2.4.

### 5.3.2 Positions of the auxiliaries

As far as the position of the auxiliary clitics is concerned, two strategies can be distinguished. First, the auxiliaries can appear attached to the *l*-participle as affixes. This is the pattern they follow in contemporary Polish most often. It is exemplified for the perfect auxiliary in (19a) and for the conditional auxiliary in (19b).

- (19) a. Rano wyjechali-*śmy* z Wrocławia<sup>119</sup>  
 morning leave<sub>PART.VIR.PL</sub>+AUX.2PL from Wrocław  
 “We left Wrocław in the morning”  
 b. Rano wyjechali-*by-śmy* z Wrocławia  
 morning leave<sub>PART.VIR.PL</sub>+COND+AUX.2PL from Wrocław  
 “We would leave Wrocław in the morning” (Pl)

Second, the auxiliary may appear after the first constituent in main clauses, and function as a second position clitic. This variant dates back to the period when Polish was a Wackernagel clitic language (cf. chapter 1, section 1.3.4.2.2.1), but is still productive, particularly in the Southern dialects (cf. Topolińska 1961). However, in Modern Polish this is not the default strategy of the auxiliary clitic placement, and the element preceding it is always interpreted as topicalized or focused. The auxiliary most often follows the subject, especially when it is realized as a pronoun. Constructions with the auxiliary in the 2<sup>nd</sup> singular, 1<sup>st</sup> and 2<sup>nd</sup> plural are quite standard (cf. 20a); the ones with the 1<sup>st</sup> singular form are archaic (cf. 20b),<sup>120</sup> and the 3<sup>rd</sup> singular and plural forms do not exist, because the auxiliary is null in the 3<sup>rd</sup> person (cf. the chart in 13).

<sup>118</sup> The sentence in (18b) does not exemplify negative concord, because the two negations are interpreted compositionally. See Blaszcak (2001) for an extensive discussion.

<sup>119</sup> In the Polish orthographic convention the auxiliary affix is written together with the *l*-participle. However, for the sake of clarity of the presentation, the affix is italicized and preceded by a hyphen.

<sup>120</sup> In chapter 1, section 1.3.4.2.2.2 I report that the 1<sup>st</sup> person singular form of the auxiliary was the first one to be reanalyzed as an affix on the *l*-participle. The reason for this seems to be morphological ambiguity of the auxiliary clitic, which is the same as an instrumental case morpheme in one of the case paradigms.

- (20) a. My-*śmy* wyjechali z Wrocławia rano  
 we+<sub>AUX.1PL</sub> leave<sub>PART.VIR.PL</sub> from Wrocław morning  
 “We left Wrocław in the morning”
- a'. My-*by-śmy* wyjechali z Wrocławia rano  
 we+<sub>COND+<sup>+</sup>AUX.1PL</sub> leave<sub>PART.VIR.PL</sub> from Wrocław morning  
 “We would leave Wrocław in the morning”
- b. %Ja-*m* wyjechał z Wrocławia rano (*dated*)  
 I+<sub>AUX.1SG</sub> leave<sub>PART.MSG</sub> from Wrocław morning  
 “I left Wrocław in the morning”
- b'. Ja-*by-m* wyjechał z Wrocławia rano  
 I+<sub>COND+<sup>+</sup>AUX.1SG</sub> leave<sub>PART.MSG</sub> from Wrocław morning (Pl)

The auxiliary clitic may also be preceded by a topicalised prepositional phrase (cf. 21a), an object (cf. 21b and c), an adverbial, an AP (cf. 21d), a complementizer (cf. 21e), or a *wh*-phrase (cf. 21f).

- (21) a. Z Warszawy-*śmy* wyjechali rano  
 from Warsaw+<sub>AUX.1PL</sub> leave<sub>PART.VIR.PL</sub> morning  
 “We left Warsaw in the morning” (... but we left Kraków in the evening)
- b. Książkę-*ś* o Polsce napisał  
 book+<sub>AUX.2SG</sub> about Poland write<sub>PART.MSG</sub>  
 “You wrote a book about Poland” (... and not an article)
- c. Książkę o Polsce-*ś* napisał  
 book about Poland+<sub>AUX.2SG</sub> write<sub>PART.MSG</sub>  
 “You wrote a book about Poland” (... and not about the Czech Republic)
- d. Bliski-*ś* mi jak brat  
 close +<sub>AUX.2SG</sub> me<sub>CL.DAT</sub> as brother  
 “You are as close to me as my brother”
- e. Zauważył-*em*, że-*ś* uciekł  
 notice<sub>PART.MSG+<sup>+</sup>AUX.1SG</sub> that+<sub>AUX.2SG</sub> run-away<sub>PART.MSG</sub>  
 “I noticed you’ve run away”
- f. Kiedy-*ście* przyjechali?  
 when+<sub>AUX.2PL</sub> arrive<sub>PART.VIR.PL</sub>  
 “When did you arrive?” (Pl, cf. Mikoś & Moravcsik 1986)

However, the auxiliary clitic may not encliticize on all types of lexical elements. For instance, coordinating conjunctions *i* and *a* may not lend support to auxiliary clitics (cf. 22) even though they may serve as hosts for pronominal clitics (cf. 4 above).

- (22) a. \*Poszedłem do tego pana  
 go<sub>PART.MSG+<sup>+</sup>AUX.1SG</sub> to this man  
 i-*m* mu wszystko powiedział  
 and+<sub>AUX.1SG</sub> him<sub>CL.DAT</sub> everything tell<sub>PART.MSG</sub>  
 “I went to this man and told him everything”
- b. Poszedłem do tego pana i mu wszystko powiedział-*em*  
 (Pl, cf. Rappaport 1988: 321)

There is some disagreement in the literature concerning the range of positions that can be occupied by the auxiliary clitic. Franks (1998) and Franks and Bański (1999) argue that when the auxiliary is not an affix on the *l*-participle (cf. 23a), it may appear anywhere in the clause as long as it precedes the *l*-participle (cf. 23e).

- (23) a. My znowu wczoraj poszli-*śmy* do parku  
 we again yesterday go<sub>PART.VIR.PL</sub> + AUX.IPL to park  
 “We went to the park yesterday again”  
 b. My-*śmy* znowu wczoraj poszli do parku  
 c. My znowu-*śmy* wczoraj poszli do parku  
 d. My znowu wczoraj-*śmy* poszli do parku  
 e. \*My znowu wczoraj poszli do parku-*śmy* (Pl, cf. Franks 1998)

These examples have been repeatedly quoted by different authors, but their acceptability varies among native speakers. For example, neither I nor any other native speakers I have consulted find (23d) to be acceptable. In fact, (23c) is not completely well-formed, either; it is only saved by the fact that the auxiliary encliticizes on the adverbial *znowu* ‘again’, which here must be necessarily interpreted as focused.<sup>121</sup> The most felicitous position for the auxiliary clitic is (23b), in which it immediately follows the first element in the sentence.

Thus, the claim that the auxiliary clitics may appear “anywhere” in the clause preceding the *l*-participle is definitely too strong. It seems that the clitics show a strong tendency to appear in the second position (cf. Mikoś & Moravcsik 1986 for a similar view).

Summarizing, it has been shown that there are two patterns of the auxiliary placement in Polish: affixation on the *l*-participle and encliticization on non-verbal hosts in the clause initial positions. The next two sections will examine these two patterns in detail and demonstrate how they differ.

### 5.3.2.1 Auxiliaries as clitics

The following sections will discuss the properties of the auxiliary clitics in Polish. I have mentioned earlier that whenever the auxiliary is not affixed on the *l*-participle, it must encliticize on the clause-initial element. However, it is still necessary to determine whether the process is only triggered by phonological requirements of the auxiliary enclitic, or whether it has syntactic effects as well.

#### 5.3.2.1.1 Placement of the auxiliary clitic – syntax or phonology?

The auxiliary clitics tend to occupy the second position in Polish. In this way they resemble clitics in Serbo-Croatian. In chapter 4, section 4.4.1.3.1 I reported that according to some analyses, cliticization in Serbo-Croatian is determined by rules of phonology, because clitics seem capable of splitting syntactic constituents. As indicated in (24), at first blush the auxiliaries may appear inside constituents in Polish as well.

<sup>121</sup> In this way Polish resembles Czech, which is a very closely related language. Clitics must appear in the Wackernagel position in Czech. However, there are exceptional contexts in which clitics may occur embedded further in the clause than in the second position, and encliticize on the element that is focused (e.g. *Petr* in ib). This pattern is often referred to as “clitic slippage” in the literature (cf. Short 2002: 495).

- (i) a. Helena řkala, že *se* Petr odstěhoval  
 Helena say<sub>PART.F.SG</sub> that CL.REFL Petr move-away<sub>PART.M.SG</sub>  
 “Helena said that Peter had moved”  
 b. Helena řkala, že PETR *se* odstěhoval  
 “Peter, Helena said, had moved” (Czech, Franks 1998)

- (24) a. Którego-*ście* studenta oblali?  
 which+AUX.2PL student fail<sub>PART.VIR.PL</sub>  
 “Which student did you fail, after all?”
- b. Tego-*m* piosenkarza znał  
 this<sub>ACC</sub>+AUX.1SG singer<sub>ACC</sub> know<sub>PART.MSG</sub>  
 “I knew this singer!”
- c. Bardzo-*śmy* świadomi tych problemów byli  
 very+AUX.1PL aware<sub>VIR.PL</sub> these problems be<sub>PART.VIR.PL</sub>  
 “We were aware of these problems VERY well”
- d. Bardzo świadomy-*ś* tych problemów był  
 very aware<sub>VIR.SG</sub>+AUX.2SG these problems be<sub>PART.MSG</sub>  
 “You were aware of these problems very well”  
 (Pl, Borsley & Rivero 1994: 395ff; Rappaport 1988: 322)

Thus, in (24a) the auxiliary clitic encliticizes on the wh-word *którego*, which is separated from its complement *student*. Likewise, in (24b) the auxiliary intervenes between the demonstrative *tego* and the DP *piosenkarza*. In (24c) the auxiliary splits the adverb *bardzo* from the adjective it premodifies. Example (24d) indicates that the clitic does not have to appear after the first head. Here it follows the first phrase (AP), *bardzo świadomy*. The AP is separated from the copula *był* by the scrambled DP *tych problemów*.

However, as in the case of Serbo-Croatian, placement of these elements in front of the auxiliary clitics can be shown to be a result of left-branch extraction, which is widely available in Polish (cf. Corver 1992; Rappaport 2000, and Bošković 2005). Moreover, the examples in (25) indicate that the left branch extraction may also occur across non-clitic elements, so it is not conditioned by the clitic status of the auxiliary verb.

- (25) a. Którego oblejesz studenta?  
 which fail<sub>PRES.PRF.2SG</sub> student  
 “Which student are you going to fail?”
- b. Tego chcę zobaczyć piosenkarza, który jest najlepszy  
 this<sub>ACC</sub> want<sub>1SG</sub> see<sub>PRF.INF</sub> singer<sub>ACC</sub> who be<sub>3SG</sub> best  
 “I want to see the singer who is the best”
- c. Bardzo jesteśmy świadomi tych problemów  
 very be<sub>1PL</sub> aware<sub>VIR.PL</sub> these problems  
 “We are aware of these problems very well”
- d. Bardzo świadomy jestem tych problemów  
 very aware<sub>MSG</sub> be<sub>1SG</sub> these problems  
 “I am aware of these problems very well” (Pl)

Furthermore, it is possible to show the clitic may only follow an element that has independently undergone syntactic movement. For example, neither the auxiliary clitic nor a lexical verb may intervene between a preposition and its complement (cf. 26). From a phonological point of view, this position should be accessible for a clitic, because the preposition is an independent phonological word that can be stressed.

- (26) a. do Krakowa-*ś* pojechał  
 to Cracow+AUX.2SG go<sub>PART.MSG</sub>  
 “You went to Cracow”
- a'. \*do-*ś* Krakowa pojechał

- b. do Krakowa jedziesz  
 to Cracow g<sub>OPRES,2SG</sub>  
 “You are going to Cracow”  
 b?. \*do jedziesz Krakowa (Pl, cf. Borsley & Rivero 1994: 406)

However, from a syntactic point of view the restriction is to be expected, because prepositions can never be extracted in Polish.

- (27) a. O czym Jan rozmawia?  
 about what Jan talk<sub>3SG</sub>  
 “What is Jan talking about?”  
 b. \*Czym Jan rozmawia o? (Pl, cf. Borsley & Rivero 1994: 406)

Thus, I conclude that in Polish, just as in Serbo-Croatian, placement of the auxiliary clitics is determined by syntax, rather than phonology.

### 5.3.2.1.2 Prosodic and morphological interactions between the auxiliary and its host

We have seen that the auxiliary clitic may only appear after the first syntactic position in the clause. This section will provide more evidence for the idea that even though the auxiliary clitic is phonologically impoverished, it is an independent syntactic unit.

As an enclitic, the auxiliary needs phonological support. However, this does not mean that it forms a morphological or prosodic word with its host. Example (28) shows that the second auxiliary clitic may be optionally deleted in a coordinated clause consisting of two adjectives if the other clitic is identical.

- (28) Zmęczony<sub>+m</sub> i głodny<sub>(+m)</sub>  
 tired<sub>ADJ.M.SG+AUX.1SG</sub> and hungry<sub>(+AUX.1SG)</sub>  
 “I am tired and hungry” (Pl, cf. Franks & Bański 1999)

The deletion of the second clitic should be prohibited if the auxiliary were a part of the inflection of the host, because this would involve deletion of a part of a word. The fact that this is possible indicates a non-morphological relation between the auxiliary and its adjectival host.

Furthermore, encliticization of the auxiliary on non-verbal elements does not influence word stress placement, which would be expected if the process were a result of a phonological operation. Word stress is very regular in Polish and almost without exception falls on the penultimate syllable, which is capitalized in (29).

- (29) a. któREgo  
 which  
 b. BArdzo  
 very (Pl)

As demonstrated in (30), the penultimate stress of the word followed by the auxiliary clitic is retained. This means that the clitics does not enter the prosodic word of the non-verbal host.



- (30) a. któREgo-*ście*  
 which<sub>ACC</sub>+AUX.2PL  
 b. BARDzo-*śmy*  
 very+AUX.1PL (Pl, cf. Bański 2000: 65)

However, even though the encliticization of the auxiliary is a syntactic process, its actual realization might be influenced by prosodic factors. Bański (2000: 96) points out that the encliticization is possible when the final syllable of the clitic host does not have a coda; that is, when it ends in a vowel.<sup>122</sup>

- (31) a. do Krakowa-*ś* pojechał  
 to Cracow<sub>GEN</sub>+AUX.2SG gOPART.M.SG  
 “You went to Cracow”  
 b. \*do Katowic-*ś* pojechał  
 to Katowice<sub>GEN</sub>+AUX.2SG gOPART.M.SG  
 b'. do Katowic pojechał-*eś*  
 to Katowice<sub>GEN</sub> gOPART.M.SG+AUX.2SG (Pl)

Otherwise, when the auxiliary encliticization is blocked for phonological reasons, a focus particle *że* might be inserted to provide appropriate support for the clitic (cf. section 5.3.4.1.3 for a detailed description of *że* support).

- (32) do Katowic-*że-eś* pojechał  
 to Katowice<sub>GEN</sub>+FOC+AUX.2SG gOPART.M.SG  
 “You went to Katowice?” (Pl)

The next section will investigate the properties of the auxiliary when it is affixed on the *l*-participle.

### 5.3.2.2 Auxiliaries as affixes

The auxiliaries in Polish may also appear as affixes on the *l*-participle. This is a more common strategy than the encliticization of the auxiliary on the clause-initial element. It also represents a more recent stage in the diachrony of the syntax of compound tenses.

When the auxiliary is an affix on the *l*-participle, the relationship between the two elements is closer than in the case of auxiliary clitics and their non-verbal hosts. Suitable evidence for it comes from morphological and prosodic patterns.

First of all, as an affix, the auxiliary may not be separated from the participle by any overt material (cf. 33a), not even by pronominal clitics (cf. 33b).

- (33) a<sub>1</sub>. Kupili-*śmy* lustro  
 buy<sub>PART.VIR.PL</sub>+AUX.1PL mirror  
 “We bought a mirror”  
 a'. \*Kupili lustro-*śmy*

<sup>122</sup> This is a descriptive statement and certainly not a rule. The actual realization of this tendency varies among speakers.

- b<sub>1</sub>. Dale-ś mi go  
 give<sub>PART.MSG</sub>+AUX.2SG me<sub>CL.DAT</sub> it<sub>CL.ACC</sub>  
 ‘‘You gave it to me’’
- b'. \*Dal mi go -ś (Pl, cf. Borsley & Rivero 1994: 386; 394)

In this way Polish differs from the South Slavic languages, in which the pronominal clitics always intervene between the *l*-participle and the 3<sup>rd</sup> person auxiliary.

- (34) a. Dal mu go e  
 give<sub>PART.MSG</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub> be<sub>AUX.3SG</sub>  
 ‘‘He gave it to him’’
- b. Dal sūm mu go  
 give<sub>PART.MSG</sub> be<sub>AUX.1SG</sub> him<sub>CL.DAT</sub> it<sub>CL.ACC</sub>  
 ‘‘I gave it to him’’ (Bg)

In Polish the 3<sup>rd</sup> person singular and plural forms of the auxiliary disappeared from the paradigm between the 15<sup>th</sup> and the 17<sup>th</sup>. This was an important step in the evolution of the compound tenses in Polish, because it meant that the *l*-participle and the auxiliary clitics to the right of it became unexceptionally adjacent. Thus, the loss of the 3<sup>rd</sup> person form certainly speeded up the reanalysis of auxiliary clitics as affixes. However, as will be demonstrated by using a variety of prosodic and morphological tests, the process has still not been completed.

The first test is related to the phonological rule of Vowel Raising and has been described by Booij & Rubach (1987), among others. The rule applies to stems that have /o/ before a voiced consonant in the last syllable. In some specifically defined contexts, when the vowel is not followed by any other vowel within the same word, it raises to [u], which is orthographically represented as *ó*. The rule is informally described in (35).

- (35) /o/ → [u] / \_ +voice C<sub>0</sub> # (B. Hermans, p.c.)

In this way the following outputs are obtained.

- (36) a. Anna pomogła  
 Anna help<sub>PART.F.SG</sub>  
 ‘‘Anna helped’’
- b. Jan pomógł  
 Jan help<sub>PART.M.SG</sub>  
 ‘‘Jan helped’’ (Pl)

As indicated in (37), the rule does not operate when the perfect auxiliaries are added. This suggests that they are not perceived by speakers as separate words (that is, as clitics), but rather as parts of the verb (that is, as affixes). Therefore, /o/ does not count as the last vowel in the word.

- (37) a. ja mogł-em I can<sub>PART.MSG</sub>+AUX.1SG  
 ‘‘I could’’
- b. my mogli-smy we can<sub>PART.VIR.PL</sub>+AUX.1PL  
 ‘‘We could’’ (Pl)

By contrast, the rule is at work with the conditional auxiliary *by* followed by the perfect auxiliary. This indicates that *by* is not an affix.

- (38)           Ja mógł-*by-m*  
 I    can<sub>PART.M.SG</sub>+COND<sup>+</sup>AUX.1SG  
 “I could have” (PI)

However, there are some other prosodic tests, which indicate that the reanalysis of the perfect auxiliary clitics as affixes has not been completed, because the auxiliaries are not uniformly interpreted as affixes throughout the whole paradigm (cf. also section 1.3.4.2.2.2 in Chapter 1). One of them is related to stress assignment, which in Polish almost without exception falls on the penultimate syllable. The paradigm of the perfective auxiliaries shows a split between the singular and the plural forms, because the stress assignment rule applies only in the singular. The whole paradigm is presented in (39) for the *l*-participle *czytał* ‘read’, with the stressed syllable capitalized and the auxiliaries in *italics*.

- (39)

	SG	PL
1	<i>czyTAl-em</i>	<i>czyTAl-i-śmy</i>
2	<i>czyTAl-eś</i>	<i>czyTAl-i-ście</i>
3	CZYtal <sub>M</sub>	czyTAl <sub>VIR</sub>
	czyTAl <sub>F</sub>	czyTAl <sub>NON-VIR</sub>
	czyTAl <sub>N</sub>	

Thus, the stress patterns show that the reanalysis of the auxiliary as an affix is more advanced among the singular forms. The perfective auxiliaries in the plural are still treated as clitics, given that the part+aux complexes receive the antepenultimate stress. Still, an increasing number of speakers applies the rule to the plural forms as well, and stress the penultimate syllable, even though this is still considered substandard by normative linguists.

Example (38) indicates that the conditional auxiliary *by* is not an affix, because its attachment to the *l*-participle does not trigger the rule of Vowel Raising. This fact is further verified by stress assignment in the ‘participle+*by*+perfect auxiliary’ formations. As the chart in (40) demonstrates, the conditional auxiliary does not enter the prosodic word of the host, on a par with the plural forms in (39).

- (40)

	SG	PL
1	CZYtal- <i>by-m</i>	czyTAl-i- <i>by-śmy</i>
2	CZYtal- <i>by-ś</i>	czyTAl-i- <i>by-ście</i>
3	CZYtal- <i>by</i> <sub>M</sub>	czyTAl-i- <i>by</i> <sub>VIR</sub>
	czyTAl <sub>F</sub> - <i>by</i> <sub>F</sub>	czyTAl <sub>NON-VIR</sub> - <i>by</i> <sub>NON-VIR</sub>
	czyTAl <sub>N</sub> - <i>by</i> <sub>N</sub>	

There is also syntactic evidence for the divergent status of the perfect auxiliaries in the singular on the one hand, and the conditional auxiliaries and perfect auxiliaries in the plural on the other hand. Mikoś & Moravcsik (1986) and Franks & Bański (1999) point out that the singular forms of identical perfect auxiliaries cannot be deleted in structures with coordinated *l*-participles.

- (41) a. Czytal-*em* i ziewal-*em*  
 read<sub>PART.M.SG</sub>+AUX.1SG and yawn<sub>PART.M.SG</sub>+AUX.1SG  
 “I was reading and yawning”  
 b. \*Czytal-*em* i ziewal-~~*em*~~ (PI)

In this way the auxiliary *-em* resembles the person/number inflection on finite verbs, which cannot be deleted under identity, either.

- (42) a. Daj-*esz* i bierz-*esz*  
 give<sub>2SG</sub> and take<sub>2SG</sub>  
 “You give and take”  
 b. \*Dajesz i bierz-~~*esz*~~ (PI, cf. Bański 2000: 77)

However, it is possible to elide the perfect auxiliary in the plural, but only when the normative, antepenultimate stress pattern is applied (cf. 43a). When the participle is stressed in the “substandard” way, the coordination with a deleted perfect auxiliary is ruled out (cf. 43b).

- (43) a. CzytAli-*śmy* i piSAli  
 read<sub>PART.VIR.PL</sub>+AUX.1PL and write<sub>PART.VIR.PL</sub>  
 “We read and wrote”  
 b. \*CzytaLI+*śmy* i pisaLI (PI)

This shows that the auxiliary deletion is impossible for the speakers that treat the participle-auxiliary complex as a single word, with the auxiliary being an inflection affix on the *l*-participle.

To my knowledge, all speakers stress the penultimate syllable of the *l*-participle when it is followed by the conditional auxiliary *by*. Therefore, the conditional auxiliaries can be always deleted in structures with coordinated *l*-participles under identity.

- (44) CZYtal-*by-m* i PIsal-~~*by-m*~~  
 read<sub>PART.M.SG</sub>+COND+AUX.1SG and write<sub>PART.M.SG</sub> (PI)

To summarize, it has been shown that the auxiliaries in Polish exhibit two different morphological patterns: they can be either clitics or affixes on the *l*-participle. The intriguing question is whether these two patterns can receive a single syntactic treatment. Four previous approaches to this problem will be presented in the next section.

### 5.3.3 Some previous accounts of the syntax of compound tenses in Polish

A number of analyses of the structure of compound tenses in Polish have been suggested in the literature (cf. Witkoś 1998 and Błaszczak 2001 for an overview). Here I selected only four, which represent different ways of accounting for the divergent properties of the auxiliary clitics and affixes. The proposals make various statements as to the position of the auxiliary clitics and affixes in the clause structure, the projections in which the perfect and conditional auxiliaries originate, as well as to whether

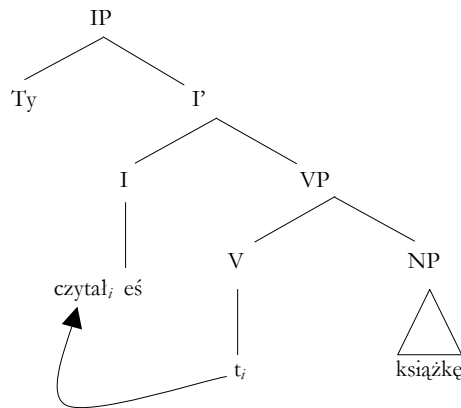
affixation and encliticization of the auxiliary takes place derivationally (i.e., in syntax) or in the lexicon.

### 5.3.3.1 Borsley & Rivero (1994)

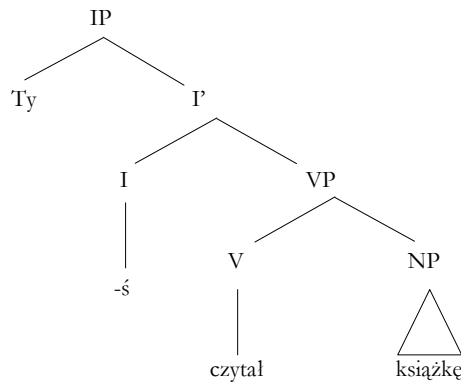
Borsley & Rivero (1994), henceforth B&R, offer the earliest syntactic account of the compound tenses in Polish. Many of the later analyses were put forward in response to B&R's approach; therefore it is necessary to present their assumptions in some detail.

B&R argue that both affixation of the auxiliary on the *l*-participle (cf. 45a) and the encliticization of the auxiliary on non-verbal forms (cf. 45b) occur via head movement. In the first instance the *l*-participle incorporates into the auxiliary. In the second instance the *l*-participle stays in situ, and the auxiliary encliticizes on a non-verbal element, such as the subject pronoun *ty* at PF

- (45) a. Ty    czytal-es                    książkę  
 you    read<sub>PART.MSG</sub>+AUX.2SG    book<sub>ACC</sub>  
 "You have read the book"



- b. Ty-ś                    czytal                    książkę  
 you+AUX.2SG    read<sub>PART.MSG</sub>    book<sub>ACC</sub>



As far as the position of the auxiliaries is concerned, B&R assume that both the perfect and the conditional forms occupy I<sup>0</sup>, because they are inseparable from each other (cf. 46b). Thus, the sequence of the *l*-participle *chciał* and the auxiliary complex *by-ś* in (46a) receives the analysis given in (46a').

- (46) a. *Chciał-by-ś*  
 want<sub>PART.MSG</sub>+COND+AUX.2SG  
 "You would like to"  
 a'. [I V<sub>i</sub> [<sub>Aux</sub> COND]] t<sub>i</sub>  
 b. \**By-chciał-eś* (Pl, cf. Borsley & Rivero 1994: 389)

Let me briefly evaluate B&R's account on the basis of the arguments they put forward themselves, as well as the data presented in section 5.3.2.

B&R's idea of the participle-to-auxiliary incorporation gains support from the penultimate stress assignment, which is frequently recalculated when the auxiliary is affixed to the *l*-participle (cf. the chart in 39 and the examples in 47). This suggests that the participle-auxiliary complex is interpreted as a single word.

- (47) a. *Ty-ś CZYtał książkę*  
 you+AUX.2SG read<sub>PART.MSG</sub> book<sub>ACC</sub>  
 "You've read the book"  
 b. *Ty czyTAł-eś książkę*  
 you read<sub>PART.MSG</sub>+AUX.2SG book<sub>ACC</sub> (Pl)

Moreover, some evidence for B&R's hypothesis comes from divergent requirements for adjacency between the *l*-participle and the auxiliary, which are related to the ordering between these two constituents. As demonstrated in (48), when the auxiliary occurs to the right of the *l*-participle, it must be adjacent to it. It may never be separated from the *l*-participle by any other constituent (cf. 48a), not even by pronominal clitics (cf. 48b).

- (48) a. *Dal-eś mi książkę*  
 give<sub>PART.MSG</sub>+AUX.2SG me<sub>CL.DAT</sub> book<sub>ACC</sub>  
 "You gave me a book"  
 a'. \**Dal książkę-eś mi*  
 b. *Dal-eś mi go*  
 give<sub>PART.MSG</sub>+AUX.2SG me<sub>CL.DAT</sub> it<sub>CL.ACC</sub>  
 "You've given it to me"  
 b'. \**Dal-mi-go-ś* (Pl, Borsley & Rivero 1994: 389)

By contrast, the auxiliary need not be left-adjacent to the *l*-participle. Whenever it encliticizes on non-verbal clause-initial elements, it can be separated from the participle by other constituents, such as the direct object in (49a and b) or the adverbial in (49c).

- (49) a. *Ewy-ś książkę czytał*  
 Ewa<sub>GEN</sub>+AUX.2SG book<sub>ACC</sub> read<sub>PART.MSG</sub>  
 "It's Ewa's book you have read"  
 b. *Ty-ś ten list napisał*  
 you+AUX.2SG this letter<sub>ACC</sub> write<sub>PART.MSG</sub>  
 "You've written this letter" (... and not read it)

- c. My-*śmy* szybko opróżnili lodówkę  
 we+<sub>AUX.1PL</sub> quickly empty<sub>PART.VIR.PL</sub> fridge<sub>ACC</sub>  
 “We have quickly emptied the fridge” (Pl)

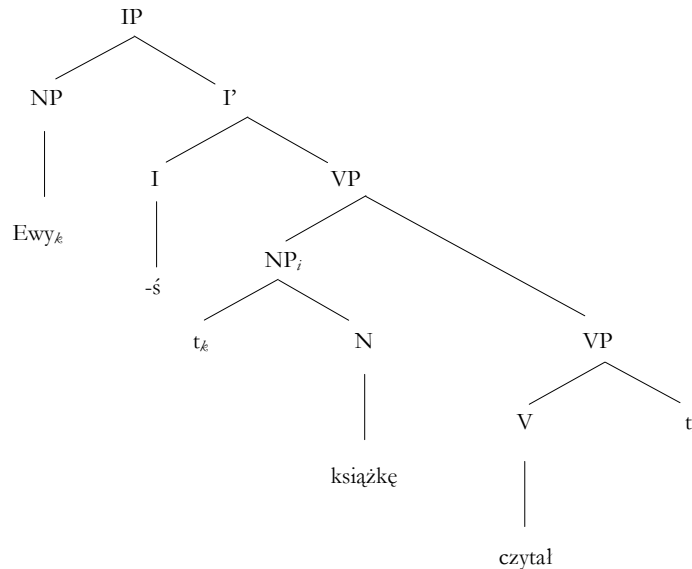
Thus, it is possible to make a generalization that whenever the *l*-participle raises, it must incorporate (or left-adjoin) to the auxiliary. When the *l*-participle remains in situ (cf. 49), the auxiliary encliticizes on the clause-initial element.

As far as the position occupied by the auxiliary is concerned, B&R observe that it is equally accessible for present tense verbs (cf. 50b) and for the *l*-participle (cf. 50c).

- (50) a. Ewy-*ś* książkę czytał  
 Ewa<sub>GEN</sub>+<sub>AUX.2SG</sub> book<sub>ACC</sub> read<sub>PART.MSG</sub>  
 “It’s Ewa’s book you have read”  
 b. Ewy czytasz książkę  
 Ewa<sub>GEN</sub> read<sub>2SG</sub> book<sub>ACC</sub>  
 “It’s Ewa’s book you’re reading”  
 c. Ewy czytale-*ś* książkę  
 Ewa<sub>GEN</sub> read<sub>PART.MSG</sub>+<sub>AUX.2SG</sub> book<sub>ACC</sub>  
 “It’s Ewa’s book you have read” (Pl, Borsley and Rivero 1994 397-398)

In B&R’s view this indicates that finite verbs, auxiliary clitics, and the *l*-participle+auxiliary complexes have the same distribution and that they may all occupy I<sup>0</sup>. The direct object *Ewy* is claimed to undergo scrambling and move to Spec, IP, as exemplified for (50a) in (51; cf. Borsley & Rivero 1994: 402)

(51)



However, B & R acknowledge that there are types of clauses in which certain positions are restricted for movement of the *l*-participle and finite verbs, but not for the

auxiliaries. For instance, the auxiliaries may appear between two *wh*-words (52a and b), but this position is inaccessible for the *l*-participle (cf. 52c).

- (52) a. Co komu-ś dal?  
 what whom+AUX.2SG givePART.MSG  
 “What did you give to whom?”  
 a’. Co-ś komu dal?  
 b. Gdzie kto *by* poszedł?  
 where who COND goPART.MSG  
 “Who would go where?”  
 b’. Gdzie *by* kto poszedł?  
 c. Co komu dal-eś?  
 what whom givePART.MSG+AUX.2SG  
 “What did you give to whom?”  
 c’. \*Co dal-eś komu? (Pl, Borsley & Rivero 1998: 410)

The well-formedness of (52a and b) is unproblematic for B&R, as they assume, following Rudin (1988), that only the first *wh*-word fills the Spec, CP position in Polish, whereas the other *wh*-phrases are adjoined to IP. On this approach the two *wh*-words precede I<sup>0</sup>, which allows them to maintain the idea that the auxiliary is always located in the same position. In order to account for the acceptability of (52a’ and b’), in which the auxiliary appears after the first *wh*-word, they suggest that the auxiliary can be adjoined to IP in the same way as a *wh*-word. According to B&R, this proposal is supported by the fact that in clauses with three *wh*-elements, the auxiliary may intervene between each of them.<sup>123</sup>

- (53) a. Co *by-ś* komu kiedy dal?  
 what COND+AUX.2SG whom when givePART.MSG  
 “What would you give to whom when?”  
 b. Co komu *by-ś* kiedy dal?  
 c. Co komu kiedy *by-ś* dal? (Pl, cf. Borsley & Rivero 1998: 409)

In my view the suggestion that the auxiliary, which is a head, may adjoin to IP has a dubious value on the assumption that heads may adjoin only to other heads. Apart from that, the proposal that the auxiliary may optionally adjoin to other categories seems quite *ad hoc* and weakens the initial hypothesis that it is always located in a single syntactic site.

B&R do not explain why the positions between the *wh*-words cannot be accessed by the *l*-participle.<sup>124</sup> Clearly, the clitic status of the auxiliary does not play a role here; because the non-clitic future auxiliary *będzie* may intervene between *wh*-phrases as well, as B&R observe themselves.

<sup>123</sup> B&R do not mention that the auxiliary may also follow all the three *wh*-words (cf. 53c). I add this example for consistency of the presentation.

<sup>124</sup> In fact, B&R’s statement is too strong, because the *l*-participle may be sandwiched between two *wh*-elements when the first *wh*-word is not D-linked. See Dornisch (1995) for details and Lubańska (2005) for an in-depth analysis of *wh*-movement in Polish.



- (54) a. Co komu będziesz rozdawał?  
 what whom be<sub>PRF.2SG</sub> give-away<sub>PART.MSG</sub>  
 “What will you give away to whom?”  
 b. Co będziesz komu rozdawał? (Pl, cf. Borsley & Rivero 1998: 409)

Moreover, B&R’s idea that both auxiliary encliticization and incorporation of the *l*-participle into the auxiliary affix occur in the same structure does not pay attention to different interpretations triggered by these two processes. As was noted in section 5.3.2.2, the affixation of the auxiliary onto the *l*-participle is the default strategy of forming compound tenses and conditional structures in Modern Polish. Conversely, encliticization of the auxiliaries into the clause-initial element always gives rise to a focused or topicalized reading. B&R argue that this element targets Spec, IP, on a par with subjects, but crosslinguistically the occupants of the subject position are not normally interpreted as focused. In fact, it will be shown in section 5.3.4.1 that the constituents that encliticize onto the auxiliary undergo A’-movement, so they cannot target Spec, IP (TP).

Furthermore, Dornisch (1997) and Witkoś (1998 ch. 1) point out empirical shortcomings of B&R’s proposal. For instance, they observe that when the *l*-participle is affixed to the auxiliary, it can be either preceded or followed by a pronominal clitic (cf. 55a). However, when the auxiliary encliticizes to an element at the beginning of the clause, the pronominal clitic can occur only between the auxiliary and the *l*-participle (cf. 55b), but it may not precede the auxiliary (cf. 55b’).

- (55) a. My (go) spotkali-*śmy* (go) wczoraj  
 we him<sub>CL.ACC</sub> meet<sub>PART.VIR.PL</sub>+AUX.IPL him<sub>CL.ACC</sub> yesterday  
 “We met him yesterday”  
 b. My-*śmy* (go) spotkali (go) wczoraj  
 we+AUX.IPL him<sub>CL.ACC</sub> meet<sub>PART.VIR.PL</sub> him<sub>CL.ACC</sub> yesterday  
 b.’ \*My go-*śmy* spotkali wczoraj (Pl, cf. Dornisch 1997: 191)

The acceptability difference between (55a) and (55b’) poses a problem for B&R’s idea that the auxiliary in Polish is always generated in the same position. If this were the case, the clitic *go* should always be able to appear on both sides of the *l*-participle.<sup>125</sup>

In spite of the shortcomings mentioned above, B&R’s hypothesis successfully captures the fact that the perfect and conditional auxiliaries in Polish can be both enclitics and auxiliaries in syntactic terms. In the latter case they stay in a much closer relationship with the *l*-participle than in the corresponding constructions in South Slavic. Therefore, in an alternative account of the syntax of compound tenses in Polish developed in section 5.3.4 I will adopt B&R’s idea that the *l*-participle incorporates into the auxiliary in I<sup>0</sup> (T<sup>0</sup>).

### 5.3.3.2 Bošković (1997)

Boskovic (1997) extends his analysis of participle fronting in Serbo-Croatian (cf. chapter 2, section 2.2.2) to Dutch and Polish. In his brief overview of Polish data he claims that in Polish, just as in Serbo-Croatian, the participle head-adjoins to the auxiliary located in Aux<sup>0</sup>. The process is triggered by an [+aux] feature. The idea that

<sup>125</sup> In my opinion, the sentence in (55b’) is excluded because the auxiliary clitic does not appear in the second position.

the two elements are adjoined gains support from the fact that no lexical material may intervene between the *l*-participle and the conditional auxiliary (cf. 56c).

- (56) a. [AuxP Chcial<sub>l</sub>-eś [VP t<sub>i</sub> t<sub>e</sub> książkę]]  
           want<sub>PART.M.SG+AUX.2SG</sub> this book  
           ‘‘You wanted this book’’
- b. Chcial<sub>l</sub>+by+ś t<sub>j</sub> t<sub>i</sub> t<sub>e</sub> książkę  
       want<sub>PART.M.SG+COND+AUX.2SG</sub> this book  
       ‘‘You would want this book’’
- c. \*Chcial t<sub>e</sub> książkę by-ś  
       want<sub>PART.M.SG</sub> this book COND+AUX.2SG (Pl, Bošković 1997: 173-174)

Unlike B&R, who suggest that both the perfect auxiliary and the conditional auxiliary *by* are generated in the same head position, Bošković argues that *by* is higher in the structure and takes the AuxP headed by the perfect auxiliary as its complement. In this way he accounts for the fact that the participle is always adjoined to the highest verbal head in the sequence. If both the perfect auxiliary and the conditional auxiliary are present, the participle may adjoin only to the latter. This is evidenced by the example in (57), in which the presence of a higher verbal head above the *l*-participle precludes its adjunction to the perfect auxiliary *-(e)ś*.

- (57) \*By chcial-eś t<sub>e</sub> książkę  
       COND want<sub>PART.M.SG+AUX.2SG</sub> this<sub>ACC</sub> book<sub>ACC</sub>  
       ‘‘You would want this book’’ (Pl, Bošković 1997: 174)

Bošković concludes the *l*-participle in Polish adjoins to the highest verbal head available. However, if there is more than one auxiliary in the clause, *by* must adjoin to the highest verb as well (cf. 56b).

Bošković’s analysis of the compound tense formation in Polish is not extensive and is used by him mainly to support his theories of participle movement in Dutch and Serbo-Croatian. However, his idea that the conditional auxiliary is generated in a different position than the perfect auxiliary will be used in an alternative analysis of participle movement in Polish presented in section 5.3.4.

### 5.3.3.3 Szczegielniak (1997)

Szczegielniak tries to recast B&R’s proposal in a Minimalist theory of feature checking (Chomsky 1995). Moreover, drawing on the ideas of Cardinaletti and Starke (1999: 187) concerning the architecture of clitic pronouns (cf. chapter 4, section 4.4.2.4.2.4.1), he argues that clitic auxiliaries have a similar impoverished morphological structure. The poverty can be compensated either by establishing a Spec-head relationship with  $\Sigma^0$ , which is the locus of polarity, focus, and prosody-related features, or by incorporation into  $\Sigma^0$ . According to Szczegielniak, the auxiliary clitic in Polish resorts to the latter option. Since  $\Sigma^0$  may encode topic and focus features, movement of an element to Spec,  $\Sigma P$  gives rise to its focused or topicalized interpretation. This is what happens in (58), where the subject *ty* is interpreted as topicalized or focused. The auxiliary *-ś* raises as a head and adjoins to  $\Sigma^0$ .

- (58) a. Ty-ś zabil Janka  
 you+<sub>AUX.2SG</sub> kill<sub>PART.MSG</sub> Janek<sub>ACC</sub>  
 “You killed Janek”  
 b. [<sub>Σ</sub> Ty [<sub>Σ</sub> -ś] [<sub>T</sub> zabil]<sub>i</sub>] [<sub>Aux</sub> t<sub>i</sub>] [<sub>VP</sub> [<sub>V</sub> t<sub>j</sub>] Janka ]] (Pl, cf. Szczegielniak 1997)

When  $\Sigma$  is not present in the derivation, the auxiliary circumvents its structural impoverishment by incorporation into the *l*-participle, which moves to  $T^0$ . The incorporation usually leads to creation of a prosodic unit, which consists of the participle and the clitic. The derivation is presented in (59b).

- (59) a. Ty zabil-ś Janka  
 you kill<sub>PART.MSG</sub>+<sub>AUX.2SG</sub> Janek<sub>ACC</sub>  
 “You killed Janek”  
 b. [<sub>TP</sub> Ty [<sub>T</sub> zabil]<sub>j</sub>+eś] [<sub>AuxP</sub> t<sub>i</sub>] [<sub>VP</sub> [<sub>V</sub> t<sub>j</sub>] Janka ]]]] (Pl, cf. Szczegielniak 1997)

In contrast to (58), the subject in (59) is hosted in Spec, TP, rather than Spec,  $\Sigma$ P. This correlates with the fact that it does not have to be interpreted as focused or topicalized.

If the conditional auxiliary *by* is present in the Numeration, the derivation proceeds as sketched in (60b)

- (60) a. Ty zabil-by-ś Janka  
 you kill<sub>PART.MSG</sub>+<sub>COND</sub>+<sub>AUX.2SG</sub> Janek<sub>ACC</sub>  
 “You would kill Janek”  
 b. [<sub>TP</sub> Ty<sub>4</sub> [<sub>T</sub> zabil]<sub>3</sub>+by<sub>2</sub>+ś<sub>1</sub>] [<sub>MP</sub> t<sub>2</sub>] [<sub>AuxP</sub> t<sub>1</sub>] [<sub>VP</sub> [<sub>DP</sub> t<sub>4</sub>] [<sub>V</sub> t<sub>3</sub>] [<sub>VP</sub> [<sub>V</sub> t<sub>3</sub>] [<sub>DP</sub> Janka ]]]]]]]]

The VP is created by merging the participle *zabil* and the object *Janka*. The subject *ty* is generated in Spec, vP. Next, the perfect auxiliary *ś* merges with vP to form AuxP, which is subsequently merged with *by* and gives MP (Mood Phrase). Alternatively, MP might be located below AuxP, and the conditional auxiliary picks up the perfect auxiliary on its way up the structure. Then T is selected and merged with MP, which gives rise to TP. Finally, the subject *ty* moves to Spec, TP and checks the EPP feature of  $T^0$ .

If  $\Sigma^0$  is present in the derivation, it attracts the ‘*by*+ the perfect auxiliary’ clitic complex, which circumvents its structural deficiency in this position.  $\Sigma^0$  also encodes a Topic/Focus feature, which forces movement of the subject to Spec,  $\Sigma$ P (cf. 61b).

- (61) a. Ty by-ś zabil Janka  
 you <sub>COND</sub>+<sub>AUX.2SG</sub> kill<sub>PART.MSG</sub> Janek<sub>ACC</sub>  
 “You would kill Mark”  
 b. [<sub>ΣP</sub> Ty<sub>4</sub> [<sub>Σ</sub> by<sub>2</sub>+ś<sub>1</sub>] [<sub>TP</sub> t<sub>4</sub> [<sub>T</sub> zabil]<sub>3</sub>+t<sub>2</sub>+t<sub>1</sub>] [<sub>MP</sub> t<sub>2</sub>] [<sub>AuxP</sub> t<sub>1</sub>] [<sub>VP</sub> [<sub>DP</sub> t<sub>4</sub>] [<sub>V</sub> t<sub>3</sub>] [<sub>VP</sub> [<sub>V</sub> t<sub>3</sub>] [<sub>DP</sub> Marka ]]]]]]]]]]

Szczegielniak submits that the *l*-participle moves to  $T^0$  in order to check Tense. This forces him to assume that the *l*-participle has overt Tense morphology. As he acknowledges himself, this is problematic, because the *l*-participle occurs also in future tense constructions (cf. 62), so it is a stipulation to suggest that it has a past interpretation.

- (62)           Ja   będę   malował   stół  
               I    be<sub>PRF.ISG</sub> paint<sub>PART.MSG</sub> table<sub>ACC</sub>  
               ‘I will be painting the table’ (PI)

Consequently, he proposes that there are two distinct types of the *l*-participle in Polish. I consider this suggestion a weakness in his analysis.

Szczegielniak argues that the movement of the *l*-participle to the auxiliary is optional, because it does not occur if the auxiliary can encliticize into an element that precedes it, such as the subject or a focused/topicalized element. Hence, he concludes that the operation cannot be regarded as feature driven as in Chomsky (1995).<sup>126</sup> Following Chomsky’s 1995 autumn lectures, Szczegielniak proposes that head movement takes place at PF. He states that PF movements are not feature driven, but exemplify “category conflation”, which results from a tendency to fuse all verbal or nominal projections by head movement. Thus, he claims that the movement of the auxiliary to  $\Sigma^0$  is triggered by the need to eliminate morphological deficiencies of the raised element. However, this proposal is inconsistent with his idea that the *l*-participle, which in his view also raises as a head at PF, checks the Tense feature of  $T^0$ . In other words, it is not clear why only certain types of head movement may lead to feature checking if they all occur at PF.

Crucially, Szczegielniak’s claim that participle movement occurs at PF is not on the right track. It was shown in chapter 2 that the operation may have semantic effects, so it does not take place only to provide support for the phonologically impoverished auxiliary. Constituents of various types may be preposed to the position preceding the auxiliary, and depending on the element that undergoes movement, the sentence receives a different interpretation. Thus, the movement is not optional, because it is related to the intended meaning of the clause. For example, encliticization of the auxiliary into the subject pronoun in (61) gives rise to its topicalized or focused interpretation. This type of reading does not need to occur when the *l*-participle is affixed to the auxiliary in  $T^0$ .

In spite of these shortcomings, Szczegielniak offers a very interesting proposal concerning the structure of compound tenses in Polish. His ideas, and especially the proposal of a  $\Sigma P$  in the clause structure were a major source of inspiration for the theory of compound tenses in Polish developed in section 5.3.4.

#### 5.3.3.4 Witkoś (1998)

The theories of the participle-auxiliary orders in Polish presented so far have been largely derivational in nature. The participle has been argued to undergo head movement or head incorporation by raising from some lower projection to  $I^0$  (Borsley & Rivero 1994),  $Aux^0$  (Bošković 1997), and  $T^0$  or  $\Sigma^0$  (Szczegielniak 1996). The analysis due to Witkoś (1998), which will be reviewed in this section, represents a lexicalist approach. Since Witkoś’s proposal is a challenge both to the previous analyses as well as to the alternative derivational account I develop in section 5.3.4, his ideas will be scrutinized in detail.

<sup>126</sup> Note that the “optionality” of movement does not exclude feature checking. For instance, a feature in a functional head may make movement possible, but it does not force it to apply overtly. The overt displacement might be enforced by some other factors, such as discourse structure requirements.

Much in the spirit of the early version of the Minimalist Program (Chomsky 1995), Witkoś assumes that verbs enter the computational component of grammar as fully inflected forms. In his view this means that the “/-participle-perfect auxiliary” complexes are always generated as single words. Moreover, he suggests that since movement is dispreferred and regarded as a costly operation in the Minimalist framework, there should be no overt raising of the /-participle to I<sup>0</sup> in Polish unless substantial evidence to the contrary is found.

In order to substantiate his claim concerning the lack of verb movement in Polish, Witkoś (1998: 27ff) refers to an analysis of verb and adverb placement by Śpiewak & Szymańska (1995); henceforth Ś&Sz. Ś&Sz demonstrate that adverbs may follow and precede VP, as well as separate a verb from its nominal complement.

- (63) a. Tomek ostrożnie podniósł dziewczynkę  
Tomek carefully lift<sub>PART.M.SG</sub> little-girl  
“Tomek lifted the girl carefully”  
b. Tomek podniósł ostrożnie dziewczynkę  
c. Tomek podniósł dziewczynkę ostrożnie  
(Pl, Śpiewak & Szymańska 1995: 130)

Hence, the position of adverbs seems to be quite free and apparently reflects information structure requirements. However, there is a group of adverbs, such as *prawie* ‘nearly’, *naprawdę* ‘really’, and *po prostu* ‘simply’, which may only precede the verb.

- (64) a. Ja prawie skończył-*em* swoją pracę  
I nearly finish<sub>PART.M.SG</sub>+AUX.ISG REFL work  
“I nearly finished my work”  
b. \*Ja skończył-*em* prawie swoją pracę  
c. \*Ja skończył-*em* swoją pracę prawie (Pl, cf. Śpiewak & Szymańska 1995: 131)

The distribution of the adverb *prawie* exhibits the same restrictions when the auxiliary encliticizes to it (cf. 65a) or some other non-verbal element, such as the pronominal subject *my* (cf. 65b).

- (65) a. Prawie-*ście* skończyli swoją pracę  
almost+AUX.2PL finish<sub>PART.VIR.PL</sub> REFL work  
“You have almost finished your work”  
b. Wy-*ście* prawie skończyli swoją pracę  
you+AUX.2PL almost finish<sub>PART.VIR.PL</sub> REFL work  
c. \*Wy-*ście* skończyli prawie swoją pracę  
d. \*Wy-*ście* skończyli swoją pracę prawie (Pl, cf. Witkoś 1998: 28-29)

Ś&Sz remark that the restriction in the position of *prawie* might be due to the fact that it is a scopal element, which requires the verb to be in its scope. Movement of the verb across it is prohibited, because it results in an illegitimate reversal of scope (cf. 64b and 65c).

Witkoś seems to ignore the special scopal semantics of the adverb *prawie* ‘almost’ and states that the lack of verb movement across it is unexpected on the assumption that the verb leaves the VP, as claimed by Borsley & Rivero (1994). Moreover, he suggests that the position of the auxiliary clitic in (65a) following the adverb *prawie*

indicates that the adverb has been topicalized across the auxiliary.<sup>127</sup> Thus, the adverb data lead him to posit that adverb placement does not favour the verb movement hypothesis.

I consider Witkoś's interpretation of the adverb positions to be misguided. He disregards the special scopal effects triggered by the scopal adjuncts and attempts to generalize the prohibition on verb movement across them to all contexts. This line of reasoning is not on the right track, which can be shown on the basis of interactions between *prawie* and another adjunct, such as the temporal adverbial *dzisiaj* 'today'.

- (66) a. Wy-ście dzisiaj prawie skończyli swoją pracę  
 you+<sub>AUX.2PL</sub> today almost finish<sub>PART.VIR.PL</sub> your work  
 "You have almost finished your work today"  
 b. Wy-ście prawie skończyli dzisiaj swoją pracę  
 c. \*Wy-ście prawie dzisiaj skończyli swoją pracę  
 d. \*Wy-ście dzisiaj skończyli prawie swoją pracę (Pl)

The examples in (66 a and b) show that the temporal adverb *dzisiaj* may follow or precede the *l*-participle, which indicates that the participle may move across it. However, the temporal adverb *dzisiaj* may not separate the scopal adjunct *prawie* from the *l*-participle, because then *prawie* would scope over the temporal adverb rather than the VP. Witkoś claims that the lack of participle movement across *prawie* manifests lack of participle movement out of the VP. If this were the case, sentence (66b) should be unacceptable, because here the *l*-participle has raised across the temporal adverb.

In spite of his initial claims that there is little evidence for overt verb movement in Polish, Witkoś (1998) points out that the position of subjects indicates that the *l*-participle may leave the VP. In (67a) the subject receives an existential reading, and remains in its thematic base-position. The subject in (67b) has a generic interpretation, as it characterizes a general property of children in the past. It has raised from its base position and presumably occupies Spec, TP.

- (67) a. Na ulicy bawily się dzieci  
 on street play<sub>PART.NV.PL</sub> REFL children  
 "Children were playing in the street"  
 b. Dzieci bawily się na ulicy  
 children play<sub>PART.NV.PL</sub> REFL on street  
 "Children used to play in the street" (cf. Pl, Witkoś 1988: 87)

Since the existential subject in (67a) occurs to the right of the *l*-participle, the *l*-participle must have moved from its base position within the VP. However, contrary to B&R's claims, Witkoś argues that the *l*-participle never moves very high, and that it does not reach the I/T projection. Given that it does not carry any tense specification, it cannot be attracted by the Tense feature in T.<sup>128</sup> He proposes that it only targets

<sup>127</sup> This is an unusual claim, because adverbs are normally taken to be immobile elements and can be used indicators of verb movement (cf. Cinque 1999; Pollock 1989).

<sup>128</sup> On similar grounds Lavine (2000 ch. 3) argues against derivation of the incorporated participle-auxiliary forms via participle movement to I<sup>0</sup>. He states that the idea is problematic from a feature-checking perspective, because the feature that drives this movement of the incorporated form would remain unchecked when the auxiliary encliticizes into a non-verbal element and the participle-to-auxiliary incorporation does not apply. In my view, the argument does not hold. T<sup>0</sup> (or I<sup>0</sup>) contains both a Tense feature, which is checked by the auxiliary, as well

AspP, where aspectual morphology is licensed. The proposal is supported by the fact that the *l*-participle always carries aspectual specification.

- (68) [AgrSP subject [TP T [AspP [Asp *l*-participle] [AgrOP object [VP V ... DP]]]]]  
(cf. Witkoś 1998: 99)

Unlike the affixes, both the perfect and conditional auxiliaries are generated in T<sup>0</sup>, and are therefore considerably higher than the *l*-participle. They may move still further to AgrS. According to Witkoś (1998: 97), in clauses with the conditional auxiliary *by*, T<sup>0</sup> has either a strong or a weak verbal [+v] feature. If it is strong, the *l*-participle raises from Asp<sup>0</sup> to T<sup>0</sup> and incorporates into the conditional (cf. 69a). If the feature is weak, the incorporation does not take place (cf. 69b).

- (69) a. Ty zjadł-*by*-ś ciastko  
you eat<sub>PART.MSG</sub>+COND+AUX.2SG cake<sub>ACC</sub>  
‘‘You would eat the cake’’  
a'. [AgrSP ty<sub>i</sub> [AgrS zjadł-*by*-ś<sub>k</sub> [TP [T t<sub>k</sub>] [AspP [Asp t<sub>j</sub>] [AgrOP ciastko<sub>i</sub> [AgrO t<sub>j</sub>][VP t<sub>i</sub> t<sub>j</sub> t<sub>i</sub>]]]]]]]  
b. Ty-*by*-ś zjadł ciastko  
you+COND+AUX.2SG eat<sub>PART.MSG</sub> cake<sub>ACC</sub>  
b'. [AgrSP ty<sub>i</sub> [AgrS byś<sub>k</sub> [TP [T t<sub>k</sub>] [AspP [Asp zjadł<sub>j</sub>] [AgrOP ciastko<sub>i</sub> [AgrO t<sub>j</sub>][VP t<sub>i</sub> t<sub>j</sub> t<sub>i</sub>]]]]]]]

By contrast, there is no optionality in the feature strength in the case of perfect auxiliaries, and the [+v] feature of T is always weak, so it never triggers movement of the *l*-participle. The non-incorporated (cf. 70a) and incorporated (cf. 70b) variants result from two different numerations.

- (70) a. Ty-ś zjadł ciastko  
you+AUX.2SG eat<sub>PART.MSG</sub> cake<sub>ACC</sub>  
‘‘You ate the cake’’  
a'. [AgrSP ty<sub>i</sub> [AgrS ś<sub>k</sub> [TP [T t<sub>k</sub>] [AspP [Asp zjadł<sub>j</sub>] [AgrOP ciastko<sub>i</sub> [AgrO t<sub>j</sub>][VP t<sub>i</sub> t<sub>j</sub> t<sub>i</sub>]]]]]]]  
b. Ty zjadł-*ś* ciastko  
you eat<sub>PART.MSG</sub>+AUX.2SG cake<sub>ACC</sub>  
‘‘You ate the cake’’  
b'. [AgrSP ty<sub>i</sub> [AgrS ś<sub>k</sub> [TP [T t<sub>k</sub>] [AspP [Asp zjadł-*ś*<sub>j</sub>] [AgrOP ciastko<sub>i</sub> [AgrO t<sub>j</sub>][VP t<sub>i</sub> t<sub>j</sub> t<sub>i</sub>]]]]]]]

Thus, on Witkoś's approach there are two ways in which the *l*-participle-auxiliary structures are generated in Polish: the one with the conditional auxiliary *by* is created derivationally, whereas the structure with the perfect auxiliary enters syntax as a fully-inflected form.

Witkoś's approach is certainly an interesting attempt at a lexicalist analysis of the structure of Polish compound tenses. However, the problem is that the author confines himself to strict Minimalist restrictions on overt movement, and tries to rigidly follow them even when data speak to the contrary. Furthermore, he stipulates that the incorporation of the *l*-participle into the conditional auxiliary hinges on the strength or weakness of the [+v] feature. Yet, it is unclear what kind of feature is represented by [+v], and how it is decided whether it is weak or strong in a given context. The proposal that the [+v] feature of T<sup>0</sup> is always weak is equally unjustified. According to

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as  $\varphi$ -features, which are checked by the *l*-participle. The  $\varphi$ -features are interpretable, so they do not need to be checked.

Chomsky (1995), feature strength may correspond to overt presence of a morphological element that realizes this feature. In Polish both the conditional morpheme and the perfect auxiliary are lexically overt, so there is no principled reason to assume that either of them differs in strength.

Witkoś's analysis also faces empirical problems. If the participle-auxiliary complexes enter the derivation as single words, it is unexpected that one of the auxiliaries in the plural may be deleted under identity in a sentence with two coordinated participles.

- (71) Czytali-*śmy* i pisali(-*śmy*)  
 read<sub>PART.VIR.PL+ AUX.1PL</sub> and write<sub>PART.VIR.PL+ AUX.1PL</sub>  
 "We read and wrote" (Pl, Mikoś & Moravcsik 1986)

Admittedly, it was shown in section 5.3.2.2 that the auxiliaries are being reanalyzed as affixes on the *l*-participle, so when the change is completed in the future, it might be correct to argue that the *l*-participle enters the derivation fully inflected. Such a claim, however, is still unjustified for Modern Polish.

By means of summary, I present the main claims of the approaches presented in this section in the chart in (72).

(72)

	B&R (1994)	Bošković (1997)	Szczegielniak (1997)	Witkoś (1998)
position of the auxiliary affix (perfect/conditional)	T <sup>0</sup> /T <sup>0</sup>	Aux <sup>0</sup> /Aux <sup>0</sup>	Aux <sup>0</sup> /Mood <sup>0</sup> , moves to T <sup>0</sup>	comes from the lexicon together with the verb
position of the auxiliary enclitic (perfect/conditional)	T <sup>0</sup> /T <sup>0</sup>	not discussed	Σ <sup>0</sup>	T <sup>0</sup> /T <sup>0</sup> , moves to AgrS <sup>0</sup> , optionally with the <i>l</i> -participle
type of movement	X <sup>0</sup>	X <sup>0</sup>	X <sup>0</sup>	X <sup>0</sup>

### 5.3.4 An alternative account

We have seen that the auxiliaries in Polish appear in two variants: synthetically as affixes on the *l*-participle, or analytically as second position clitics. The former option is a more recent diachronic development and prevails in Modern Polish; the latter is reminiscent of the Wackernagel law, which was observed in Old Polish. In chapter 1, section 1.3.4.2.2.1 I pointed out that the reanalysis of the auxiliary as an affix started already in the 16<sup>th</sup> century and has been proceeding very slowly over time. According to Kowalska's (1976: 63) calculations, the auxiliary appears as the second position clitic only in 3% of compound tense formations in her corpus of Polish texts from the first half of the 20<sup>th</sup> century. However, in spite of the rarity of these cases, the process seems to be far from completion.

Furthermore, it has been reported that the reinterpretation of the auxiliary status does not proceed uniformly within the paradigm, and that it is completed only among the singular forms. Thus, it seems that the auxiliaries are subject to two diachronic changes, rather than just one: a shift from the Wackernagel clitic to an affix on the *l*-



participle, and the spread of the affix form within the singular and the plural paradigms. The important question is whether these two processes are really related, or perhaps one of them occurs independently of the other.

Franks & Bański (1999) analyze the change in the position of the auxiliary by using Kroch's (1989) theory of "Grammar Competition". According to this theory, a diachronic change occurs in a language when there are two competing analyses of a single linguistic phenomenon in the individual grammars of native speakers. Language change is achieved when one of the analyses wins over the other. Franks & Bański suggest that in the case of Polish the competition seems to be between the two interpretations of the auxiliary: as a clitic or as an affix on the *l*-participle. In Modern Polish there is a strong preference for the latter. However, if the affixed variants enjoy such a predominant position in the grammar, and the process of the reanalysis has been taking place for so many centuries, it is surprising that the auxiliary clitics still exist. Bański (2000: 195) argues that the slow rate of the process is due to the fact that the competition between grammars involves three options, rather than just two. The third option covers the present tense copula 'be', which is constructed with an old strong form of the verb 'be' *jest* and person-number affixes (cf. 73a; see section 5.3.4.2.4 for details). They are morphologically the same as the affixes on the *l*-participle (cf. 73b; see also section 1.3.4.2.2.1 in chapter 1, and section 5.3.4.2.4 in the present chapter), but different from the ones found on finite verbs (cf. 73c).

- (73)
- |    |   |             |           |  |
|----|---|-------------|-----------|--|
| a. | Jest- <i>eśmy</i>                               | bardzo      | zmęczeni  |  |
|    | be+ <sub>1PL</sub>                              | very        | tired     |  |
|    | "We are very tired"                             |             |           |  |
| b. | Kupili- <i>śmy</i>                              | ciekawą     | książkę   |  |
|    | buy <sub>PART.VIR.PL</sub> +AUX. <sub>1PL</sub> | interesting | book      |  |
|    | "We bought an interesting book"                 |             |           |  |
| c. | Jedzi- <i>emy</i>                               | na          | wycieczkę |  |
|    | go+ <sub>1PL</sub>                              | on          | trip      |  |
|    | "We are going on a trip"                        |             |           |  |
- (Pl)

It is not clear to me why Bański singles out the copula 'be' as a special verbal case that hinders the reinterpretation of the auxiliary clitics in Polish as affixes.

In my view, the diachronic change is far from the end because in fact there is no competition between the two forms of the auxiliary in Modern Polish at all. I would like to argue that auxiliary affixation and the auxiliary encliticization correspond to two different syntactic processes, which make use of a morphologically identical form of the auxiliary, but which are syntactically and semantically independent of each other.

The auxiliary always encliticizes onto the elements that have been moved to the clause initial position for reasons of focus or topicalization. It may also move by itself to a functional head located in the left periphery of the clause in which a special grammatical function, such as subjunctive mood, polarity or focus is encoded. Thus, the operation is performed in order to express special semantic concepts which are found less often in language, and therefore auxiliary encliticization is statistically a less common option than auxiliary affixation, which is used in order to render the temporal relations in the clause.

When the auxiliary is right-adjacent to the *l*-participle, most speakers treat it as an affix in the singular, and as an enclitic in the plural. Some speakers have already reinterpreted the auxiliary as an affix throughout the whole paradigm. However, all of them are able to perform auxiliary encliticization in order to express focus or modality.

Hence, the only process of language change that is taking place at the moment consists in the extension of the auxiliary affixation to the whole paradigm of the “*l*-participle+auxiliary” complexes. It is entirely independent of the auxiliary enclitization on clause-initial elements.

The situation in which the auxiliary enclitics and the auxiliary affixes performed the same grammatical function in Polish would be very uneconomical. It would imply presence of morphological doublets, that is the forms which are morphologically the same, but which are not functionally differentiated. Since both variants of the auxiliary still exist in the language, this means that they are not in competition, because they are used for different reasons.

The analysis developed here presupposes that since the auxiliary clitic and the auxiliary affix are formally and functionally unrelated, they should occur in different syntactic positions. This implies that it should also be possible to find contexts in which only one of the options is available. This is indeed the case, as is exemplified in (74). The sentence contains a verb of volition *chcieć*, which requires that the auxiliary is encliticized on the complementizer, rather than affixed on the *l*-participle in the embedded clause (see section 5.3.4.1.1 for details).

- (74) a. Chcę, że-*byś* przestał mi przeszkadzać  
 want<sub>I</sub>SG that+COND+AUX.2SG stop<sub>PART</sub>MSG me<sub>DAT</sub> disturb  
 “I want you to stop disturbing me”  
 b. \*Chcę, że przestał-*byś* mi przeszkadzać (Pl, cf. Borsley & Rivero 1994)

Moreover, texts written in older variants of Polish contain clauses in which the two positions of the auxiliary are filled simultaneously. Thus, in the examples in (75) the auxiliary is doubled and appears simultaneously on the *l*-participle and the clause-initial element, which is interpreted as topicalized or focused.<sup>129</sup>

- (75) a. Tedy-*m* ja owszeki stracił-*em* miasto  
 then+AUX.1SG I irretrievably lose<sub>PART</sub>MSG+AUX.1SG city  
 “Then I irretrievably lost the city”  
 b. Iż-*eś* ty pobil-*eś* wszyscy sprzeciwiające się mnie  
 that+AUX.2SG you beat<sub>PART</sub>MSG+AUX.2SG all opposing REFL me  
 “That you defeated all those who opposed me”  
 (16<sup>th</sup> c. Pl, Decaux 1955: 34; cf. Bański 2000: 125)

The following sections will discuss these two types of the auxiliary placement and will provide support for the claim that the auxiliary participates in divergent syntactic operations, depending on whether it is a clitic (cf. section 5.3.4.1) or an affix (cf. section 5.3.4.2). I will begin with cases of enclitization, which comprise conditional and subjunctive structures formed with the enclitic *by* (cf. section 5.3.4.1.1), topicalization (cf. section 5.3.4.1.2), and *że*-support (cf. section 5.3.4.1.3). Subsequently, I will address the syntax of the incorporated *l*-participle-auxiliary forms in Polish, which will be contrasted with the corresponding structures in South Slavic (cf. section 5.3.4.2). The conclusions that I reach there will allow me to make definite claims about the position of different auxiliary verbs in the structure of Polish (cf. section 5.3.4.2.4) and finally, about the syntax of the ‘*l*-participle-auxiliary’ constructions (cf. section 5.3.4.2.5).

<sup>129</sup> Note that this phenomenon resembles complementizer agreement in West Flemish (cf. Haegeman 1992) and Bavarian (cf. Bayer 1984).

### 5.3.4.1 Auxiliary encliticization

The following sections will examine instances of encliticization of the auxiliary onto clause initial elements. It will be shown that these elements are always located higher than TP, and occupy projections that license different types of modality, focus, and topicalization.

#### 5.3.4.1.1 The conditional / subjunctive auxiliary *by*

This section analyzes the auxiliary *by*. It will be demonstrated that it occurs in two types: as a conditional and as a subjunctive marker, depending on whether it encliticizes on the *l*-participle or a clause-initial element. The two types of *by* will be argued to target different syntactic positions.

##### 5.3.4.1.1.1 The position of *by*

*By* is an invariant conditional auxiliary, which is always immediately followed by the perfect auxiliary. Since these two elements are inseparable, it is often argued (cf. Borsley & Rivero 389-390; Witkoś 1998) that they enter the derivation as a single inflected ‘conditional auxiliary+perfect auxiliary’ complex. This view receives support from the fact that when the perfect auxiliary is attached to *by*, it cannot be elided in coordinated clauses under identity (cf. 76b). By contrast, it is possible to elide both of the auxiliaries simultaneously (cf. 76a; compare the data in section 5.3.2.2).

- (76) a. Włączyli-*by-śmy* radio i posłuchali-*by-śmy* muzyki  
 turn-ONPART.VIR.PL+COND+AUX.IPL radio and listenPART.VIR.PL+COND+AUX.IPL music  
 “We would turn on the radio and listen to music”  
 b. \*Włączyli-*by-śmy* radio i posłuchali-*by-śmy* muzyki (Pl, Bański 2000: 80)

However, I would like to argue for a derivational treatment of the ‘*by* + perfective auxiliary’ complexes (cf. Dogil 1987, Booij and Rubach 1987; Bošković 1997, and Dornisch 1997 for a similar view). If they were to emerge from the lexicon together with the perfect auxiliary as a single unit, they should be always able to appear together. Still, only *by* can be attached to impersonal participles.<sup>130</sup> Encliticization of the perfect auxiliary, either alone, or together with *by* on the impersonal participle results in ungrammaticality.

- (77) a. Włączono-*by* radio i posłuchano-*by* muzyki  
 turn-ONIPT+COND radio and listenIPT+COND music  
 “One would switch on the radio and listened to music”  
 b. \*Włączono-*by-m* radio i posłuchano-*by-m* muzyki  
 turn-ONIPT+COND+AUX.ISG radio and listenIPT+COND+AUX.ISG music  
 c. \*Włączono-*m* radio i posłuchano-*m* muzyki  
 turn-ONIPT+AUX.ISG radio and listenIPT+AUX.ISG music (Pl)

<sup>130</sup> Impersonal participles were introduced in chapter 3, section 3.5. They never show subject agreement and were argued not to be able to raise to T.

More evidence for the claim that *by* and the perfect auxiliary do not form a single lexical word comes from language acquisition. Aguado and Dogil (1989) notice that Polish children often place the conditional auxiliary independently of the perfect auxiliary, which they choose to attach to the *l*-participle (cf. 78a; 78b represents standard Polish). This demonstrates that it is possible to generate *by* independently of the perfect auxiliary, so the two elements must occupy different positions in the clause structure.

- (78) a. Basia powiedziała, że-*by* ja za godzinę (*child language*)  
 Basia say<sub>PART.F.SG</sub> that+<sub>COND</sub> her<sub>ACC</sub> after hour  
 obudził-*ś*  
 wake<sub>PART.M.SG+AUX.2SG</sub>
- b. Basia powiedziała, że-*by-ś* ja za godzinę obudził  
 Basia say<sub>PART.F.SG</sub> that+<sub>COND+AUX.2SG</sub> her<sub>ACC</sub> after hour wake<sub>PART.M.SG</sub>  
 ‘Basia said that you should wake her up in an hour’  
 (Pl, Aguado and Dogil 1989: 106)

Hence, I would like to claim that *by* is merged as the head of MoodP, and left-adjoins to the perfect auxiliary in T<sup>0</sup>, as is exemplified in (79) for the conditional auxiliary in (76a).

- (79) ...[T *by*<sub>T</sub>+*ś*<sub>Mood</sub> t<sub>i</sub>]

#### 5.3.4.1.1.2 The meanings of *by*

It has been observed (cf. Borsley and Rivero 1994; Mikoś and Moravcsik 1986) that the ‘*by*+perfect auxiliary’ complex is obligatorily attracted by some conjunctions, such as *gdy+by* ‘if *jak+by* ‘as if’ *o+by* ‘I wish’/‘may’, and *że+by* ‘so that’, which express various types of modal meanings, such as condition and potentiality in (80) or desire in (81).<sup>131</sup> If the auxiliary is affixed on the *l*-participle rather than the complementizer, the result is ungrammatical (cf. 80b and 81b).

- (80) a. *Gdy-by-m* miał czas,  
 if+<sub>beCOND+AUX.1SG</sub> have<sub>PART.M.SG</sub> time<sub>ACC</sub>  
 poszedł-*by-m* do kina  
 go<sub>PART.M.SG+COND+AUX.1SG</sub> to cinema  
 ‘If I had time, I would go to the cinema’
- b. \**Gdy miał-by-m czas, poszedlbym do kina* (Pl, Borsley & Rivero 1994: 418)

<sup>131</sup> It is a matter of debate whether these forms are formed in syntax via movement of *by* into the position occupied by these conjunctions (as in Mikoś and Moravcsik 1986 and in the analysis developed in this section), or whether they emerge from the lexicon as fully inflected items, as in Bański (2000: 110). One of Bański’s arguments for a lexical approach to *by*-conjunctions is related to the meaning of some of these forms, which according to him is not compositional. For instance, *aby* consists of *by* and a coordinating conjunction *a* ‘and’, but the meaning of the whole structure is ‘in order to’, which does not correspond to the meaning of *a* plus *by*. However, the problem is that *by* may express a variety of modal meanings, such as potentiality, non-factuality, or prediction, so it is difficult to provide a compositional meaning of the whole ‘*by*-conjunction’ complex without specifying the exact semantic contribution of *by* first.

- (81) a. *Że-by-ś* tylko tego nie robił!  
 that+COND+AUX.2SG only this NEG doPART.MSG  
 “May you never do that!”  
 b. \**Że* tylko tego nie robił-*by-ś*! (Pl, cf. Bański 2000: 113)

Correspondingly, the same requirement holds for the position of the auxiliary in purpose clauses. It must occur right-adjacent to the complementizer *że* and may not be affixed on the *l*-participle.

- (82) a. Basia prosila, *że-by-ś* ją za godzinę obudził  
 Basia askPART.F.SG that+COND+AUX.2SG her<sub>ACC</sub> after hour wakePART.MSG  
 “Basia asked you to wake her up in an hour”  
 a’. \*Basia prosila, *że* ją za godzinę obudził-*by-ś* (Pl, Dogil 1987: 40)  
 b. Muszę się dużo uczyć *że-by-m* zdał ten egzamin  
 must<sub>1SG</sub> REFL much study<sub>INF</sub> that+COND+1SG passPART.MSG this exam  
 “I have to study hard so that I pass this exam”  
 b’. \*Muszę się dużo uczyć *że* zdał-*by-m* ten egzamin (Pl)

Likewise, *by* must encliticize on the complementizer *że* when it introduces a subjunctive complement of volition verbs (cf. 83a and b). *Że* is the most common subjunctive complementizer, but as demonstrated in (83c and d), it does not need to be present, or it can be replaced by the complementizer *a*, which carries a similar meaning.

- (83) a. Chcę, *że-by-ś* to zrobił  
 want<sub>1SG</sub> that+COND+AUX.2SG it doPART.MSG  
 “I want you to do it”  
 b. \*Chcę, *że* zrobił-*by-ś* to  
 c. Chcę, *by-ś* to zrobił  
 d. Chcę, *a-by-ś* to zrobił  
 (Pl, cf. Aguado & Dogil 1989: 105; Borsley & Rivero 1994: 418; Bański 2000: 82)

All the examples which require encliticization of *by* onto the complementizer contain subjunctive complements, so it can be assumed that the auxiliary is attracted by a modal feature related to subjunctivity located in a functional head in the left periphery of the clause. The assumption is supported by the fact that if the auxiliary is not adjoined to a complementizer and instead is affixed on the *l*-participle, only the indicative meaning is normally possible (cf. 84a).

- (84) a. Powiedział, *że* to zrobili-*by-śmy* **indicative clause**  
 sayPART.MSG that it doPART.VIR.PL+COND+AUX.1PL  
 “He said we would do it”  
 b. \*Powiedział, *że* to zrobili-*by-śmy* **purpose clause**  
 sayPART.MSG that it doPART.VIR.PL+COND+AUX.1PL  
 “He told/asked us to do it”  
 (Pl, cf. Aguado & Dogil 1989: 105; Bański 2000: 84)

The indicative meaning may also obtain when the conditional auxiliary raises to a position to the right of the complementizer *że*, as in (85). This leads to a focused reading of the auxiliary complex *byśmy*.

- (85) Powiedział, że *by-śmy* to zrobili **indicative clause**  
 say<sub>PART.MSG</sub> that COND<sup>+</sup>AUX.1PL it d<sub>OPART.VIR.PL</sub>  
 “He said we would do it” (Pl, cf. Bański 2000: 85)

Nevertheless, there is some evidence that the movement of *by-śmy* in (85) does not involve adjunction of *by* into the complementizer. For instance, in contrast to the subjunctive purpose clause in (86a), the complementizer and the conditional auxiliary may be split by a covert or overt subject, such as *my* in the indicative clause in (86b). Moreover, the two auxiliaries are written separately. According to Bański (2000: 84ff), the orthographic convention reflects different positions of *pro* or overt subjects in these two types of clauses.<sup>132</sup>

- (86) a. Powiedział, że-*by-śmy* [*pro*]/ *my* to zrobili **purpose clause**  
 say<sub>PART.MSG</sub> that+COND<sup>+</sup>AUX.1PL we it d<sub>OPART.VIR.PL</sub>  
 “He told us to do it”  
 b. Powiedział, że [*pro*]/*my by-śmy* to zrobili **indicative clause**  
 say<sub>PART.MSG</sub> that we COND<sup>+</sup>AUX.1PL it d<sub>OPART.VIR.PL</sub>  
 “He said we would do it” (Pl, cf. Bański 2000: 86)

Furthermore, Bański (2000: 81ff) observes that prosodic requirements of *by* differ depending on its occurrence in an indicative clause or in a subjunctive clause. In general, *by* is an enclitic, so it may not appear at the beginning of a sentence. However, it has been reported (cf. Booij & Rubach 1987: 40; Borsley & Rivero 1994: 389) that some speakers accept *by* clause-initially. According to Bański, the speakers who permit *by* in this position do so only when the sentence has a subjunctive interpretation.

- (87) *By* teraz to zrobił  
 COND now it d<sub>OPART.MSG</sub>  
 “(For him) to do it now”  
 “\*He would do it now” (Pl, Bański 2000: 83)

To summarize, it has been shown that there are two types of conditional auxiliaries in Polish. The auxiliary must encliticize onto a complementizer that introduces subjunctive clauses, but it does not need to do so when the complementizer selects an indicative clause. I suggest that this means that *by* may occupy two different positions in Polish. The proposal is specific not only to Polish, because there is some evidence for this idea in other Slavic languages, too. For example, in chapter 4, section 4.3.3.2 I pointed out, following Willis (2000), that in Old Church Slavonic certain complementizers such as *a* ‘if’ always attracted the conditional auxiliary, irrespectively of the order of the constituents that followed it.

- (88) a. A by bylъ sьde  
 if COND.3SG be<sub>PART.MSG</sub> here  
 “If he had been here”  
 b. A by sьde bylъ  
 c. A by bylъ prorokъ  
 if COND.3SG be<sub>PART.MSG</sub> prophet  
 “If he had been the prophet” (OCS, Vaillant 1977: 219)

<sup>132</sup> It is more usual not to insert the subject, unless it needs to be focused or topicalized.

Some other auxiliaries, such as *da*, attracted the conditional auxiliary only optionally, as in the two different translations of *Luke* 4:42.

- (89) a. Drъžaaxō i da ne bi oтbšelъ oтb nixъ  
held<sub>3PL</sub> him that NEG COND.3SG leave<sub>PART.M.SG</sub> from them  
(OCS, *Codex Marianus*, Willis 2000: 330)
- b. Drъžaaxō i da bi ne oтbšlъ oтb nixъ  
held<sub>3PL</sub> him that COND.3SG NEG leave<sub>PART.M.SG</sub> from them  
“And they held him, so that he would not leave them”  
(OCS, *Codex Zographensis*, Willis 2000: 330)

It was argued in chapter 4 that the placement of the auxiliary was contingent on the semantics of the complementizer. The complementizer that selected conditional sentences, such as *a*, always attracted the auxiliary. By contrast, the complementizer *da*, which usually introduced indicative clauses, did not have to be adjacent to the conditional auxiliary.

Likewise, Tomić (2005) shows that in some contemporary Balkan Slavic languages conditional auxiliaries also appear in different positions in indicative and subjunctive clauses. For example, in Macedonian the auxiliary clitic *ќе* occurs to the left of the subjunctive complementizer *da* (cf. 90a), but to the right of the indicative complementizer *deka* (cf. 90b).

- (90) a. Ќе da dojde  
CL<sub>MOD</sub> that<sub>SUBJ</sub> come<sub>SUBJ.PAST.3SG</sub>  
“S(he) seems to have come”
- b. Reče deka ќе dojde  
say<sub>PAST.3SG</sub> that<sub>IND</sub> CL<sub>MOD</sub> come<sub>PRES.1SG</sub>  
“(S)he said that (s)he would come” (Mac, Tomić 2005: 365)

Given the crosslinguistic data from various Slavic languages I suggest that there are two positions in which the conditional auxiliary *by* can be hosted in Polish. Following Tomić’s (1995) terminology, I will dub the projection where the subjunctive mood is licensed ModP, and I will refer to the lower modal projection licensing non-subjunctive meanings as MoodP.

To begin with an analysis of indicative (non-subjunctive) clauses, I propose that MoodP is located immediately below TP. The conditional auxiliary *by* obligatorily raises from Mood to T via head movement (cf. 91a). Subsequently, the *l*-participle may raise via head movement from within the VP and left-adjoin to the auxiliary complex in T (cf. 91b). The movement of the *l*-participle is not obligatory. If it does not take place, the auxiliary complex receives a focused interpretation (cf. 85 above).

- (91) a. (Powiedział) że by-śmy im tę książkę pożyczyli  
say<sub>PART.M.SG</sub> that COND<sup>+</sup>AUX.1PL them<sub>CL.DAT</sub> this book lend<sub>PART.VIR.PL</sub>  
“He said that we would lend this book to them”
- a’. [C że [T by<sub>r</sub>+śmy] [Agr<sub>IOP</sub> im [Agr<sub>OP</sub> tę książkę [VP pożyczyli]]]]
- b. (Powiedział) że pożyczyli-by-śmy im tę książkę  
say<sub>PART.M.SG</sub> that lend<sub>PART.VIR.PL</sub>+COND<sup>+</sup>AUX.1PL them<sub>CL.DAT</sub> this book
- b’. [C że [T pożyczyli<sub>r</sub>+by<sub>r</sub>+śmy] [Agr<sub>IOP</sub> im [Agr<sub>OP</sub> tę książkę [VP t<sub>j</sub>]]]] (Pl)

It is evident that the *l*-participle adjoins to the auxiliary complex in T<sup>0</sup>, because it may not be separated from it by any lexical material, whether it is a full DP (cf. 92a; cf. Bošković 1997: 173) or a pronominal clitic (cf. 92b).

- (92) a. \**ze*    *pożyczyli*    *tę*    *książkę*    *by-śmy*  
           that    lend<sub>PART.VIR.PL</sub> this    book    COND<sup>+</sup>AUX.1PL
- b. \**ze*    *pożyczyli*    *ją*    *by-śmy*  
           that    lend<sub>PART.VIR.PL</sub> it/her<sub>CL.ACC</sub> COND<sup>+</sup>AUX.1PL (PI)

Moreover, it is possible to insert the subject to the left of the fronted *l*-participle. This shows that the ‘by + perfect auxiliary’ complex is not incorporated into the complementizer. This also indicates that the *l*-participle does not land in Spec, TP, the way it does in Bulgarian and Serbo-Croatian. The subject *my* ‘we’ in (93) is topicalized.

- (93)            *ze*    *my*    *pożyczyli-by-śmy*            *im*            *tę*    *książkę*  
                   that    we    lend<sub>PART.VIR.PL</sub>+COND<sup>+</sup>AUX.1PL    them<sub>CL.DAT</sub>    this    book (PI)

Apart from the subject, other elements may intervene between the complementizer and the auxiliary (or the *l*-participle that has adjoined to the auxiliary), such as adverbs (cf. 94a) and topicalized objects (cf. 94b). Both of them receive a focused interpretation.

- (94) a. (Powiedział) *ze*    *jutro*    *by-śmy*            *im*  
                   say<sub>PART.MSG</sub>    that    tomorrow    COND<sup>+</sup>AUX.1PL    them<sub>CL.DAT</sub>  
                   *tę*    *książkę*    *pożyczyli*  
                   this    book    lend<sub>PART.VIR.PL</sub>  
                   ‘He said that tomorrow we would lend this book to them’
- b. (Powiedział) *ze*    *tę*    *książkę*    *by-śmy*            *im*  
                   say<sub>PART.MSG</sub>    that    this    book    COND<sup>+</sup>AUX.1PL    them<sub>CL.DAT</sub>  
                   *wtedy*    *pożyczyli*  
                   then    lend<sub>PART.VIR.PL</sub>  
                   ‘He said that we would lend this book to them then’ (PI)

By contrast, in the case of subjunctive clauses, the conditional auxiliary must obligatorily be right-adjacent to the complementizer. It cannot be separated from it by any overt material. This is illustrated for an adverbial in (95a) and a subject in (95b).

- (95) a. (Powiedział) *ze*    (\**jutro*)    *-by-śmy*            *im*            *jutro*  
                   say<sub>PART.MSG</sub>    that    tomorrow    +COND<sup>+</sup>AUX.1PL    them<sub>CL.DAT</sub>    tomorrow  
                   *tę*    *książkę*    *pożyczyli*  
                   this    book    lend<sub>PART.VIR.PL</sub>  
                   ‘He said that we should lend this book to them tomorrow’
- b. (Powiedział) *ze*    (\**wy*)-*by-ście*            *wy*            *im*  
                   say<sub>PART.MSG</sub>    that    you<sub>PL</sub>+COND<sup>+</sup>AUX.2PL    you<sub>PL</sub>    them<sub>CL.DAT</sub>  
                   *tę*    *książkę*    *pożyczyli*  
                   this    book    lend<sub>PART.VIR.PL</sub> (PI)

As an illustration, the derivation of the embedded clause in (95b) is presented in (96b). First *by* moves as a head from Mood and adjoins to the auxiliary in T. Next, the complex is attracted by a subjunctive feature in Mod, which is located immediately below the complementizer.



- (96) a. *ze-by-ście* wy im tę książkę pożyczyci  
 that+COND+AUX.2PL you<sub>PL</sub> them<sub>CL.DAT</sub> this book lend<sub>PART.VIR.PL</sub>  
 b. [C *że* [<sub>ModP</sub> *by<sub>i</sub>+ście*] [<sub>TP</sub> *wy* [<sub>T</sub> <*t<sub>i</sub>'* + *t<sub>j</sub>>*] [<sub>MoodP</sub> [<sub>Mood</sub> *t<sub>j</sub>*] [<sub>AgriOP</sub> *im* [<sub>AgriOP</sub> *tę* książkę [<sub>VP</sub> *pożyczyli*]]]]]] (Pl)

To summarize, this section has shown that the auxiliary enclitic *by* in Polish may occupy two different positions in the clause, depending on its semantics. When it functions as the subjunctive marker, it moves to the head of ModP above TP. When it is the conditional auxiliary, it stays in its base position in Mood below TP.

- (97) [CP [<sub>ModP</sub> *BY<sub>SUBJ</sub>*] [<sub>TP</sub> [<sub>MoodP</sub> *BY<sub>COND</sub>* ]]]

### 5.3.4.1.2 Topicalization

Another context in which the auxiliary is not affixed on the *l*-participle involves auxiliary encliticization on constituents that have been preposed for reasons of focus or topicalization. It was shown in section 5.3.2.1.1 that the fronted elements comprise a variety of different categories. The movement prevents the auxiliary enclitic from occurring clause initially, so Borsley & Rivero claim that it happens at PF. This does not seem to be the correct suggestion, because the process displays syntactic locality restrictions. For instance, the auxiliary may not encliticize onto extra-sentential elements, such as the vocative in (98a) or the conjunction (99a). Rather, it must encliticize on the initial element that is part of the same clause, such as a *wh*-word (cf. 98b) or an adverbial (99b), or else it must be affixed on the *l*-participle (cf. 98c and 99c).

- (98) a. \**Jurku-ś*, czemu otworzył drzwi?  
*Jurek*<sub>VOC+AUX.2SG</sub> why open<sub>PART.MSG</sub> door<sub>ACC</sub>  
 ‘Jurek, why did you open the door?’  
 b. *Jurku*, *czemu-ś* otworzył drzwi?  
 c. *Jurku*, *czemu* otworzył-*ś* drzwi? (Pl, Mikoś & Moravcsik 1986: 330)
- (99) a. \**I-ś* wtedy otworzył drzwi?  
*and*<sub>AUX.2SG</sub> then open<sub>PART.MSG</sub> door  
 b. *I* *wtedy-ś* otworzył drzwi?  
 ‘And was it then that you opened the door?’  
 c. *I* *wtedy* otworzył-*ś* drzwi? (Pl)

In section 5.2.2 I mentioned that pronominal clitics may be supported by conjuncts and other extra-clausal elements, because this process occurs for purely phonological reasons, so they accept any type of overt lexical material as prosodic support.

- (100) a. *I* *mu* wtedy otworzył-*ś* drzwi?  
*and* *him*<sub>CL.DAT</sub> then open<sub>PART.MSG+AUX.2SG</sub> door<sub>ACC</sub>  
 ‘And you open opened the door for him then?’  
 b. \**Mu* wtedy otworzył-*ś* drzwi? (Pl)

This is not the case with the auxiliary encliticization on the focused/topicalized elements, which leads me to conclude that this is a syntactically-constrained phenomenon.

According to Borsley & Rivero (1994), the perfect auxiliary is always generated in I<sup>0</sup>, whether it is incorporated into the *l*-participle or encliticized onto the word

appearing in the first position. The clause-initial elements reach their ultimate landing site by scrambling (cf. 101a), or in the case of *wh*-elements, via *wh*-movement (cf. 101b).

- (101) a. Tego-*m* piosenkarza znał  
 this<sub>ACC</sub>+AUX.1SG singer<sub>ACC</sub> know<sub>PART.M.SG</sub>  
 ‘‘I knew this singer!’’  
 b. Którego-*ście* studenta oblał?  
 which+AUX.2PL student fail<sub>PART.VIR.PL</sub>  
 ‘‘Which student did you fail, after all?’’ (PI)

All these clause-initial elements create an inseparable unit together with the auxiliary. However, even though the unit is inseparable, the two elements do not form a phonological word, because they resist penultimate stress assignment, as shown in (102) for the example in (101b).

- (102) a. \*Którego-*ście* studenta oblał?  
 b. KtóREgo-*ście* studenta oblał? (PI)

Consequently, I conclude that the unit is formed in syntax. Since the auxiliary can be preceded by phrasal elements, such as *wh*-words and pronouns, I suggest that they occupy the specifier of the projection which is headed by the auxiliary. Following Borsley and Rivero (1994: 399), I assume that these elements reach this position by scrambling. Now, in order to determine whether the auxiliary really resides in I/T, as Borsley and Rivero (1994: 399) suggest, and whether the elements that precede the auxiliary target Spec, TP it is necessary to examine the properties of scrambling.<sup>133</sup>

It has been observed that scrambling in Polish shares a number of properties with *wh*-movement (cf. Willim 1989; Borsley & Rivero 1994; Lubańska 2000). For instance, both types of displacement are constrained by the same restrictions, such as the *Wh*-island Constraint, the Complex NP Constraint, and the Left Branch Condition. As an example, the sentence in (103a) illustrates *wh*-movement, whereas the ones in (103b) demonstrate scrambling of an object to the clause-initial position in the context of the *Wh*-island Constraint. See Willim (1989) for a discussion of the other constraints.

- (103) a. \*[<sub>CP</sub> Co<sub>j</sub> [<sub>TP</sub> *pro* zastanawiał-*eś* się  
 what<sub>j</sub> wonder<sub>PART.M.SG</sub>+AUX.2SG REFL  
 [<sub>CP</sub> komu<sub>i</sub> [<sub>TP</sub> Jan da t<sub>i</sub> t<sub>j</sub> ?]]]]  
 (to) who<sub>i</sub> Jan give<sub>PRES.3SG</sub> t<sub>i</sub> t<sub>j</sub>  
 ‘‘\*What did you think that John to whom gives?’’  
 b. \*Jana<sub>j</sub> [oni zastanawiali się [kto t<sub>i</sub> odwiedza t<sub>j</sub>]]  
 John<sub>j</sub> [they wonder<sub>PART.VIR.PL</sub> REFL [who<sub>i</sub> t<sub>i</sub> visit<sub>PRES.3SG</sub> t<sub>j</sub>]]  
 ‘‘\*John<sub>j</sub>, they wondered who visited him<sub>i</sub>’’ (PI, Willim 1989: 110; 124)

*Wh*-movement represents A<sup>3</sup>-movement. Since scrambling is subject to the same conditions and restrictions as *wh*-movement, it must instantiate A<sup>2</sup>-movement as well. This assumption is further verified by the fact that scrambling in Polish licences parasitic gaps.

<sup>133</sup> Borsley & Rivero (1994: 400-401) claim that scrambling in Polish ‘‘adjoins a phrase to a X<sup>max</sup> in the clause and creates a chain with the characteristics of *wh*-chains’’. My interpretation of this statement is that scrambled elements adjoin to TP/IP by creating an A<sup>2</sup>-bar chain. Topicalization seems to be the more appropriate term here.

Parasitic gaps, which are marked with *e* in (104), are compatible only with A'-movement. Their existence depends on the presence of a real gap in the clause, which is identified with *t* in (104). Bondaruk (1995) observes that parasitic gaps are attested in clauses in which the real gap that licenses the parasitic gap results from scrambling (cf. 104a and b). The clauses in which scrambling does not occur are ill-formed due to the lack of the gap (cf. 104a' and b'). Thus, scrambling is the only way to create the required gap. Since the traces left by scrambled constituents behave like A'-bound variables, scrambling must take place via A'-movement.

- (104) a. Ten artykuł Piotr odłożył *t* nie analizując *e*  
 this article Piotr put-away<sub>PART.MSG</sub> not analysing  
 "Piotr put away this paper without analysing"
- a.' \*Piotr odłożył ten artykuł nie analizując *e*  
 Piotr put-away<sub>PART.MSG</sub> this article not analysing
- b. Tę spódnicę trzeba dobrze wyprasować *t*,  
 this skirt one-should well iron<sub>INF</sub>  
 żeby móc nałożyć *e*  
 that+COND can<sub>INF</sub> put-on<sub>INF</sub>  
 "This skirt should be well-ironed before it is worn"
- b.' \*Trzeba dobrze wyprasować tę spódnicę,  
 one-should well iron<sub>INF</sub> this skirt  
 żeby móc nałożyć *e*  
 that+COND can<sub>INF</sub> put-on<sub>INF</sub> (Pl, cf. Bondaruk 1995)

Moreover, Borsley & Rivero (1994: 399-401) postulate that scrambling in Polish must be movement to an A'-position, because it has reconstruction properties, which is a characteristic of A'-movement (cf. Déprez 1989). As shown in (105b), the anaphor *swojego* can be bound by the object *Jana* even when it is topicalized to the clause-initial position.

- (105) a. Jan spotkał swojego brata  
 Jan meet<sub>PART.MSG</sub> his-OWN<sub>REFL</sub> brother  
 "Jan<sub>i</sub> met his<sub>i</sub> own brother"
- b. Swojego brata Jan spotkał  
 his-OWN<sub>REFL</sub> brother Jan meet<sub>PART.MSG</sub> (Pl, Borsley & Rivero 1994: 400)

To conclude, the tests that have been carried out so far uniformly indicate that Polish has scrambling of the A'-type. However, the sentences examined above did not include auxiliary clitics. What remains to be shown is that the examples with auxiliary clitics exemplify the same type of scrambling possibilities. Thus, the sentence in (106), which corresponds to (104), indicates that scrambling of the object across an auxiliary clitic licenses parasitic gaps.

- (106) Tę książkę-ś odłożył *t* nie analizując *e*?  
 this book+AUX.ZSG put-away<sub>PART.MSG</sub> not analysing  
 "Was it this book that you put away without analysing?" (Pl)

Likewise, the pairs in (107) demonstrate that movement of the direct object in front of the auxiliary clitic exhibit reconstruction properties, as well.

- (107) a. Ty-ś spotkał swojego brata  
 you+AUX.2SG meetPART.MSG your-ownREFL brother  
 “You<sub>i</sub> met your<sub>i</sub> own brother”  
 b. Swojego brata-ś spotkał  
 your-ownREFL brother+AUX.2SG meetPART.MSG (Pl)

To summarize, the test I have carried out prove that the displacement of various constituents across the auxiliary clitic exemplify A'-movement. This indicates that they may not target Spec, TP (or Spec, IP), because it is an A-position. Following the insights due to Szczegielniak (1996; cf. section 5.3.3.3), but contra Borsley & Rivero (1994), I assume that in these cases the auxiliary clitic raises higher than I/T and that it lands in  $\Sigma$ , which is a projection that encodes topic and focus features. The scrambled elements land in Spec,  $\Sigma$ P, as exemplified in (108) for (107b).

- (108) [ $\Sigma$ P <swojego brata><sub>i</sub> [ $\Sigma$  -ś<sub>j</sub> [ $\Sigma$ P [ $\Sigma$  t<sub>j</sub> ... [ $\Sigma$ P spotkał t<sub>i</sub>]]]]]

#### 5.3.4.1.3 *Że*-support

Section 5.3.2.1.2 showed that there are circumstances in which encliticization of the auxiliary onto the preceding element is blocked for phonological reasons. This happens most often when the last syllable of the clitic host has a highly sonorous coda (cf. Bański 2000: 96). The only way then to save the derivation is to attach the auxiliary to the *l*-participle as an affix (cf. 109b), or to insert the focus particle *że*, which will provide appropriate phonological support for the clitic (cf. 109c).

- (109) a. \*do Katowic-ś pojechał  
 to KatowiceGEN+AUX.2SG goPART.MSG  
 b. do Katowic pojechał-ś  
 to KatowiceGEN goPART.MSG+AUX.2SG  
 “You went to Katowice”  
 c. do Katowic-że-ś pojechał  
 to KatowiceGEN+FOC+AUX.2SG goPART.MSG  
 “You went to Katowice?!” (Pl)

When supported by *że*, the auxiliary clitic may appear in the clause initial position. As shown in (110), the auxiliary-*że* complex may be followed by the subject (cf. 110a) or a scrambled direct object (110b).

- (110) a. Że-ś ty czytał tę książkę  
 FOC+AUX.2SG you readPART.MSG this book  
 nie zaskoczyło nikogo  
 NEG surprisePART.NSG nobody  
 “The fact that you read this book did not surprise any one”  
 b. Że-ś tych meili jeszcze nie wysłał  
 FOC+AUX.2SG theseGEN e-mailsGEN still NEG sendPART.MSG  
 to my wiemy  
 this we know  
 “The fact that you haven’t sent these e-mails yet is known to us” (Pl)

This indicates once again that Borsley and Rivero's (1994) idea that the auxiliary is located in I<sup>0</sup> in all contexts cannot be on the right track. If this were the case, it should be impossible for the subject *ty* in (110a) to follow the auxiliary clitic.

As in the other types of auxiliary encliticization, *że* does not enter the prosodic word of the preposed non-verbal element. This is shown in (111), where *że* does not change the normal penultimate stress pattern.

- (111) a. do KaTOWic-*że-ś* pojechał  
 to Katowice<sub>GEN+FOC+AUX.2SG</sub> go<sub>PART.MSG</sub>  
 "You went to Katowice?!"
- b. KIEdy-*że-ś* tam poszedł  
 when<sub>+FOC+AUX.2SG</sub> there go<sub>PART.MSG</sub>  
 "When did you go there?!" (Pl)

*Że* is homophonous with the indicative complementizer. However, the complementizer *że* has a different distribution from the supportive particle *że*, and there is strong evidence that the two elements constitute different categories in spite of their morphological identity. For instance, insertion of the supportive *że* is obligatory only when there is no suitable phonological host for the auxiliary clitic (cf. 112a). If the auxiliary is affixed on the *l*-participle, *że* is superfluous and hence may not appear in the structure (cf. 112b). If the auxiliary can encliticize on the clause initial element, *że* may be optionally inserted to render additional emphasis to this element (cf. 112c).

- (112) a. We wtorek-\*(*że*)-*śmy* go nie widzieli  
 on Tuesday<sub>+FOC+AUX.1PL</sub> him<sub>CLACC</sub> NEG see<sub>PART.VIR.PL</sub>  
 "On Tuesday we didn't see him"
- b. We wtorek (\**że*) go nie widzieli-*śmy*  
 on Tuesday<sub>+FOC</sub> him<sub>CL.GEN</sub> NEG see<sub>PART.VIR.PL+AUX.1PL</sub>
- c. Wtedy-(*że*)-*śmy* go nie widzieli  
 then <sub>FOC+AUX.1PL</sub> him<sub>CLACC</sub> NEG see<sub>PART.VIR.PL</sub>  
 "We didn't see him then" (Pl, cf. Bański 2001)

By contrast, the indicative complementizer must always appear in the clause and is never dropped.

- (113) Powiedział, \*(*że*) już zjedli-*ście* obiad  
 say<sub>PART.MSG</sub> that already eat<sub>PART.VIR.PL+AUX.2PL</sub> dinner  
 "He says that you have already had dinner" (Pl)

Furthermore, the two types of *że* may co-occur. The complementizer is always located higher than the focus particle. It is also possible to place some lexical material between the two elements (cf. 114b), which is then interpreted as topicalized or focused.

- (114) a. Powiedział, że *że-ście* już zjedli obiad  
 say<sub>PART.MSG</sub> that <sub>FOC+AUX.2PL</sub> already eat<sub>PART.VIR.PL</sub> dinner  
 "He says that you have already had dinner"
- b. Powiedział, że ten park *że-ście* już widzieli  
 say<sub>PART.MSG</sub> that this park <sub>FOC+AUX.2PL</sub> already see<sub>PART.VIR.PL</sub>  
 "He says that you've seen this park already" (Pl, cf. Bański 2001)

Moreover, the focus particle *że* may be accompanied by the interrogative complementizer *czy*. As in the case of the indicative complementizer, *że* is located lower than *czy*.

- (115) Zastanawiam się, czy *że-ście* już to widzieli  
 wonder<sub>PRES.1SG</sub> REFL if FOC+AUX.2PL already it see<sub>PART.VIR.PL</sub>  
 “I wonder whether you have seen it yet” (Pl, cf. Bański: 2001)

The position of the supportive *że* with respect to other constituents suggest that even though its occurrence is motivated prosodically, it is located in a designated syntactic position in the left periphery of the clause. To my knowledge, there have been no detailed accounts of *że*-placement specifying its syntactic position proposed so far. The use of *że*-support seems to be increasing in spoken Polish (cf. Szpiczakowska 1988),<sup>134</sup> which led Franks & Bański (1999) to suggest that the ‘*że*+AUX’ complexes might be new auxiliaries, with *że* being reanalyzed as a verbal stem. In his later work, Bański (2000, 2001) proposes that *że* is a ubiquitous dummy head which may be inserted at PF in order to supply a host for stranded auxiliary clitics, which are unable to form a prosodic word otherwise. He argues that in this respect *że* is similar to *do*-support in English.

However, as Bański (2001) points out himself, there are problems with the idea that *że* occurs just for phonological reasons. For example, *że*-support may apply when there is no prosodic need for it, as in (116a), where the auxiliary can be affixed on the *l*-participle (cf. 116b). The only reason to insert *że* in (116a) is to put an additional focus on *poszli*.

- (116) a. POSZLI *że-ście* już tam?  
 go<sub>PART.VIR.PL</sub> FOC+AUX.2PL already there  
 “Have you gone there yet?”  
 b. Poszli-*ście* już tam? (Pl, cf. Bański 2000: 211)

Likewise, *że* is commonly affixed on the imperative. As (117b) shows, its form may be morphologically reduced to *ż*.

- (117) a. Idź(-*że*) już!  
 go<sub>IMPV.2SG</sub>+FOC already  
 “Go there now!”  
 b. Zróbcie(-*ż*) to!  
 do<sub>IMPV.2PL</sub>+FOC it  
 “Do it” (Pl, cf. Bański 2001)

The current status of *że* in Polish becomes clarified once the diachronic development of this element is taken into account. Both types of *że* have a common ancestor. *Že* was used as an enclitic focus marker in Old Church Slavonic (cf. 118) and in Old Polish (cf. 119).

<sup>134</sup> It will be shown presently that this statement does not seem to be justified diachronically. It is more likely that the use of supportive *że* tends to be more accepted by normative linguists, and hence may appear to them to be more widespread than before.

(118) a. Rečeno že bystь  
 say<sub>PASS.N.SG</sub> FOC be<sub>AOR.3SG</sub>  
 “But it was said” (OCS, Willis 2000: 325)

(119) Ty, jen-že-ś jest przez początku  
 you who+<sub>FOC+AUX.2SG</sub> be<sub>FOC</sub> since beginning  
 “Thou, who hast been since the beginning...”  
 (Old Polish, Andersen 1987: 37)

In Old Polish texts the focus particle was frequently attached to demonstratives in order to add emphasis. These forms have been lexicalized in Modern Polish into *tenże* ‘this<sub>GEN</sub>’; *tegoż* ‘this<sub>GEN</sub>’, *temuż* ‘this<sub>DAT</sub>’, and *tymże* ‘this<sub>INSTR</sub>’. Moreover, it formed a complex conjunction together with the 3<sup>rd</sup> person copula *jest* and the question particle *li*: *je(st)+że+li*, which has been lexicalized as the complementizer *jeżeli* ‘if/whether’<sup>135</sup> (cf. Decaux 1955: 205-206).

According to Decaux (1955: 208-209), the function of *że* as a complementizer, which predominates in Modern Polish, was extremely uncommon in Old Church Slavonic and Old Polish texts. The usual complementizer was *iże*, and *że* emerged as a complementizer only in the 16<sup>th</sup> century, when the initial vowel *i* was lost. The categorial shift from the focus particle to the complementizer was accompanied by a change in the direction of cliticization: whereas the focus particle was an enclitic, the complementizer was a proclitic.

I would like to suggest that the reinterpretation of *że* has syntactic repercussions as well. As a declarative complementizer, it is the head of CP. When *że* functions as a focus particle, it is one of the possible spell-outs of the  $\Sigma^0$ -related focus feature. When the auxiliary clitic is unable to encliticize onto a host, it must compensate for its prosodic deficiency by incorporating into *że* in  $\Sigma^0$ . This is exemplified for the 1<sup>st</sup> person plural auxiliary *-śmy* in (120).

(120) [<sub>ΣP</sub> [<sub>Σ</sub> že+*-śmy*<sub>i</sub>] [<sub>TP</sub> [<sub>T</sub> t<sub>i</sub>]]]

However, the  $\Sigma$ -head does not have to be spelt out overtly. For example, the auxiliary clitic may encliticize into the topicalized lexical element occupying Spec,  $\Sigma P$ , if the prosodic structure of this element is appropriate for encliticization (in the case at hand, if it does not end in an obstruent). This option is illustrated for the 1<sup>st</sup> person plural subject pronoun *my*, which is the host for the enclitic auxiliary *-śmy*.

(121) [<sub>ΣP</sub> My<sub>i</sub> [<sub>Σ</sub> *-śmy*<sub>i</sub>] [<sub>TP</sub> t<sub>j</sub> [<sub>T</sub> t<sub>j</sub>]]]

Summarizing, the preceding sections investigated cases of auxiliary encliticization. It was demonstrated that the enclitics move from their base positions to functional heads which lexicalize meanings related to focus, topic, and subjunctivity. The elements that give support to the enclitics undergo A<sup>?</sup>-movement.

<sup>135</sup> In contrast to the South Slavic languages, the question particle *li* is obsolete in Modern Polish. *Jeżeli* has an alternative variant *jesli*, which presumably derives from *jest+li*. *Jeżeli* seems to render additional focus meaning, which is to be expected given that it contains the focus particle *że*.

### 5.3.4.2 Auxiliary affixation on the *l*-participle

The present section will analyze the position of auxiliary affixes in the clause structure. Unlike the auxiliary clitics, which can encliticize on any fronted category, the auxiliary affixes are always adjacent to the verb. Therefore, I will be only concerned with their placement with respect to the *l*-participle.

#### 5.3.4.2.1 Participle movement in Polish and in South Slavic

Chapter 2 extensively analysed fronting of the *l*-participle across the auxiliary ‘be’ in South Slavic. The movement was argued to be an instance of predicate/locative inversion, and the *l*-participle was claimed to raise to Spec, TP. A number of arguments were raised in support of this approach. For instance, it was shown that since the *l*-participle is marked for gender and number, it is a suitable candidate for movement into Spec, TP in order to check the  $\varphi$ -features of T<sup>0</sup>. The hypothesis is confirmed by the fact that the fronted participle may never co-occur with the subject, which means that the two constituents compete for the same position.

In Polish the *l*-participle has exactly the same morphology as in South Slavic. It carries  $\varphi$ -features, so it is potentially eligible for movement to Spec, TP. However, it may be preceded by the subject.

- (122) My pojechali-*śmy* do Bukaresztu pociągiem  
 we g<sub>OPART.VIR.PL</sub>+AUX.IPL to Bucharest<sub>GEN</sub> train<sub>INSTR</sub>  
 “We went to Bucharest by train” (Pl)

Admittedly, the presence of the pronoun in (122) adds emphasis to the interpretation of the clause, but this is due to the fact that Polish is a *pro*-drop language, so subject pronouns are usually elided. However, in South Slavic the subject may not be placed in front of the *l*-participle, not even to render extra emphasis. Whenever the subject is clause-initial, it must precede the auxiliary, while the *l*-participle remains in situ. If the same word order is applied in Polish, the auxiliary encliticizes on the subject. The subject is then normally interpreted as topicalized or focused, which is not necessarily the case in South Slavic.

- (123) My-*śmy* pojechali do Bukaresztu pociągiem  
 we+AUX.IPL g<sub>OPART.VIR.PL</sub> to Bucharest<sub>GEN</sub> train<sub>INSTR</sub> (Pl)

There are a number of ways to explain this variation across the Slavic languages. For instance, there exists a linguistic division between East Slavic on the one hand and the West and South Slavic on the other hand concerning the availability of declinable auxiliary clitics. The East Slavic languages, such as Russian or Ukrainian, have lost their perfect auxiliaries completely (cf. chapter 1, section 1.3.4.2.1). At the same time they are non-*pro*-drop languages, and this property is often attributed to the lack of the auxiliaries in these languages (cf. Franks 1995 ch. 7). It could be hypothesized, then, that due to the weakening of the auxiliaries, Polish is losing its *pro*-drop properties. Presumably, some of the person features are being lost on the auxiliary because of its morphological impoverishment, and the overt realization of the subject is a way to recover them. In order to maintain uniformity with the analysis of the related constructions in South Slavic, it could be argued that when the subject precedes the participle-auxiliary sequences (cf. 122), it moves higher than the *l*-participle and lands in



a high verbal position (e.g. in Spec, Focus/Topic Phrase). This idea might be potentially supported by the position occupied by sentential adverbs. Watanabe (1993) and Bošković (1997) assume that they are adjoined to TP. As long as the position of sentential adverbs is a reliable criterion for the structure of Polish, the data in (124) show that the subject may occur higher than sentential adverbs in the structure, and target positions inaccessible for the *l*-participle.

- (124) a. Ty    na pewno   zaspal-eś  
           you   certainly   oversleep<sub>PART.M.SG+AUX.2SG</sub>  
           ‘You’ve certainly overslept’  
       b. \*Ty    zaspal-eś                            na pewno  
           you   oversleep<sub>PART.M.SG+AUX.2SG</sub>   certainly                            (P)

However, it was pointed out in chapter 2 that the same distribution is found in the South Slavic languages, where the subject may raise across sentential adverbs as well.

Another option may be to suggest that as a result of the morphological weakening of the auxiliaries, the structure of the compound tenses in Polish is different than in South Slavic. As was pointed out in section 5.3.2.2, not all native speakers of Polish treat the perfect auxiliaries uniformly. All of them analyze the forms in the singular paradigm as affixes, but many of them still interpret the variants in the plural as clitics. I will assume, though, that regardless of the clitic/affix status of the auxiliary, all speakers treat the *l*-participle as a head. It undergoes head movement to T, where it adjoins to the auxiliary. As a result, it may be freely preceded by the subject, which occupies Spec, TP.

In the subsequent sections I will carry out different tests, which will allow me to determine that the *l*-participle does indeed move as a head in Polish. The most important one will be related to its interaction with sentential negation. Section 5.3.4.2.2 will differentiate between sentential and constituent negation. Since only the former is relevant for *l*-participle movement, it is necessary to distinguish between the two types, using criteria related to prosody (cf. section 5.3.4.2.2.2) and certain morphological relations between negation and the object, such as the genitive of negation (cf. section 5.3.4.2.2.3).

#### 5.3.4.2.2 Position and types of negation in Polish

The Slavic languages have a very lax word order, with many constituents being moved in order to establish specific discourse structure relations. Frequently the only reliable way of deciding about the placement of a constituent in the clause structure is to investigate the elements that are assumed not to undergo movement, such as adverbs and negation, or the words that must appear in fixed positions, such as clitics. However, it was shown in section 5.2.2 that pronominal clitics do not have to target a designated position in Polish, so they cannot be used to determine verb placement. Therefore, it seems more useful to look at the position of negation instead.

It was demonstrated in chapter 2 that negation is a useful device not only for establishing the position of the verb, but also for deciding whether the verb moves as a head or as an XP. The negative marker is a head, which projects NegP. It obligatorily attracts other X<sup>0</sup> elements, either only verbs, as in Serbo-Croatian, or the closest head of any category, as in Bulgarian. Since the *l*-participle undergoes XP-movement in Bulgarian and Serbo-Croatian, it may not be attracted by negation.

Furthermore, it was pointed out in chapter 2, section 2.3.6.1 that it is important to distinguish between sentential (cf. 125a) and constituent (contrastive) negation (cf. 125b).

- (125) a. Jan nie pije piwa  
 Jan NEG drink<sub>3SG</sub> beer<sub>GEN</sub>  
 “Jan doesn’t drink beer”  
 b. Jan pije nie piwo a wino  
 Jan drink<sub>3SG</sub> NEG beer<sub>ACC</sub> but wine<sub>ACC</sub>  
 “Jan doesn’t drink beer but wine” (Pl)

The two types of negation differ in their syntactic licensing in Slavic. Sentential negation always involves incorporation of a verbal head into the negative marker. Constituent negation is assigned by placing the negative marker in the position immediately preceding the element that is to be negated. It does not involve syntactic incorporation, because the negated element can be either a head or an XP, while incorporation is possible only between two heads.

Hence, the X<sup>0</sup>/XP nature of the element that is attracted by the negative particle can be uniformly determined only in the case of sentential negation. Luckily, unlike South Slavic, Polish has very explicit means of distinguishing between sentential and constituent negation, which are related to stress shift and the assignment of genitive of negation. They will be overviewed in sections 5.3.4.2.2.2 and 5.3.4.2.2.3, respectively. On the basis of these findings I will determine the position of NegP that licenses sentential negation in section 5.3.4.2.3. This will allow me to make definite claims about the location of the *l*-participle and the type of movement it undergoes in section 5.3.4.2.3, as well as about the position of the auxiliaries in the clause structure in section 5.3.4.2.4.

#### 5.3.4.2.2.1 *Position of sentential and constituent negation*

It has been observed in the literature (cf. Willim 1990: 212ff, Witkoś 1998: 214ff, and Błaszczak 2001: 55) that the negative particle *nie* immediately precedes finite and non-finite verbal heads in Polish. Insertion of any overt material between negation and the verb results in ungrammaticality.

- (126) a. Jan nie czyta gazet  
 Jan NEG read<sub>3SG</sub> newspapers<sub>GEN</sub>  
 “Jan doesn’t read newspapers”  
 b. \*Jan nie gazet czyta (Pl)

Negation may not be separated from the verb even by reflexive or pronominal clitics. In this respect Polish patterns with Serb-Croatian, where negation is obligatorily pre-verbal as well.

- (127) a. Jan się nie nudzi  
 Jan REFL NEG bore<sub>3SG</sub>  
 “Jan is not bored”  
 a’. \*Jan nie się nudzi

- b. Jan jej nie słyszy  
 Jan her<sub>CL.GEN</sub> NEG hear<sub>3SG</sub>  
 “Jan can’t hear her”
- b’. \*Jan nie jej słyszy (Pl, cf. Willim 1990: 212)

Błaszczak (2001: 125-127) observes that there is some evidence for overt attraction of verbs in Polish by negation, which comes from their ordering with respect to frequency and manner adverbs. The default pattern is ‘adverb-verb’. However, when the verb is negated, it tends to precede the adverb.

- (128) a. Ewa ładnie się ubiera  
 Ewa prettily REFL dress<sub>3SG</sub>  
 “Ewa dresses well”
- a’. Ewa nie ubiera się ładnie  
 Ewa NEG dress<sub>3SG</sub> REFL prettily  
 “Ewa doesn’t dress well”
- b. Jan często pisze listy  
 Jan often write<sub>3SG</sub> letters<sub>ACC</sub>  
 “Jan writes letters frequently”
- b’ Jan nie pisze często listów  
 Jan NEG write<sub>3SG</sub> often letters<sub>GEN</sub>  
 “Jan doesn’t write letters frequently” (Pl, Błaszczak 2001: 125-126)

The sentences listed in (126) through (128) exemplify sentential negation. However, just as Bulgarian and Serbo-Croatian, Polish also has an option of expressing constituent negation by placing the negative particle in front of the constituent that negation scopes over. Unlike in the case of sentential negation, the negated constituent does not have to be a verbal element or a head. It can be of any category that needs to be negated, such as the noun phrase in (129a) or a prepositional phrase in (129b). The sentence is normally followed by a “correction phrase” introduced by the complementizer *ale* or *lecz* ‘but’.

- (129) a. Jan czytał nie gazetę ale list  
 Jan read<sub>PART.M.SG</sub> NEG newspaper<sub>ACC</sub> but letter<sub>ACC</sub>  
 “Jan didn’t read a newspaper but a letter”
- b. Ania przyszła nie w poniedziałek, lecz we wtorek  
 Ania come<sub>PART.F.SG</sub> NEG on Monday but on Tuesday  
 “Ania didn’t come on Monday, but on Tuesday” (Pl, Błaszczak 2001: 57)

To summarize, sentential negation attracts only verbal heads, whereas constituent negation may scope over different categories, which can be phrasal. This means that only sentential negation involves the syntactic operation of incorporating a negated element into the head of NegP, because incorporation is possible only between two heads. Constituent negation consists in placement of a negative adverbial in front of the negated constituent, and does not involve incorporation. In the following sections I will show that in Polish the two types of negation differ in prosodic and syntactic properties. By examining these differences it will be possible to determine the exact position of NegP in the clause structure, and its relation to the *l*-participle.

5.3.4.2.2.2 *Prosodic properties of negation*

Apart from the selectional restrictions, sentential negation exhibits different phonological properties than constituent negation. Namely, the former imposes stress shift on the verbal element that is negated. Thus, since stress falls on the penultimate syllable in Polish, it is moved from a one-syllable verb to the negative particle when the verb is negated. This shows that negation forms a prosodic word with the verb it precedes.

- (130) a. WIEM  
           know<sub>1SG</sub>  
           ‘‘I know’’  
       b. NIE wiem  
           NEG know<sub>1SG</sub>  
           ‘‘I don’t know’’  
       c. \*Nie WIEM (Pl, cf. Ozga 1976: 137)

Conversely, constituent negation does not give rise to the stress shift, which means that the negative particle *nie* does not form a prosodic word with non-verbal elements.

- (131) a. Nie JA  
           NEG I  
           ‘‘Not me’’  
       b. \*NIE ja (Pl, Błaszczak 2001: 120)

The contrast is to be expected on the assumption that a syntactic process may have prosodic effects. Only sentential negation involves syntactic incorporation, so only this type of negation changes stress assignment.

5.3.4.2.2.3 *Genitive of negation*

It has been demonstrated that only sentential negation involves syntactic incorporation of a negated verbal head into the negative marker in Neg<sup>0</sup>. The present section will discuss the phenomenon of genitive of negation, which is a very reliable criterion of sentential negation. I will examine the elements that are affected by this rule, and this will allow me to locate NegP in the clause structure.

Polish, along with Slovene, is the only Slavic language that obligatorily exhibits genitive of negation (Błaszczak 2001: 60).<sup>136</sup> The rule requires that the direct object that appears in accusative case in affirmative clauses switch into genitive case when the sentence is negated (cf. 132b).

- (132) a. Ewa karmi ptaki/\*ptaków  
           Ewa feed<sub>3SG</sub> birds<sub>ACC</sub>/birds<sub>GEN</sub>  
           ‘‘Ewa feeds birds’’

<sup>136</sup> The other Slavic languages that have genitive of negation limit its application to some specific constructions. See Babby (1980), Pesetsky (1982), Franks (1995), Brown (1999), Błaszczak (2001), and the references cited therein for a detailed discussion.

- b. Ewa nie karmi \*ptaki/ptaków  
 Ewa NEG feed<sub>3SG</sub> birds<sub>ACC</sub>/birds<sub>GEN</sub>  
 “Ewa doesn’t feed birds” (Pl, cf. Błaszczak 2001: 61)

The examples in (133) demonstrate that the direct objects selected by the transitive verb may also appear in dative (133a) or instrumental (133b), but they remain unaffected by negation. Thus, the generalization is that negation does not have any influence on inherent case.

- (133) a. Jan pomaga Ewie  
 Jan help<sub>3SG</sub> Ewa<sub>DAT</sub>  
 “Jan helps Ewa”  
 a’. Jan nie pomaga Ewie/\*Ewy  
 Jan NEG help<sub>3SG</sub> Ewa<sub>DAT</sub>/Ewa<sub>GEN</sub>  
 “Jan does not help Ewa”  
 b. Jan kieruje samochodem  
 Jan drive<sub>3SG</sub> car<sub>INSTR</sub>  
 “Jan drives a car”  
 b’. Jan nie kieruje samochodem/\*samochodu  
 Jan NEG drive<sub>3SG</sub> car<sub>INSTR</sub>/car<sub>GEN</sub>  
 “Jan doesn’t drive a car” (Pl, cf. Błaszczak 2001: 61-62)

Correspondingly, negation has no effect on the case of nominal adjuncts (cf. 134). It is only nominal complements that appear in genitive case (cf. 135).

- (134) a. Deszcz padal trzy godziny  
 rain<sub>NOM</sub> fall<sub>PART.MSG</sub> three<sub>ACC</sub> hours<sub>ACC</sub>  
 “It was raining for three hours”  
 b. Deszcz nie padal trzy godziny/\*trzech godzin  
 rain<sub>NOM</sub> NEG fall<sub>PART.MSG</sub> three<sub>ACC</sub> hours<sub>ACC</sub>/three<sub>GEN</sub> hours<sub>GEN</sub>  
 “It wasn’t raining for three hours” (Pl, Willim 1990: 211)

- (135) a. Jan przeszedł trzy mile  
 Jan walk-through<sub>PART.MSG</sub> three<sub>ACC</sub> miles<sub>ACC</sub>  
 “Jan walked three miles”  
 b. Jan nie przeszedł \*[trzy mile]/ [trzech mili]<sup>137</sup>  
 Jan NEG walk-through<sub>PART.MSG</sub> three<sub>ACC</sub> miles<sub>ACC</sub>/three<sub>GEN</sub> miles<sub>GEN</sub>  
 (Pl, Willim 1990: 211)

Genitive of negation has a different distribution with internal arguments of negated unaccusative verbs. Błaszczak (2001: 62) observes that their case is not affected by negation, so they must appear in the nominative form.

<sup>137</sup> It is not entirely clear whether *trzech mili* is a complement or actually an adjunct. Most analyses (e.g. Franks & Dziwirek 1993, Franks 1995, Witkoś 1998) argue for the latter interpretation of the constituent, which is regarded as a member of an exceptional class of temporal, distance, and measurement adjuncts that take genitive of negation. Witkoś (1998: 273 fn 32) points out that both variants of (135b) are acceptable under the appropriate interpretation. Genitive on the DP adverb implies that Jan covered a distance shorter than three miles. When the accusative form of the DP is used, the adverb of duration has negation within its scope and thus involves constituent negation on the adverb. It may trigger contrastive reading, such as “John did not cover three miles, but four”.

- (136) Studenci/\*studentów nie przyszli na wykład  
 students<sub>NOM</sub> /students<sub>GEN</sub> NEG come<sub>PART.VIR.PL</sub> on lecture  
 “The students didn’t come to the lecture” (Pl, Błaszczak 2001: 62-63)

Correspondingly, the underlying objects of passive participles must also always occur in nominative.

- (137) Gazety/\*gazet nie były dostarczone  
 newspapers<sub>NOM.NV</sub>/newspapers<sub>GEN.NV</sub> NEG be<sub>PART.NV.PL</sub> deliver<sub>PASS.NV.PL</sub>  
 “The newspapers have not been delivered” (Pl)

Moreover, in contrast to sentential negation, constituent negation has no bearing on the case of the nominals that are negated, whether they are subjects (cf. 138a) or objects (cf. 138b).

- (138) a. Nie Marek, a Tomek przyniósł chipsy i wino  
 NEG Marek<sub>NOM</sub> but Tomek<sub>NOM</sub> bring<sub>PART.MSG</sub> chips<sub>ACC</sub> and wine<sub>ACC</sub>  
 “Chips and wine were brought not by Marek but by Tomek”  
 b. Jan kupił nie książkę a kwiaty  
 Jan buy<sub>PART.MSG</sub> NEG book<sub>ACC</sub> but flowers<sub>ACC</sub>  
 “Jan didn’t buy a book but flowers” (Pl)

The exact mechanism of the accusative-to-genitive shift in the presence of sentential negation has been a matter of debate in the literature for a long time (cf. the references listed in footnote 136, and especially Błaszczak 2001, Przepiórkowski 2000, and Witkoś 1998 for an analysis of the genitive of negation in Polish in particular). The details of these accounts or the reason for the case change are not relevant here and exceed the scope of this dissertation. What is important for the analysis developed in this chapter is that genitive of negation never operates on the external argument of transitive and unergative verbs, or internal arguments of unaccusative verbs. It is related to sentential negation and only affects the objects marked for accusative case. Therefore, NegP that licenses sentential negation cannot be higher than TP in Polish. I propose that it is located immediately above AgrOP, which means that it scopes only over the projection in which accusative case is checked (cf. Błaszczak 2001 for related claims). As an illustration, I provide a derivation of a clause with a negated verb in (139).

- (139) a. Nie kupuję roweru  
 NEG buy<sub>1SG</sub> bicycle<sub>GEN</sub>  
 “I’m not buying a bicycle”  
 b. [TP [T <nie+kupuję><sub>i</sub>] ... [NegP [Neg nie + t<sub>i</sub>] [AgrOP roweru<sub>j</sub> [AgrO t<sub>i</sub>] ... [VP t<sub>i</sub> t<sub>j</sub>]]]

The finite verb *kupuję* undergoes head movement from V to AgrO. The object DP *rower*<sub>ACC</sub> raises out of VP to Spec, AgrOP in order to check case. Under the influence of negation immediately above AgrOP, the case on the object switches into genitive. The verb is attracted by the negative particle and incorporates into it. Finally, the verb moves to T together with the negative particle, where it checks Tense.

### 5.3.4.2.3 Negation and types of verbs

The properties of genitive of negation discussed in the previous section indicate that NegP is located above AgrOP in Polish. Moreover, it has been established that Neg

attracts verbal heads, which incorporate into the negative particle *nie*, and that the two elements form a prosodic word. The present section will investigate the types of verbs that are attracted by negation.

In section 5.3.4.2.2.1 I mentioned that in Polish as in Serbo-Croatian the negative particle must immediately precede finite and non-finite verbs. Insertion of any overt material between negation and the verb results in ungrammaticality.

- (140) a. Jan nie jedzie jutro na wycieczkę  
 Jan NEG go<sub>3SG</sub> tomorrow on trip  
 “Jan is not going on a trip tomorrow”  
 b. \*Jan nie jutro jedzie na wycieczkę (PI)

Correspondingly, negation precedes the copula ‘be’ in Polish. This is the pattern found in Bulgarian and Serbo-Croatian as well, but the important difference between Polish and the other languages is that the present tense copula in South Slavic is a clitic and must occur in designated clitic positions. In Polish the present tense copula ‘be’ is not a clitic and has the same distribution as other finite verbs (cf. section 5.3.4.2.4.1).

- (141) To jabłko nie jest wystarczająco dojrzałe  
 this apple NEG be<sub>3SG</sub> enough ripe<sub>N.PL</sub>  
 “This apple is not ripe enough” (PI)

There are a few other differences with respect to verb movement and negation between Polish and South Slavic. In Serbo-Croatian and Bulgarian negation may attract all types of auxiliaries. In Polish, negation may precede only the non-clitic future auxiliary.

- (142) a. Ty nie będziesz się śmiać  
 you NEG be<sub>PRF.2SG</sub> REFL laugh<sub>PART.MSG</sub>  
 “You won’t laugh”  
 b. \*Ty będziesz się nie śmiać (PI, cf. Błaszczak 2001: 81)

When the auxiliary is a clitic or an affix (cf. 143 for the conditional auxiliary and 144 for the perfect auxiliary), the *l*-participle must be attracted instead.

- (143) a. Ty by-ś nie zgubił kluczy  
 you COND+AUX.2SG NEG lose<sub>PART.MSG</sub> keys<sub>GEN</sub>  
 “You wouldn’t lose the keys”  
 b. \*Ty nie by-ś zgubił kluczy (PI)

- (144) a. My-śmy nie widzieli zorzy polarnej  
 today+AUX.1PL NEG see<sub>PART.VIR.PL</sub> light polar  
 “We didn’t see the northern lights”  
 b. \*My nie-śmy widzieli zorzy polarnej (PI)

The contrast in (143) and (144) is crucial for the analysis developed in this chapter, because it shows that the *l*-participle incorporates into negation in Polish. Since the negative marker is a head, and incorporation is possible only between heads, the acceptability of (144a) proves that the *l*-participle moves as a head in Polish. The variants of (144a) are ungrammatical in Bulgarian and Serbo-Croatian, because the *l*-participle undergoes XP movement in these languages.

To summarize, the preceding sections have demonstrated that there is only one NegP in Polish, which dominates AgrOP. As in South Slavic, the head of NegP obligatorily attracts verbal heads, which incorporate into the negative marker *nie*. However, in contrast to the South Slavic languages, negation may not attract verbal clitics, such as the conditional auxiliary *by* and the perfect auxiliaries. A striking property of Polish is the fact that it allows incorporation of the *l*-participle into negation. This indicates that the *l*-participle undergoes head movement in Polish, and has the same syntactic distribution as finite verbs.

In order to make more definite claims about the position and the movement of the *l*-participle in Polish, it is necessary to establish the syntactic distribution of the auxiliaries that it appears with. This will be done in the subsequent section.

#### 5.3.4.2.4 Position and types of the auxiliaries

The following sections will determine the positions occupied by different auxiliaries in the clause structure in Polish. It will be shown that it is possible to distinguish two types of auxiliaries on the basis of their interactions with negation and the *l*-participle.

It has been established that negation always immediately precedes the future auxiliary *będzie*, finite verbs including the copula *jest*, and the *l*-participle. Conversely, the perfect and conditional auxiliaries may never be preceded by negation. I would like to argue that the contrast is not superficial and that it corresponds to substantial structural and semantic differences between the two groups of verbs. For ease of reference, I will term the members of the former class “lexical”, while the latter class will be dubbed “functional”. In this way I follow the distinction introduced by Lema and Rivero (1989) and Rivero (1991, 1994, 2000) to differentiate between the auxiliaries that license participle preposing in South Slavic.

##### 5.3.4.2.4.1 Syntactic properties of functional and lexical auxiliaries

I propose that the lexical auxiliaries are generated below AgrOP, which is the projection immediately dominated by NegP. They undergo head movement and incorporate into negation. The functional auxiliaries that may not be preceded by the negative particle are merged above NegP: *by* originates as the head of MoodP, while the perfect auxiliaries are generated directly in T. The proposal receives support not only from the interaction of functional auxiliaries with the negative particle, but also from their distribution in the presence of the main verb. As demonstrated in (145) and (146), *by* and the perfect auxiliary may never appear lower in the clause structure than immediately right-adjacent (affixed) to the *l*-participle.

- (145) a. Płynęli-*śmy* szybko na drugi brzeg  
SWIMPART.VIR.PL<sup>+</sup>AUX.IPL quickly on second shore  
 “We were swimming quickly to the other shore”  
 b. \*Płynęli szybko-*śmy* na drugi brzeg  
 c. \*Płynęli szybko na drugi brzeg-*śmy* (Pl)
- (146) a. Płynęli-*by-śmy* szybko na drugi brzeg  
SWIMPART.VIR.PL<sup>+</sup>COND<sup>+</sup>AUX.IPL quickly on second shore  
 “We would swim quickly to the other shore”  
 b. \*Płynęli szybko-*by-śmy* na drugi brzeg  
 c. \*Płynęli szybko na drugi brzeg-*by-śmy* (Pl)





(150) Paradigm of the copula 'be' in standard Polish

	SG	PL
1	jest- <i>em</i>	jest- <i>eśmy</i>
2	jest- <i>eś</i>	jest- <i>ście</i>
3	jest	sa

The chart in (150) presents the most common strategy of copula formation. The alternative way is to encliticize the person/number morphemes onto the clause initial element. The two variants are compared in (151). The striking property is that when the copula is encliticized onto the pronominal subject, *jest* and *sa* are copula stems, which remain the same irrespectively of the person specification of the copula enclitic (cf. Bański 2000: 169).

(151) Two ways of copula formation in Polish

	copula affix		copula enclitic	
1SG	ja	jest- <i>em</i>	ja- <i>m</i>	jest I+ <sub>AUX.1SG</sub> be <sub>3SG</sub>
2SG	ty	jest- <i>eś</i>	ty- <i>ś</i>	jest YOU+ <sub>AUX.2SG</sub> be <sub>3SG</sub>
3SG		on/ona/ono he/she/it	jest	be <sub>3SG</sub>
1PL	my	jest- <i>eśmy</i>	my- <i>śmy</i>	sa we+ <sub>AUX.1PL</sub> be <sub>3PL</sub>
2PL	wy	jest- <i>ście</i>	wy- <i>ście</i>	sa we+ <sub>AUX.2PL</sub> be <sub>3PL</sub>
3PL		oni/one they <sub>VIR</sub> /they <sub>NV</sub>	sa	be <sub>3PL</sub>

The pattern observed in (151) confirms that *sa* and *jest* do not specify any person feature, as they are compatible with any person variant of the copula enclitic. Moreover, they must be located lower than the other members of the paradigm in this context. If they were to move, they would compete for the same syntactic position with the enclitic following the clause initial element. As an illustration, the contrast between *jest/sa* and the other copulas is exemplified in (152). In (152a) the copula *jest* raises to T<sup>0</sup> in order to left-adjoin into the auxiliary affix *-śmy*, which carries the 1<sup>st</sup> person plural feature. In (152b) *-śmy* is the 1<sup>st</sup> person plural clitic, which originates in T<sup>0</sup>, and becomes incorporated into the subject pronoun *my*. The 3<sup>rd</sup> person (or non-person) plural copula *sa* may not raise to T<sup>0</sup>, as this position is occupied by the the auxiliary affix *-śmy*. I propose that *sa* remains in its base position, that is in Aux<sup>0</sup>. The ungrammaticality of (152c) proves that only the non-person copula forms remain in situ. The ones that carry a person feature must raise to T<sup>0</sup>. They may not do so if this position is already occupied by an auxiliary clitic, such as *-śmy*.

(152) a. My    jest-*eśmy*    zadowoleni  
           we    be+<sub>AUX.1PL</sub>    glad<sub>VIR.PL</sub>  
           ‘‘We are glad’’

- b. My-*śmy* są zadowoleni  
 we+<sub>AUX.1PL</sub> be<sub>3PL</sub> glad<sub>VIR.PL</sub>  
 “We are glad”
- c. \*My-*śmy* jest-*eśmy* zadowoleni (Pl)

Thus, the generalization is that only the 1<sup>st</sup> and the 2<sup>nd</sup> person copula raise to T<sup>0</sup>, while the 3<sup>rd</sup> person variants remain in Aux<sup>0</sup>. In this way I am also able to show that the syntactic structures of the auxiliaries in Polish and in the South Slavic languages are in fact quite similar. In each of these languages the 3<sup>rd</sup> person auxiliary remains lower than the other forms. In Bulgarian, Macedonian, and Serbo-Croatian this is overtly demonstrated in the arrangement of the clitics in the cluster, as the 1<sup>st</sup> and 2<sup>nd</sup> person auxiliary forms are higher and are separated from the 3<sup>rd</sup> person by the pronominal forms. This pattern is more difficult to discern in Polish, because the language is lacking pronominal clitics.

Even though the auxiliaries in Polish and South Slavic target the same syntactic positions, an important difference between these languages concerns the fact that in South Slavic the copula has the same morphological form as the auxiliary (cf. 153 for Bulgarian).

- (153) a. Dovolēn sŭm **‘be’ as a copula**  
 glad<sub>MSG</sub> be<sub>PRES.1SG</sub>  
 “I am glad”
- b. Pročel sŭm stixove **‘be’ as an auxiliary**  
 read<sub>PART.MSG</sub> be<sub>PRES.1SG</sub> poems  
 “I have read poems” (Bg)

In Polish the two forms have divergent properties: the copula has properties of a lexical element, and can incorporate into negation (cf. 154a), while the auxiliary is a functional word, because it cannot be preceded by *nie* (cf. 154b).

- (154) a. Jestem zadowolony **‘be’ as a copula**  
 be<sub>PRES.1SG</sub> glad<sub>MSG</sub>  
 “I am glad”
- a’. Nie jestem zadowolony  
 NEG be<sub>PRES.1SG</sub> glad<sub>MSG</sub>  
 “I am not glad”
- b. Czytał-*em* wiersze **‘be’ as an auxiliary**  
 read<sub>PART.MSG+<sup>AUX.1SG</sup></sub> poems<sub>ACC</sub>  
 “I have read poems”
- b’. Nie czytał-*em* wierszy  
 NEG read<sub>PART.MSG+<sup>AUX.1SG</sup></sub> poems<sub>GEN</sub>  
 “I haven’t read poems”
- b’’. \*Nie-em czytał wierszy (Pl)

Despite the morphological contrast between the auxiliary and the copula in Polish, I will demonstrate that the differences are more superficial than they seem on the surface. The main evidence for this claim will come from their inflectional paradigms.

I have argued that Aux<sup>0</sup> is the position where both the present tense copula *jest* and the future auxiliary *będzie* are generated. However, the two elements have different inflection. *Bedzie* exhibits the same paradigm as lexical verbs in the present tense, exemplified in (155) for *jechać* ‘to ride’.

(155) Paradigm of the copula 'be' and the finite verb *jechać*

	SG		PL	
	future auxiliary	<i>jechać</i>	future auxiliary	<i>jechać</i>
1	będę	jadę	będziemy	jedziemy
2	będziesz	jedziesz	będziecie	jedziacie
3	będzi-e	jedzi-e	będą	jadą

Conversely, *jest* has inflection affixes which are the same as the auxiliary affixes attached to the *l*-participle. In (156) the paradigm of *jest* is contrasted with the auxiliary forms on the *l*-participle *jechał* 'ride'.<sup>139</sup>

## (156) Paradigm of the copula and auxiliary affixes

	copula affix	auxiliary affixes
1SG	ja <i>jest-em</i> I be <sub>1SG</sub>	<i>jechał-em</i> ride <sub>PART.M.SG</sub> +AUX.1SG
2SG	ty <i>jest-eś</i> you be <sub>2SG</sub>	<i>jechał-eś</i> ride <sub>PART.M.SG</sub> +AUX.2SG
3SG	on/ona/ono <i>jest</i> he/she/it be <sub>3SG</sub>	<i>jechał</i> ride <sub>PART.M.SG</sub>
1PL	my <i>jest-emy</i> we be <sub>1PL</sub>	<i>jechali-emy</i> ride <sub>PART.VIR.PL</sub> +AUX.1PL
2PL	wy <i>jest-ecie</i> you be <sub>2PL</sub>	<i>jechali-ecie</i> ride <sub>PART.VIR.PL</sub> +AUX.2PL
3PL	oni/one są they <sub>VIR</sub> /they <sub>NV</sub> be <sub>3PL</sub>	<i>jechali</i> ride <sub>PART.VIR.PL</sub>

The principal difference between the two paradigms in (155) and (156) is the lack of the morpheme *ś* in the finite verb forms in (155), as in *jest-emy* 'be<sub>1PL</sub>' and *jechali-emy* 'ride<sub>PART.VIR.PL</sub>+AUX.1PL', as well as *jest-ecie* 'be<sub>2PL</sub>' and *jechali-ecie* 'ride<sub>PART.VIR.PL</sub>+AUX.2PL' versus *jechał-emy* 'be<sub>PRE.1PL</sub>' and *jechał-ecie* 'be<sub>PRE.2PL</sub>'. Following the ideas developed in chapter 4, section 4.4.1.3, it could be hypothesized that this morpheme represents the "speaker/hearer" feature, as it appears only on the 1<sup>st</sup> and 2<sup>nd</sup> person forms (cf. Poletto 2000). The morpheme is absent on the 3<sup>rd</sup> person auxiliary, which only carries the number feature.<sup>140</sup>

At first blush the contrast between the two paradigms is surprising, because the copula 'be' does not follow the same pattern as *jechał*, which is the form of 'be' used as the future auxiliary. Quite unexpectedly, the copula matches the paradigm of the auxiliary that is affixed to the *l*-participle. However, the contrast receives a straightforward explanation once a diachronic development of the copula is taken into account. As was argued in chapter 1, section 1.3.4.2.2.1, the form of the copula in Modern Polish were created via morphological merge of the emphatic (orthotonic)

<sup>139</sup> For reasons of clarity, I present only the masculine/virile forms of the *l*-participle. The feminine variant of 'ride' is *jechała*, and the neuter one is *jechało*. The feminine and the neuter forms in the singular have the non-virile form in the plural *jechały*.

<sup>140</sup> Andersen (1987: 34) defines the meaning of *ś* as "subject other than speaker", because the morpheme is missing in the 1<sup>st</sup> singular form in Polish. However, this specification is misguided, because the equivalent of *ś* in South Slavic occurs in the first person singular, too.

variant of 'be' *jest* with the affixes that originated from an enclitic variant of 'be' (cf. Andersen 1987). This is shown for the 1<sup>st</sup> person plural form in (157).<sup>141</sup>

$$(157) \quad \begin{array}{l} \text{jest+(e)smy} \quad \rightarrow \quad \text{jesteśmy} \\ \text{be}_{\text{FOC.3SG}} + \text{be}_{\text{CL.1PL}} \quad \text{be}_{\text{1PL}} \end{array} \quad (\text{PI})$$

The *l*-participle is accompanied by the same type of affixes as auxiliaries, because it also occurred with an enclitic variant of 'be' functioning as the auxiliary (cf. Długosz-Kurczabowa & Dubisz 2001: 307).

$$(158) \quad \begin{array}{l} \text{przyszli} \quad \text{smy} \quad \rightarrow \quad \text{przyszli-śmy} \\ \text{come}_{\text{PART.VIR.PL}} \quad \text{be}_{\text{AUX.1PL}} \quad \text{come}_{\text{PART.VIR.PL}} + \text{AUX.1PL} \end{array} \quad (\text{PI})$$

In spite of the similarity in the forms of affixes, the *l*-participle and the copula have different verbal properties. For instance, the former is non-finite, exhibits adjectival morphology, and is able to assign case and theta roles. The latter is finite, functions as a linking verb and is unable to assign case or project theta roles. Therefore, I suggest that the *l*-participle is generated as the head of  $V^0$ , while the copula is merged in the extended projection of the verb, as the head of AuxP.

The future auxiliary *będzie* has a different paradigm than the present tense copula *jest*. However, these two elements are members of the same aspectual pair. Native speakers of Polish do not perceive *jest* and *będzie* as marked for any aspectual value, but there are diachronic reasons to assume that this is the case. In chapter 1, section 1.3.3.5.2.2 I mentioned that the equivalent of *będzie* in Old Church Slavonic represented the perfective form of 'be' (cf. Dostál 1954: 146). The assumption that *będzie* is perfective is further supported by the facts that it contains the nasal vowel  $\epsilon$  in the root, which is a descendant of a Proto-Indo-European perfectivizing infix (cf. chapter 1, section 1.3.3.5.2.2). Nasality signals perfectivity in some other Polish verbs as well, for instance in *usiąść* 'to sit<sub>PRF</sub>', which contains the nasal vowel  $a$ , in contrast to *siedzieć* 'to sit<sub>IMP</sub>', which is imperfective. Therefore, given that *jest* and *będzie* represent the same verb, I submit that they are both generated in Aux<sup>0</sup>.

To summarize, it has been demonstrated that Polish has two types of auxiliaries, which differ in their syntactic behaviour. The subsequent section will show that the two groups of auxiliaries differ in their semantics as well.

#### 5.3.4.2.4.2 *Semantic properties of functional and lexical auxiliaries*

Apart from the syntactic ordering with respect to each other, the functional and lexical forms have different semantic content. The auxiliary clitics carry only formal features, which are number and person in the case of perfect auxiliaries, and the mood feature in the case of *by*. The lexical elements are richer in their semantics. For instance, they are able to appear in aspectual pairs (cf. 159a), which means that they must have raised across AspP. The functional elements are unable to show aspectual distinctions. This is demonstrated in the compound tense constructions in (159b), in which the aspectual meaning is carried by the *l*-participle, rather than by the perfect auxiliary.

<sup>141</sup> *E* preceding *smy* is a linking vowel occurring for phonological reasons.

- (159) a. *piszę/napiszę*  
 write<sub>IMP.1SG</sub>/write<sub>PRF.1SG</sub>  
 b. *pisal-em/napisal-em*  
 write<sub>IMP.PART.M.SG</sub>+AUX.1SG/ write<sub>PRF.PART.M.SG</sub>+AUX.1SG (Pl)

Likewise, the future auxiliary *będzie* is also a member of an aspectual pair. As was noted in chapter 1, section 1.3.3.5.2.2, it is a perfective variant of the verb 'be' and forms an aspectual pair with the present tense copula *jest*, which is imperfective. Moreover, *będzie* imposes aspectual restrictions on the main verbs that it appears with. Thus, as shown in (160), only imperfective forms of verbs are permitted in compound future constructions in Polish.

- (160) *Będziemy kąpali/\*wykąpali się w morzu*  
 be<sub>PRF.1PL</sub> bathe<sub>PART.IMP.VIR.PL</sub>/bathe<sub>PART.PRF.VIR.PL</sub> REFL in sea  
 "We will be bathing in the sea" (Pl)

The perfect (functional) auxiliary is not specified for any aspectual distinctions, because it originates above AspP. Consequently, it may occur with both perfective and imperfective variants of the *l*-participle.<sup>142</sup>

- (161) a. *Kąpali-śmy się w morzu*  
 bathe<sub>PART.IMP.VIR.PL</sub>+AUX.1PL REFL in sea  
 "We were bathing in the sea"  
 b. *Wykąpali-śmy się w morzu*  
 bathe<sub>PART.PRF.VIR.PL</sub>+AUX.1PL REFL in sea  
 "We bathed in the sea" (Pl)

To summarize, I present the positions of the two types of auxiliaries in the clause structure in (162). It shows that the perfect and the conditional auxiliary forms are located in T and Mood, respectively. Thus, they are higher than the lexical future auxiliary *będzie*, which occupies the same position as the copula *jest*.

- (162) [TP [T Perfect Aux [MoodP [Mood *by* [AspP [AgrIOP [NegP [AgrOP [AuxP *będzie/jest* [VP/PartP]]]]]]]]]]

<sup>142</sup> In chapter 2 I mentioned that in Bulgarian the past auxiliary *beše*, which diachronically corresponds to the form of the verb 'be' in the imperfectum in Old Church Slavonic, cannot combine with the *l*-participles that carry imperfectum morphology, whether they are specified for perfective or imperfective aspect (cf. ib). It may only appear with aorist participles (cf. ia; see Krapova 1999a: 61).

- (i) a. *Ivana beše pisala stixove*  
 Ivana be<sub>PAST.3SG</sub> write<sub>PART.IMP.F.AOR.F.SG</sub> poems  
 "I had written poems"  
 b. *\*Ivana beše napišela/pišela stixove*  
 Ivana be<sub>PAST.3SG</sub> write<sub>PART.PRF.IMP.F.SG</sub>/write<sub>PART.IMP.F.SG</sub> poems  
 (Bg, Krapova 1999a: 60-61)

Thus, the generalization is that the participle should carry the opposite aspectual value from the one specified by the auxiliary. I leave the explanation of this semantic relation for future research.

### 5.3.4.2.5 Why is XP-movement of the *l*-participle impossible in Polish?

I will conclude this chapter by trying to respond to the question posed in section 5.3.4.2, which was concerned with the impossibility of *l*-participle fronting via predicate inversion.

It has been shown that the *l*-participle moves as a head in Polish. The main motivation for this assumption comes from the fact that the *l*-participle is able to become incorporated into the negative particle, which is the head of NegP. However, this still does not exclude XP movement of the *l*-participle to Spec, TP. In principle, it should be equally possible to raise NegP into Spec, TP after the *l*-participle has incorporated into negation. For instance, NegP in (139), repeated in a modified version in (163), should be eligible for XP-movement into Spec, TP, that is to the position in front of the auxiliary affix *-em*.

- (163) a. Nie kupil-*em* roweru  
NEG buy<sub>PART.MSG</sub>+AUX.ISG bicycle<sub>GEN</sub>  
 “I didn’t buy a bicycle”  
 b. [TP [T -em ... [NegP [Neg nie + kupil]<sub>i</sub>’ [AgrOP roweru]<sub>j</sub> [AgrO t<sub>j</sub>’ ... [VP t<sub>i</sub> t<sub>j</sub> ]]]]]]

In fact, I suggest that this is the way the derivation proceeds in Czech, as will be demonstrated briefly in the next section for comparison.

#### 5.3.4.2.5.1 *An excursus on participle fronting in Czech*

Czech has been scarcely discussed in this dissertation (although see some remarks on the copula/auxiliary distinction in chapter 1, section 1.3.4.2.2.3). However, even though it is a Western Slavic language closely related to Polish, it displays participle fronting via predicate inversion, on a par with the South Slavic languages. Thus, the examples in (164) indicate that the *l*-participle in Czech may be preposed to the sentence-initial position.

- (164) a. Ja jsem koupil knihy  
I be<sub>AUX.ISG</sub> buy<sub>PART.MSG</sub> books<sub>ACC</sub>  
 “I have bought the book”  
 b. Koupil jsem knihy (Czech, cf. Rivero 1991; 2000: 315)

As in South Slavic, the *l*-participle may not be fronted across the auxiliary clitic if the position at the beginning of the clause is occupied by the subject (cf. 165a). Correspondingly, the *l*-participle may only raise entirely on its own, so full VP-movement, together with an object DP, is barred (cf. 165b)

- (165) a. \*Ja koupil jsem knihy  
I buy<sub>PART.MSG</sub> be<sub>AUX.ISG</sub> books<sub>ACC</sub>  
 b. \*Koupil knihy jsem  
buy<sub>PART.MSG</sub> books<sub>ACC</sub> be<sub>AUX.ISG</sub> (Czech, cf. Rivero 2000: 314)

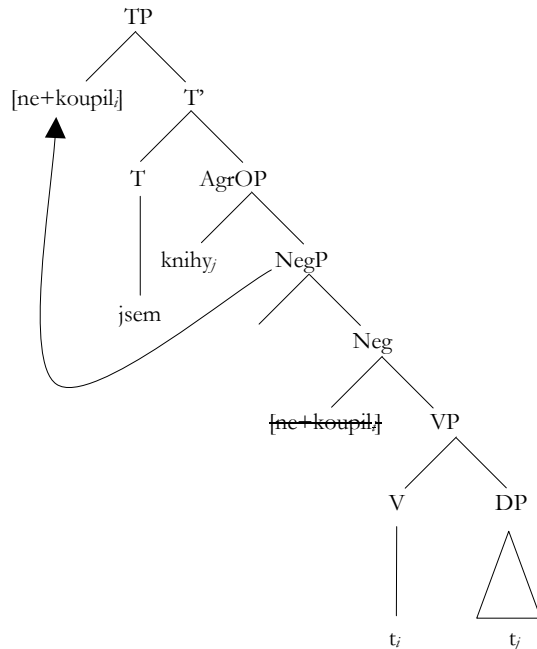
As in Polish, negation in Czech exhibits different patterns depending on whether it negates the copula or the auxiliary ‘be’. In the former case, it must precede the copula (cf. 166). In the latter, it must precede the *l*-participle (cf. 167).

- (166) a. Jsem zdráv  
 be<sub>1SG</sub> healthy  
 “I am healthy”  
 b. Nejsem zdráv  
 NEG+be<sub>1SG</sub> healthy  
 “I am not healthy”  
 c. \*Jsem ne-zdráv (Czech, J. Dotlačil p.c.)
- (167) a. Nekoupil jsem knihy  
 NEG+buy<sub>PART.MSG</sub> be<sub>AUX.1SG</sub> books<sub>ACC</sub>  
 “I haven’t bought books”  
 b. \*Nejsem koupil knihy (Czech, cf. Rivero 1991)

I assume that this means that the verb ‘be’ is generated in two different positions depending on its function: in T<sup>0</sup> when it is an auxiliary verb, and in Aux<sup>0</sup> when it is a copula (cf. also Veselovská 2004 for an analysis of the position of the verb ‘be’ in Czech).

In contrast to Polish, Czech does not have the rule of Genitive of Negation, so the objects in negative clauses retain their structural case. I propose that this means that NegP does not dominate AgrOP in Czech. In other words, it is located lower in the structure than in Polish. As an illustration, I provide a derivation of (167a) in (168b).

- (168) a. Nekoupil jsem knihy (Czech)  
 NEG+buy<sub>PART.MSG</sub> be<sub>AUX.1SG</sub> books<sub>ACC</sub>  
 b.





The derivation shows that the *l*-participle *koupil* incorporates into negation, while the direct object *knihy* moves to Spec, AgrOP to check case. Next, the *ne+koupil* complex raises as NegP to Spec, TP, and checks the  $\varphi$ -features of T.

#### 5.3.4.2.5.2 *The solution*

There are two crucial differences between Czech and Polish with respect to the structure of compound tenses. First, in Czech the auxiliary is homophonous with the copula. In Polish, these two elements are morphologically different (cf. section 5.3.4.2.4.1 above). I would like to claim that this fact has direct repercussions for the nature of *l*-participle movement in Polish. It was mentioned in chapter 2, section 2.3.2 that participle fronting via locative/predicate inversion is possible only across the auxiliary ‘to be’. Due to its morphological impoverishment the auxiliary does not resemble the verb ‘to be’ in Polish any more. I suggest that this precludes participle movement via locative inversion in Modern Polish.

Another contrast between the two languages is the fact that in Czech the auxiliary is a clitic which must receive phonological support, but does not need to become affixed to the *l*-participle. In Polish the perfect auxiliary is more impoverished than in Czech, and it must be affixed to the *l*-participle. The affix status of the auxiliary makes the *l*-participle fronting via XP-movement in Polish impossible for two reasons. First, this is an instance of remnant movement, so although the PartP moves without its complement, it contains the trace of the object that has been evacuated out of it for case checking. It is a common property of traces that they block encliticization or affixation. The most well-known case is the “*wanna*-contraction”. *Wanna* is a contracted form of *want* and the infinitival particle *to*.

- (169) a. Which wine do you want to drink  
b. Which wine do you wanna drink

It has been observed (cf. Lasnik and Saito 1984; Van Riemsdijk and Williams 1986: 150 and the references cited therein) that the contraction is blocked when there is a *wh*-trace present between *want* and *to*.

- (170) a. Who do you want to get the wine  
b. \*Who do you wanna get the wine (Van Riemsdijk and Williams 1986: 150)

The derivations for sentence (169a) is presented in (171a), and for (170a) in (171b).

- (171) a. [which wine]<sub>*i*</sub> do you<sub>*j*</sub> want [<sub>TP</sub> PRO<sub>*j*</sub> to drink [e]<sub>*i*</sub>]  
b. [who]<sub>*i*</sub> do you want [<sub>TP</sub> [e]<sub>*i*</sub> to get the wine]  
(Van Riemsdijk and Williams 1986: 150)

Likewise, the contraction is blocked by the intervention of an overt lexical element between *want* and *to*.

- (172) a. I want the glass to be emptied  
b. \*I wanna the glass be emptied

The examples of *wanna* contraction closely correspond to the auxiliary affixation in Polish, because both processes are blocked by the presence of an overt element, such as

the direct object *wino* in (173a) as well as the object trace, if the object moves to Spec, AgrOP before the *l*-participle lands in Spec, TP (cf. 173b).

- (173) a. \*Wypil                      wino-*em*  
           drink<sub>PART.MSG</sub>    wine+<sub>AUX.ISG</sub>  
 a'. [TP <wypil wino><sub>i</sub> [T -em ... [AgrOP ... [VP t<sub>i</sub> ]  
 b. \*<sub>[XP Wypil t<sub>j</sub>]-em</sub>                      wino<sub>i</sub>  
           drink<sub>PART.MSG+AUX.ISG</sub>    wine  
 b'. [TP <wypil<sub>i</sub> t<sub>j</sub>> [T -em ... [AgrOP wino<sub>j</sub> ... [VP t<sub>i</sub> t<sub>j</sub> ]]]]

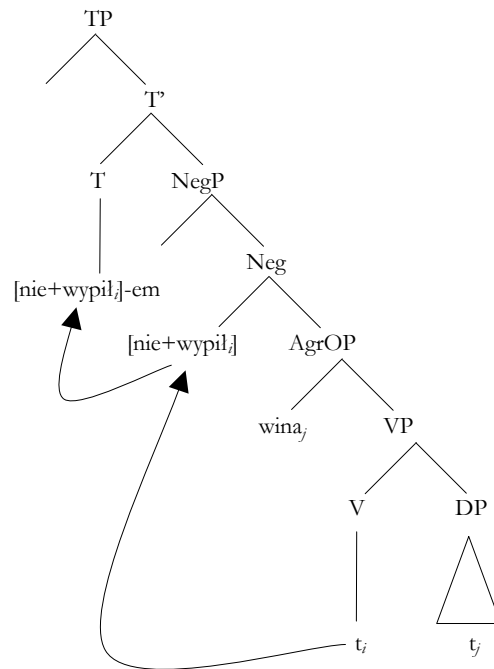
Another property of *l*-participle fronting via locative inversion is the fact that it always occurs as XP-movement, even if an intransitive verb is fronted. It is standardly assumed that affixes may attach to heads, rather than phrases. Therefore, the intransitive *l*-participle *skończył* 'finish' in (174a) may not undergo XP-movement to Spec, TP, because this will preclude the affixation of the auxiliary into the *l*-participle. Consequently, the derivation presented in (174b) will crash.

- (174) a. Skończył-*em*  
           finish<sub>PART.MSG+AUX.ISG</sub>  
           'I have finished'  
 b'. [TP [VP skończył] [T -em ... [tvp]]]

Summarizing, I have shown the *l*-participle may not undergo XP movement in Polish due to the affixal nature of the auxiliary. The *l*-participle must always raise as a head in order to permit the auxiliary affixation. Moreover, the movement via locative inversion is impossible, because the auxiliary does not correspond to the verb 'to be' any more.

The structure in (175) represents a converging derivation, in which the negated *l*-participle undergoes head raising.

- (175) a. Nie wypil-em wina  
 NEG drink<sub>PART.MSG</sub>+AUX.1SG wine<sub>GEN</sub>  
 b.



In contrast to the related derivation of the Czech example in (168), AgrOP is dominated by NegP, and hence it is affected by the rule of genitive of negation. The *l*-participle incorporates into the negative particle *nie* in Neg<sup>0</sup>, and the two elements raise as a complex head to T<sup>0</sup>, where they left-adjoin to the auxiliary affix *-em*.

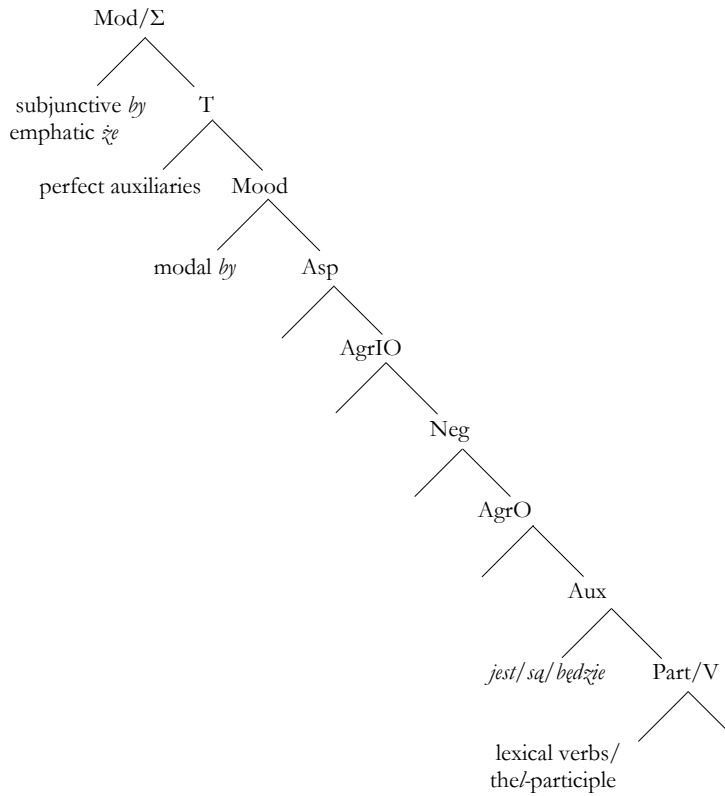
## 5.4 Conclusions

This chapter has described the properties of pronominal clitics and the syntax of compound tenses in Polish. The pronominal clitics have been shown to be steadily becoming more independent with respect to their position in the clause. By contrast, the auxiliary clitics are in the process of being reanalyzed as affixes on the *l*-participle. Thus, the pronominal and the auxiliary clitics are developing in opposite directions: the former are being reinterpreted as strong, whereas the latter are becoming morphologically impoverished.

Summarizing the ideas developed in this chapter, I propose the syntactic template for the structure of compound tenses in Polish in (176). The perfect auxiliaries are functional elements, so they are generated directly in the functional projection that specifies their feature content. Since they carry person and number features, I suggest they are merged in T<sup>0</sup>. Right above them I place Mod<sup>0</sup>, which is the site where the subjunctive mood is lexicalized. To simplify the template, I generate the Σ<sup>0</sup> in the same position. This is the site where polarity and Force features are located. This projection hosts the emphatic particle *że*, and it may attract perfect and conditional auxiliaries,

while A'-scrambled constituents land in Spec,  $\Sigma$ P. The perfect auxiliaries, to which the *l*-participle may adjoin, are hosted in T<sup>0</sup>. This is also the head against which finite verbs check Tense. The modal auxiliary *by* originates in Mood<sup>0</sup>, from which it moves in order to adjoin to the perfect auxiliary in T<sup>0</sup> either by itself or as a free rider on the *l*-participle. The future auxiliary is merged as the head of AuxP, together with the 3<sup>rd</sup> person copulas *jest* and *sa*. *Będzie* raises to T<sup>0</sup> in order to check Tense. Finite verbs, the present tense copula *jest*, and the *l*-participle, which are merged in V, move to T<sup>0</sup> as well, where they check Tense or  $\varphi$ -features.

(176)



## Summary

This dissertation has overviewed the diachrony and synchrony of the structure of compound tenses in Slavic. The underlying assumption was the idea that the tense system of the contemporary Slavic languages has been simplified due to an excess of aspect marking via both tense and aspect morphology in Proto Slavic and Old Church Slavonic. The simplification proceeded in two ways: morphosyntactically, through a decline of the aspectual tenses, and semantically, through a reinterpretation of the present perfect. The former strategy occurred in West and East Slavic languages, which have lost the aorist and the imperfectum, and reduced the auxiliary in the present perfect. The latter strategy was applied in South Slavic. These languages have largely retained the aspectual tenses, but have reanalyzed the present perfect as a marker of non-evidentiality.

Bulgarian and Serbo-Croatian have preserved the morphological make-up of the Old Church Slavonic present perfect. It is constructed with the auxiliary ‘to be’, which has the same form as the copula, and appears in different aspectual variants in order to render temporal distinctions. The auxiliary is accompanied by the *l*-participle, which is a descendant of a class of Proto-Indo-European *\*lo*-adjectives. Throughout the history of Slavic these adjectives have become completely verbalized, and now are case and theta role assigners. The *l*-participle always shows agreement in gender and number with the subject. I argued in chapter 2 that this property makes it eligible for movement to Spec, TP and for checking the  $\varphi$ -features of T. I also suggested that the operation proceeds via XP-movement, on a par with locative inversion in English. The main motivation for this claim came from the complementary distribution of the raised subject and the fronted participle, and the requirement of strict adjacency between the clause-initial participle and the auxiliary. More evidence was drawn from properties of double participle constructions, short participle movement, participle fronting across the future auxiliary *šte* in Bulgarian, and the patterns of sentential negation. In this way I challenged the previous accounts of *l*-participle fronting, which postulate that the movement consists in head raising or head adjunction.

Chapter 3 studied the compound tense formed with the auxiliary ‘have’ and the past participle. It has received scarce attention in linguistics so far, so this thesis offers the first detailed analysis of the construction in generative literature. Unlike the ‘be’-perfect, which has a uniform distribution across Slavic, the ‘have’-perfect has developed a complete paradigm only in Kashubian and Macedonian. In these two languages the participle does not agree with the subject in  $\varphi$ -features, and always appears in the invariant singular neuter form. It is morphologically the same as the passive participle, and hence was claimed to be unable to assign structural case to the object and project an external theta role. These functions are performed by the auxiliary ‘to have’. A few other Slavic languages, which have not grammaticalized the ‘have’-perfect yet, use a similar construction, termed the ‘stative perfect’. Its distribution is quite limited, because it is found only with animate subjects and transitive participles, which always appear in the perfective form and agree with the direct object. On the basis of the development of related structures in Germanic and Romance languages I concluded that the stative perfect is the underlying, non-grammaticalized variant of the ‘have’-perfect. The stative perfect and the ‘have’-perfect were contrasted with the impersonal participle construction, which is found in Polish, Byelorussian, Ukrainian, and some dialects in Russian. This form represents the most verbalized type of the passive participle.

Chapter 4 investigated clitics in South Slavic. Their distribution is important for the structure of the compound tenses for two reasons. First, Slavic languages have a very unconstrained word order, but the arrangement of clitics in the clause is exceptionally rigid. Therefore, clitics can be used as indicators of syntactic movement in order to determine the placement of other elements in the sentence. Second, the forms of the auxiliary ‘to be’ in the present tense are clitics themselves.

The South Slavic languages exhibit a considerable diversity in their clitic systems. Serbo-Croatian is one of the few world’s languages which still have Wackernagel clitics. In this way it represents the pattern of the early Proto-Indo-European dialects, which was lost in most languages. Clitics in Bulgarian display divergent syntactic and phonological requirements: phonologically they are enclitic, so they need a morphologically overt host to their left, but syntactically they are proclitic, hence they opt for a preverbal position. Macedonian clitics show a very intricate distribution, with divergent requirements depending on the categorial status of their host. In the alternative analysis developed in chapter 4 I proposed that clitics in Macedonian do not form a uniform category, but rather comprise clitics proper and weak pronouns. The former occur with case-assigning verbs, while the latter are found in constructions with non-verbal predicative XPs, such as APs, DPs, and passive participles.

The status of the auxiliary clitics was argued to determine the pattern of *l*-participle fronting. It was demonstrated that the overt presence of the 3<sup>rd</sup> person auxiliary *je/e*, which always occupies the final slot in the clitic cluster, is the condition for the XP-movement. In the languages which have lost the 3<sup>rd</sup> person auxiliary, such as Macedonian, Czech, and Polish, the auxiliary raises out of the PartP as a head.

The final part of the dissertation analyzed the syntax of Polish. In contrast to the South Slavic languages it simplified the structure of the compound tenses through a reduction of the tense inventory and their morphological composition, rather than via a semantic reinterpretation. The morphological reduction consists in the reanalysis of the auxiliary enclitic as an inflectional affix on the *l*-participle, and has been proceeding slowly since the 16<sup>th</sup> century. The phenomenon coincided with a change in the auxiliary placement, but I have argued that the two processes have been independent of each other. In the older variants of Polish the auxiliary uniformly targeted the Wackernagel position. In Modern Polish the auxiliary is attached to the *l*-participle in most contexts, but it encliticizes onto the sentence-initial element in the clauses that express meanings related to subjunctivity, focus, and topicalization. This is best observed in the case of the auxiliary *by*, which can be a marker of subjunctive mood or conditionality, depending on its enclitization on the *l*-participle or the clause-initial constituent.

Finally, it has been shown that in contrast to the auxiliary clitics, which are being morphologically reduced, the pronominal clitics in Polish are steadily becoming more independent with respect to their position in the clause. They have few properties in common with the South Slavic pronominal clitics: they do not need to cluster or appear in designated positions, and they can scramble across the clause quite freely.

I have argued that the ways the compound tenses have evolved in different Slavic groups have been influenced by external language contacts. For instance, the aspectual tenses have been retained in Bulgarian and Macedonian because they also exist in some other Balkan languages. Likewise, the ‘have’-perfect has been fully grammaticalized in Kashubian and Macedonian due to extensive crosslinguistic exposure of their speakers to German and Arumanian, respectively. It might be interesting to determine whether the internal properties of other syntactic subsystems of Slavic, such as the impoverished DP structure in Balkan Slavic, may have an impact on the structure of compound tenses as well. This issue, however, has to await further research.

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## Samenvatting in het Nederlands

Dit proefschrift behandelt de diachronie en synchronie van de structuur van samengestelde tijden in de Slavische talen. De onderliggende aanname is dat het temporele systeem in de tegenwoordige Slavische talen is vereenvoudigd als gevolg van een overvloed aan aspectuele markering door zowel temporele als aspectuele morfemen in het Protoslavisch en het Kerkslavisch. Deze vereenvoudiging vond plaats op twee manieren: morfosyntactisch, door het verdwijnen van de aspectuele tijdsvormen, en semantisch, door een herinterpretatie van de voltooid tegenwoordige tijd. De eerstgenoemde strategie vinden wij in de West- en Oost-Slavische talen, die de aorist en het imperfectum verloren en het hulpwerkwoord in het perfectum gereduceerd hebben. De tweede strategie vinden we in het Zuid-Slavische talen, die in de regel de aspectuele tijden behouden hebben, maar de voltooid tegenwoordige tijd geherinterpreteerd hebben als een markerder van niet-evidentialiteit.

Het Bulgaars en het Servo-Kroatisch hebben de morfologische opmaak van de voltooid tegenwoordige tijd in het Kerkslavisch behouden. Het wordt gevormd met het hulpwerkwoord 'zijn', dat dezelfde vorm heeft als het koppelwerkwoord en dat in verschillende aspectuele varianten optreedt om temporele verschillen uit te drukken. Het hulpwerkwoord is vergezeld van het zogenaamde *l*-participium, dat zich ontwikkeld heeft uit de klasse van Proto-Indo-Europese adjectieven die beginnen met *\*lo-*. Deze adjectieven zijn nu volledig geverbaliseerd en kunnen naamval en thematische rollen toekennen. Het *l*-participium congrueert altijd in geslacht en getal met het onderwerp. In hoofdstuk 2 betoog ik dat het *l*-participium dankzij deze eigenschap naar Spec, TP verplaatst kan worden om de  $\varphi$ -kenmerken van T te checken. Ik stel verder voor dat dit door middel van XP-verplaatsing gebeurt, op vergelijkbare wijze als locatief inversie in het Engels plaatsvindt. De belangrijkste argumenten voor deze stelling zijn de complementaire distributie van onderwerp en het vooropgeplaatste participium en het feit dat het vooropgeplaatste participium direct aan het hulpwerkwoord moet voorafgaan. Meer evidentie wordt gevormd door eigenschappen van dubbele deelwoordconstructies, korte participiumverplaatsing, verplaatsing van het participium over het hulpwerkwoord voor de toekomstige tijd *šte* in het Bulgaars, en zinsontkenning. Met dit voorstel geef ik een alternatief voor analyses die stellen dat de verplaatsing van het *l*-participium het gevolg van hoofdverplaatsing/adjunctie is.

In hoofdstuk 3 onderzoek ik de samengestelde tijden die gevormd worden met het hulpwerkwoord 'hebben' en het voltooid deelwoord. Dit is tot nu toe nauwelijks onderzocht en dit proefschrift biedt dan ook de eerste gedetailleerde analyse van deze constructie binnen het generatieve kader. In tegenstelling tot de voltooid tijd met het hulpwerkwoord 'zijn', die men in alle Slavische talen aantreft, hebben alleen het Kasjoebisch en het Macedonisch een volledig paradigma van de voltooid tijd met 'hebben' ontwikkeld. In deze twee talen congrueert het participium niet met het onderwerp in  $\varphi$ -kenmerken, maar verschijnt het altijd in onveranderlijke (enkelvoudige en onzijdige) vorm. Het is morfologisch gezien identiek aan het passieve participium en daarom wordt wel beweerd dat het niet in staat is om een externe theta-rol te nemen of structurele naamval aan het voorwerp toe te kennen. Deze functies worden vervuld door het hulpwerkwoord 'hebben'. Een aantal andere Slavische talen, waarin de voltooid tijd met 'hebben' niet grammaticaliseerd is, gebruiken een vergelijkbare constructie die wel de 'statieve voltooid tijd' genoemd wordt. De distributie daarvan is nogal beperkt: het komt alleen voor met levende onderwerpen en met transitieve voltooid deelwoorden die congrueren met het lijdend voorwerp. Op basis van de

ontwikkeling van verwante structuren in de Germaanse en Romaanse talen concludeer ik dat de statieve voltooide tijd de onderliggende, niet-gegrammaticaliseerde variant van de voltooide tijd met 'hebben' is. Deze twee constructies vergelijk ik met constructies met een onpersoonlijk participium die men aantreft in het Pools, het Witruisisch, het Oekraïens en sommige Russische dialecten. Deze vorm representeert het meest gegrammaticaliseerde type van het passieve participium.

In hoofdstuk 4 houd ik me bezig met clitica in het Zuid-Slavisch. Hun distributie is om twee redenen belangrijk voor de structuur van de samengestelde tijden. In de eerste plaats hebben de Slavische talen een nogal vrije woordvolgorde, maar is de plaatsing van de clitica bijzonder rigide. Hierdoor kan de plaatsing van de clitica gebruikt worden als indicator voor syntactische verplaatsing. In de tweede plaats zijn de vormen van het hulpwerkwoord 'zijn' in de tegenwoordige tijd zelf clitica.

De Zuid-Slavische talen vertonen aanzienlijke verschillen in hun cliticsystemen. Het Servo-Kroatisch is een van de weinige talen in de wereld die nog Wackernagel-clitica hebben. Deze taal vertoont dus nog het patroon van de vroege Indo-Europese dialecten, dat uit de meeste talen verdwenen is. Clitica in het Bulgaars moeten voldoen aan uiteenlopende syntactische en fonologische eisen: fonologisch zijn ze enclitisch en vereisen dus een morfologisch gerealiseerde gastheer aan hun linkerzijde: syntactische gezien, daarentegen, zijn ze proclitisch, omdat ze bij voorkeur in preverbale positie staan. Macedonische clitica tonen een zeer ingewikkelde distributie, die afhankelijk is van de categoriale status van hun gastheer. In mijn analyse stel ik dat de clitica in het Macedonisch geen homogene categorie vormen, maar een mengeling zijn van echte clitica en zwakke voornaamwoorden. De eerste treden op met werkwoorden die naamval toekennen, de laatste in constructies met niet-verbale predicatieve XP's zoals AP's, DP's, en passieve participia.

De status van het hulpwerkwoord in de derde persoon enkelvoud bepaalt hoe het *l*-participium vooropgeplaatst wordt. De overte aanwezigheid van het hulpwerkwoord *je/e*, dat altijd de laatste positie in het clitic cluster inneemt, is noodzakelijk voor XP-verplaatsing. In de talen die het hulpwerkwoord in de derde persoon enkelvoud verloren hebben, zoals het Macedonisch, het Tsjechisch en het Pools, verlaat het participium de VP als hoofd.

Het laatste gedeelte van het proefschrift geeft een analyse van het Pools. In tegenstelling tot de Zuid-Slavische talen heeft deze taal de structuur van de samengestelde tijden niet vereenvoudigd door een semantische herinterpretatie, maar door een reductie van het aantal tijden en hun morfologische opmaak. Deze morfologische vereenvoudiging bestaat uit de heranalyse van de enclitische hulpwerkwoorden als een verbuigingsuitgang op het *l*-participium. Dit reductieproces is begonnen in de 16<sup>e</sup> eeuw en voltrekt zich zeer langzaam. De reductie van het hulpwerkwoord vond tegelijkertijd plaats met een verandering in de plaatsing van het hulpwerkwoord, maar ik beargumenteer dat we hier met twee onafhankelijke verschijnselen te maken hebben. In de oudere stadia van het Pools werd het hulpwerkwoord onveranderlijk in de Wackernagelpositie geplaatst. In het Moderne Pools, daarentegen, hecht het hulpwerkwoord zich in de meeste gevallen aan het *l*-participium, hoewel het zich ook kan hechten aan gefocusde of getopicaliseerde constituenten op de eerste zinspositie. Tenslotte laat ik zien dat, in tegenstelling tot de clitische hulpwerkwoorden, de plaatsing van pronominale clitica in het Pools steeds



vrijer wordt; in tegenstelling tot de Zuid-Slavische pronominale clitica hoeven zij niet langer te clusteren of op vaste posities in de zin te verschijnen.