SUOMALAIS-UGRILAISEN SEURAN TOIMITUKSIA MÉMOIRES DE LA SOCIÉTÉ FINNO-OUGRIENNE *244*

Riho Grünthal

Finnic adpositions and cases in change

Finnic adpositions and cases in change online version (published in 2010):

ISBN 978-952-5667-25-7

Printed book: ISBN 952-5150-71-2 Mémoires de la Société Finno-Ougrienne: ISSN 0355-0230

> SOCIÉTÉ FINNO-OUGRIENNE HELSINKI 2003

Preface

Human interest in the differences between genetically closely related languages and academic obligation explain why this book was written. Discovering the silent secrets of language took place far from the hectic of urban life. During the years 1999 to 2003, as I was planning, writing and editing my thesis, I felt it a privilege to learn more about the linguistic and cultural heritage of northern Europe. This was the constant joy of my work also after I had completed the most creative research stage.

First of all, I would like to cordially thank Professor Johanna Laakso, my encouraging tutor during the writing of the current work and attentive friend since the beginning of my studies. The first ideas grew to elaborated assumptions and linguistic research under constant collaboration with her.

This book is a fruit of the joint project in which Johanna and Professor Anneli Sarhimaa participated. She was the other member of the personal research group and consulting team that opened for me new perspectives in language and linguistics, for which I am very grateful.

I am greatly obliged to Professors Helle Metslang and Alho Alhoniemi for their valuable guidance and detailed comments on the manuscript of my thesis. Their advice was indispensable for completing the project successfully.

The Department of Finno-Ugrian Studies at the University of Helsinki, with its productive yet relaxed atmosphere, was immensely important for me, as I was allowed to proceed at my own pace in writing the thesis. I am grateful to earlier and current directors of the Department, Professors Raija Bartens, Seppo Suhonen, Ulla-Maija Kulonen, and Tapani Salminen, for a motivating environment that both nurtured traditions and fostered innovations.

Several colleagues commented on earlier versions and parts of the thesis, and showed me the way forward. Professor Frans Plank helped me with theoretical issues and introduced me to up-to-date literature. Professor Karl Pajusalu, Dr Rami Saari, Dr Riitta Korhonen, and Dr Lembit Vaba discussed various details in the text and provided help in detecting errors and inconsistencies. Topics in language change and Finno-Ugrian linguistics have generated highly constructive conversations with Professor Jorma Koivulehto, Mr Petri Kallio, Cand. Phil., Mr Janne Saarikivi, Lic. Phil., Professor Maria Vilkuna, Professor Pentti Leino, Professor Reet Kasik, Mr Daniel Lowit, M.A., and Mr Jarmo Elomaa, Lic. Phil. I also wish to express my warmest thanks to those numerous friends and colleagues who have supported my work

by sharing their experience and expressing their interest. Needless to say, I am alone responsible for all the remaining mistakes and inadequacies.

I appreciate very much the contribution made by Mr Dennis Estill, Lic. Phil. He revised the English language of the thesis, and performed his difficult task showing good spirit and sportsmanship. This thesis finally took the shape of a book when in the hands of Ms Leena Huima, Cand. Phil., who excells in creative applications of typography.

The University of Helsinki and the Academy of Finland gave me the opportunity to concentrate on this study undisturbed by other academic obligations. The Finno-Ugrian Society has been my window to the past and present in Finno-Ugrian studies in Finland, during the entire research project. I am both proud of and grateful to the Society for publishing my work in its proceedings.

The acoustic ambience of my work was created by children's voices from their merriment and creative play. The positive energy of my home team conveyed me safely through unknown paths and cloudy days. Lauri, Alva and Ilmar learned to speak, read and write simultaneously with my linguistic studies. Now, at the end of the project, Lauri and Alva have become practised school children and Ilmar will start school in two years.

The faithful pillar of our family is my wife Satu, who has unselfishly provided me with an opportunity to pursue new ideas and, in the final stages of my work, edit, reconcile and rewrite unfinished chapters over and over again. This has often happened at the cost of her own time and, yet, she has always one-upped me in academic qualifications. Learning together, whether individually or side by side, has been an important feature of our home life.

I dedicate this book to the memory of my father, a friend of languages, who showed me the fascinating world of languages, peoples and history.

Helsinki, November 2003

Riho Grünthal

Contents

Preface

Contents

List of figures, maps and tables

١.	Introduction	13
	1.1 Languages, data and methodology	14
	1.2 The transcription and encoding of data	
	1.3 The organisation of the present work	
2.	Contrasting the Finnic languages	19
	2.1 Genetic relationship between the Finnic languages2.2 Language ecology 22	20
	2.3 Typological divergence between the Finnic languages	24
	2.9 Typological avergence between the rimite tanguages	
	2.5 Key hypotheses concerning diachronic change	20
	in the Finnic case and adposition system	29
3.	Erosive and preservative forces in morphosyntactic change	32
	3.1 Inflectional elements in change	34
	3.2 Preservative processes in diachronic change	
	3.2.1 Preservative morphosyntactic change	
	3.2.2 Analogy	
	3.3 Conclusions	
4.	The Finnic adpositional phrase	45
	4.1 The syntactic ambiguity of the adpositions	46
	4.2 Historical preamble	
	4.2.1 The age of old adpositional stems	47
	4.2.2 Suffixed postpositions and their morphological adaptation	50
	4.3 Adpositions in a contact-linguistic perspective	
	4.4 Defining the number of adpositions in Finnic	
	4.5 The morphosyntax and case government of adpositions	
	4.5.1 The morphosyntax of postpositional phrases	

	4.5.1.1 The inflection of the noun complement	
	4.5.1.2 The inflection of postpositions	
	4.5.2 The morphosyntax of prepositional phrases	
	and bipositional adpositions	
	4.6 Morphosyntactic change in the Livonian postpositional phrase	
	4.6.1 Remarks on the Livonian genitive-accusative	85
	4.6.1.1 The paradigmatic and syntagmatic genitive-accusative	
	4.6.1.2 Genitive attribute and word order	89
	4.6.2 The morphosyntactic structure of the Livonian	
	postpositional phrase	
	4.6.2.1 The form of the complement: nominative vs. genitive	
	4.6.2.2 The form of the complement: dative 9	9
	4.6.2.3 Dative and adverb	101
	4.6.3 Grammatical heads and syntactic morphochange	105
	4.7 The morphosyntax of adpositional phrases	
	in comparison to case inflection	
	4.8 Conclusions	114
5.	The evolution of the Veps local case system	
	5.1 Introduction 116	
	5.2 A review of the historical roots of the Veps local cases 122	
	5.3 The functional domains of local cases 128	
	5.3.1 Local cases and spatial relations	
	5.3.2 Local cases and temporal adverbials	
	5.3.3 Local cases and possessive relations	
	5.3.4 Local cases and instrumental relations	
	5.3.5 Exterior local cases and morphosyntactic reanalysis	
	5.3.6 Other semantic roles of the Veps local cases	
	5.4 The merger of case affixes and compensation	151
	5.4.1 Syncretism between local cases	
	5.4.2 Functional constraints in recovering the local case system	156
6.	Language contact and morphosyntactic change	161
	(1 Historical impact of language contacts on Finnis 1/1	
	6.1 Historical impact of language contacts on Finnic 1616.2 Southern Veps prolative-comitative 162	
	6.2.1 Prolative in Finnic and Veps 165	
	6.2.2 From prolative towards comitative and	160
	instrumental functions	109
	6.2.3 Preliminary conclusions on the development	170
	of the prolative-comitative	
	6.2.4 The instrumental in Russian	
	6.3 Contact-induced reanalysis in Livonian	1 / /
	6.3.1 Previous conceptions of the history of the	100
	Livonian translative-comitative	180
	6.3.2 The functional distribution of the translative-comitative	182

6.3.3 The Finnic-Mordvin translative	185
6.3.4 <i>pa</i> and <i>pan</i> in Standard Latvian	188
6.3.5 Merger of <i>pa</i> and <i>pan</i> in Latvian dialects	
6.3.6 Development of the translative-comitative 1	
6.4 Interaction between endogenous and contact-induced change	
6.4.1 Analogy in reanalysis	196
6.4.2 The gradualness of the development of the Southern	
Veps prolative-comitative and the Livonian	
translative-comitative	199
6.5 Conclusions	201
7. Summary	203
References	206

List of maps, figures and tables

Мар

Map 1.	The geographical core	e area of the Finnic languages	20
--------	-----------------------	--------------------------------	----

Figures

Figure 2.1.	The historical diverging (A) and the present-day taxonomy (B) of the Finnic languages.	21
Figure 5.1.	Diachronic change of form (cx) and function $(F_1 \dots F_6)$ in the Veps local cases.	118
Figure 5.2.	The development of the LocI and LocE in Veps	
Figure 6.1.	Dialectal isoglosses for prolative and comitative in Veps	
Figure 6.2.	The conceptual space of the Livonian TRANSLCOM.	
Figure 6.3.	The morphosyntactic properties of the preposition <i>pa</i> and TRANSLCOM in Livonian and their correspondences in Latvian.	
Figure 6.4.	The Russian instrumental as an analogy catalyst for the reanalysis of the Southern Veps PROLCOM.	
Figure 6.5.	The Latvian (accusative-)instrumental as an analogy catalyst for the reanalysis of the Livonian TRANSLCOM	
Figure 6.6.	Reanalysis of the TRANSLCOM in the prepositional phrase	
Figure 6.7.	The diachronic stages in the development of the Southern Veps PROLCOM.	
Figure 6.8.	The diachronic stages in the development of the Livonian TRANSLCOM.	

Tables

Table 2.1.	Erosion of Estonian and Livonian inflectional suffixes in comparison to Finnish (*'tongue; language', **'hunger')	
Table 2.2.	Inflectional case system in Finnic.	
Table 2.3.	Inflectional cases in Livonian and new Standard Veps.	
Table 3.1.	Correlation between word order and affix placement in the world's languages.	
Table 3.2.	Finnic word order (SVO) with respect to adposition and affix placement.	

Table 4.1.	The adpositional/adverbial stem * <i>al</i> - and its inflection in six Finno-Ugric languages.	
Table 4.2.	Adpositions in Standard Estonian, based on EKSS.	
Table 4.3.	The morphosyntactic structure of Finnic adpositional phrases.	
Table 4.4.	The Morphosyntactic characteristics of the Finnic PrepP and the PostpP.	
Table 4.5.	The case government of Veps prepositions.	77
Table 4.6.	Finnic prepositions expressing circumspatial relations	
Table 4.7.	The negative instrumental in Finnic	
Table 4.8.	Morphosyntactic alternation in the Livonian PostpP.	
Table 4.9.	The noun stem as a constituent of the inflected oblique case forms and postpositional phrase	111
Table 4.10.	Morphosyntactic integration between inflected local case forms and postpositional phrases in Estonian	111
Table 5.1.	Encoding of interior and exterior local cases	
Table 5.2.	The local cases in new Standard Veps	
Table 5.3.	The local case forms in Standard Finnish and Standard Estonian.	
Table 5.4.	The functions of the inessive (LocI=) and elative (LocI-) in Veps	
Table 5.5.	The functions of the adessive (LocE=) and ablative (LocE-) in Veps	
Table 5.6.	The development of form and function in the Veps exterior local cases (LocE).	
Table 6.1.	The functional and syntactic distribution of the Livonian TRANSLCOM.	

Abbreviations

ABESS abessive ABL ablative ACC accusative ADESS adessive ADJR adjectiviser ADP adposition ADV adverb(ial) ALL allative APPR approximative ASP aspect BIPOSIT bipositional adposition CAUS causative CMPR comparative COM comitative COND conditional CX case suffix DAT dative DEF definite DIM diminutive DIR directional EGR egressive ELAT elative ESS essive F feminine **FREQ** frequentative FUT future GEN genitive ILL illative IMP imperative IMPF imperfect(ive) INCH inchoative **INESS** inessive **INF** infinitive INFL inflectional INST instrumental LAT lative LOC locative LOCE exterior local case

LOCI interior local case M masculine N noun NEG negative NMLR nominaliser NOM nominative NP noun phrase **OBJ** object OBL oblique PART partitive PASS passive PRF perfect PL plural POSS possessive POST postposition POSTPP postposition phrase PRED predicative **PREP** preposition PREPP preposition phrase PRET preterite PROL prolative PFU Proto-Finno-Ugric PROLCOM prolative-comitative PST past PTCP participle PU Proto-Uralic PX possessive suffix **REFL** reflexive REL relational (noun) SG singular SPAT spatial SOV subject object verb order SVO subject verb object order SUBJ subject **TERM** terminative TRANSL translative TRANSLCOM translative-comitative

I. Introduction

Various explanations have been presented for the synchronic divergence and genetic descendance of the Finnic languages, formerly known as Balto-Finnic or Baltic-Finnic (German *ostseefinnisch*), ever since the study of this group of closely related languages became more systematic in the 19th century. Present-day relations have been accounted for through a gradual geographical dispersal beginning in the prehistoric era, while motivation for structural change has been searched for in contact-induced and endogenous processes, and typological drift. Given the mutual differences in inflectional paradigms and the way grammatical relations are manifested, the Finnic languages form a versatile linguistic laboratory for identifying diachronic changes behind synchronic constructions.

This study attempts to discover the characteristics of the relational marking of the noun in the Finnic languages, discusses some salient features of the synchronic structure such as the morphosyntax of adpositional phrases, and investigates what kind of diachronic changes affect the case and adposition system. As phrased by Bybee (1988: 351), "we must look to the diachronic dimension to learn how the conventions of grammar arise if we are to know why they take the particular form that they do". Specifically, this work focuses on the following general issues: (1) How does phonological attrition of suffixal elements affect Finnic adpositional phrases? (2) What functional and structural constraints does the difference between statistically dominant postpositions and historically innovative prepositions imply? (3) How should one account for the morphologisation of new case affixes? (4) In what way do language-specific characteristics and contact-induced changes intertwine in the evolution of the case and adposition system?

While the major Indo-European languages have been the prevailing basis for constructing the history of mainstream linguistics, the two major Finnic languages, Finnish and Estonian, have been the traditional core of Finnic studies. Therefore, my earnest attempt will be to discuss certain problems on the basis of the minor Finnic languages, especially Veps and Livonian, yet at the same time departing from some of their most salient characteristics.

Besides problems with a more general linguistic interest, there often are more language-specific issues, which is seen in the development of the Finnic case and adposition system. The current study investigates the morphosyntax of the Finnic adpositional phrase, the interaction of morphological loss and the syntactic structure of the Livonian postpositional phrase, the Veps local case system and the reanalysis of Southern Veps prolative-comitative as well as the Livonian translative-comitative. Thus, special emphasis will be laid on case inflection and the morphosyntax of adpositional phrases. The crucial constructions on which the analysis of empirical data is based are [N + cx] and [[N + cx] + [Postp + cx]]. This is the point of departure for a discussion of various synchronic relations and diachronic processes that extend to alternative word order patterns in Finnic adpositional phrases and of motivations for suffixing preference.

The morphosyntax of the Finnic adpositional phrase and the Veps local case system intertwine with many related phenomena of typological nature. The first topic casts light on the causalities behind asymmetry in word order and the parallel existence of pre- and postpositions in Finnic, while the second discusses reasons for suffixing preference in diachronic change. Language contact has presumably influenced the development of the Southern Veps prolative-comitative and the Livonian translative-comitative, but different stages of the diachronic process are not uniform and reveal certain preconditions for morphosyntactic change.

1.1 Languages, data and methodology

The Finnic languages form a genetically concise but typologically divergent group of closely related, yet distinct varieties. They have repeatedly been characterised as languages with a rich inflectional system, especially if compared to the neighbouring Indo-European languages (Germanic, Baltic, Slavic). Given that the Finnic languages include two socially well-established modern languages (Estonian, Finnish) and seriously endangered minor languages with less foothold in modern technological society (Karelian, Olonetsian, Lude, Veps, Ingrian, Vote and Livonian), we have an array of idioms with sharply differing perspectives on survival.

The current work seeks to describe different diachronic changes in Finnic case and adposition morphosyntax, but does not apply a single theoretical framework. Key words that illustrate this study include typology, morphology, syntax, grammatical relations, language contact, morphosyntactic change, reanalysis and diachronic linguistics. Intentional or not, typological studies frequently find themselves at the threshold of diachronic processes, historical linguistics and language contact research. Although not aiming at a description of language in terms of functional grammar, this study and its conclusions are typically functional by nature as typological studies often are. None of the relevant approaches would alone do justice to the details of the phenomena described in this study. Chapter 4 and the account of changes in the Livonian postposition phrase is predominantly syntactic, while morphology is very

important for understanding the development of the Veps local case system. In chapter 6 the point of departure is language contact. After all, interdependence between various forms of grammatical reference affects both synchronic relations and diachronic development regardless of whether we call it conspiracy (Croft 1990: 197), an invisible hand (Keller 1994), drift (Sapir 1921), an inexplicable metacondition of language change (Schwegler 1990: 177), or something else.

One of my goals is to analyse the mechanics of as unintentional and unplanned a change as possible. Veps and Livonian seem to provide an outstanding opportunity for this even though their position has been achieved at the cost of the ecological state of the language: Livonian is a nearly extinct language, while Veps is one of the critically endangered languages in North-West Russia. There have been attempts to create a literary language for both of them, but the few existing translations or literary texts written in Veps or Livonian have not been used for the present work. Instead I have relied on the evidence of some published text materials (MSFOu 100, 106, NEV 1–2, Mägiste 1964). Data from earlier field research published in these volumes is used for empirical analysis and tentative statistical purposes. Furthermore, I have tried to take into account the few existing studies on the issues discussed and existing grammatical descriptions, linguistic works, dictionaries, etc.

The reason why I have relied mainly on data from the beginning of the 20th century is related to sociolinguistic factors. At that time, the geographical distribution of the Finnic languages had reached a sort of culmination point. The political, social and cultural rupture as well as the demographic breakdown that later caused a large-scale ethnocultural and social devastation had not yet reached its most disastrous stage.

The main sources, from which the Veps and Livonian data has been drawn are the publications of the Finno-Ugrian Society that include texts collected from many informants (MSFOu 100, MSFOu 106). Comparative evidence has been searched for in contemporary texts (NEV 1), grammars (Kettunen 1938, Zajceva 1981, etc.) and compatible language samples (Mägiste 1964). Furthermore, I have consulted other available published Livonian and Veps data in order to find comparative evidence of the analysed phenomena but, as a rule, I have not included their material in the samples. The chosen main data is not used for primarily quantitative purposes, but it is adequate for tentative statistical observations that are used solely to cast more light on the processes at issue.

Standard Estonian and Finnish in turn are the Finnic languages most thoroughly described. So, in many respects it is useful to take reports of their typology into account. For the purposes of contrastive typological research the dissonance of applied sources is not as important as it appears to be at first sight. Standard Estonian and Finnish differ from one another in many ways, whereas the languages on the geographical periphery, i.e. Livonian and Veps, are characterised by features that can successfully be contrasted with other Finnic data. For this reason, Estonian and Finnish are mainly used to provide comparative evidence of various processes. Data from languages other than Livonian and Veps have been drawn from random texts, in the case of Estonian and Finnish, also by consulting native speakers.

1.2 The transcription and encoding of data

The transcription of Livonian and Veps data has been simplified by applying the conventions of the recently re-established literary language wherever possible. Prosodic features such as the tonal accent in Livonian (Danish *stød*, German *Stosston*) have not been marked. The reduced vowel ϑ as well as phonemes marked \underline{e} and \underline{i} in the original source have been replaced by \tilde{o} as in written Livonian. For instance, *sil'l* ϑ 'into' has been written *sill* \tilde{o} . The alternating $\frac{1}{a}$ and $\overline{\varrho}$ have been encoded as \overline{o} . If alternation in Livonian words affects the quality of a vowel, such as the difference between \ddot{u} and i, the vowel in the printed source has been retained.

As regards Veps, the simplification is mainly reflected in the rejection of superfluous phonetic marking. Diacritics such as the wedge under \ddot{u} and the palatalisation mark for a non-dental consonant (\acute{m} , \acute{p} , k', etc.) have been omitted: $k'\ddot{u}zuiba$ is written $k\ddot{u}zuiba$. However, if the mark affects the phonological realisation of the vowel as in the case of e, it has been preserved, unlike written Veps. This decision is based on the opinion that if the afore-mentioned notation is adopted the palatal correlation of dental consonants should also be systematically noted in the writing of the consonants. No distinction is made between Λ and l, and the latter symbol is used for both allophones. Suffixed postpositions are fused with the stem. In the original sources spacing is only seldom found: *tserkvas päi* is written *tserkvaspäi* that is the prevalent type in the original sources as well.

1.3 The organisation of the present work

This book is organised so that chapter 2 will introduce those characteristics of the Finnic noun morphosyntax most relevant to the focus of the present study. This will contribute to the discussion on the diachronic relationship of inflectional case suffixes and adpositional phrases in the empirical parts of the work. Furthermore, a short overview of the Finnic languages will be presented for the reader who might not be so well acquainted with their typology and history. Given the diachronic orientation of this work, the theoretical foundations in chapter 3 will concentrate on the nature of morphological and morphosyntactic change. Special attention will be paid to the lack of uniformity in morphological change and the fundamental assumption will be that morphological change is not unidirectional. A distinction will made between two opposite directions, the erosive (reductive) and the preservative.

These theoretical deliberations will be followed by the empirical part of the work: three chapters presenting in detail some synchronic characteristics of the Finnic case systems and adpositional phrases in which the connection between these and diachronic development will be elucidated. An analysis of endogenous diachronic processes forms the contents of chapters 4 and 5, whereas the impact of language contact and multicausal aspects in typological evolution will be discussed in chapter 6.

More concretely, chapter 4 outlines the adposition system of the chosen four Finnic languages with special reference to the morphosyntactic structure of the adpositional phrase. Typologically, the most salient feature in the adpositional system is that all Finnic languages display a relatively free word order and have both prepositions and postpositions. The analysis mainly concentrates on issues that emerge from the morphosyntactic divergence of the adpositional phrases. It is argued that the double character of the word order pattern is based on divergent morphosyntactic structures and constructionspecific case government rather than mechanical word order permutations. The largest empirical section in chapter 4 elaborates on the influence of phonological erosion and morphological loss on the Livonian postpositional phrase. The chapter ends with a discussion of the effect of phonological erosion on Finnic case inflection and the morphosyntactic structure of postpositional phrases.

Chapter 5 focuses on morphological issues and the interdependence between form and function in the diachronic development of the Veps local case system. The point of departure here is the assumption that the phonological attrition of an inflectional affix is accompanied by reanalysis, and the reestablishing of a lost grammatical category has clear functional constraints; hence it is strongly influenced by semantic conditions. The diachronic development of the Veps local cases provides an outstanding opportunity to test the so-called localist hypothesis. The details of the diachronic process provide considerable insight into suffixing preference in the world's languages and the various reasons for it.

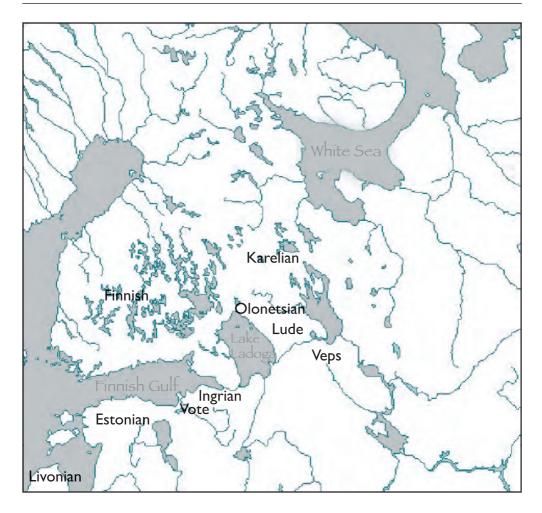
Finally, the last empirical chapter (6) elaborates the interplay between endogenous and contact-induced change. Two idiosyncratic features of the Southern Veps and Livonian case systems compared to other Finnic languages are the substantial core of that chapter. The first deals with the Southern Veps prolative-comitative case suffix, while the second focuses on an analysis of the Livonian translative-comitative. The hypothesis to be tested is that a reanalysis of these suffixes was caused by the interaction of two basic components: endogenous phonological reduction and the influence of language contact.

2. Contrasting the Finnic languages

This chapter presents an overview of the Finnic languages, their geohistorical background and some salient features in the relational marking of the noun. The close mutual relationship between the Finnic languages is transparently represented in their vocabulary and grammar, which illustrates the historical declension of this particular Finno-Ugric subgroup. Historically, these languages are or were spoken on the eastern coast of or in the vicinity of the Baltic Sea. Compared to all other Finno-Ugric branches, the Finnic languages are historically and structurally considerably closer to one another than to any other branch. Roughly, the degree of linguistic relatedness of Finnic to remote Finno-Ugric branches such as Sámic, Mordvin, Mari and Permic, corresponds to the geographical distance between these groups. Looking for the mechanics of change from the evidence of related languages opens two perspectives to be discussed: similarities in change and similarities in retention (Cowgill 1966: 114).

Close geographical location and a common genetic background are the basis for the historical development of the Finnic languages. The common origin is so transparent that the shared lexical and grammatical elements were observed by the very first scholars, who wrote down notes on them at the dawn of comparative linguistics in the 18th and 19th centuries. The present-day languages can plausibly be derived from a common proto-language by means of the historical-comparative method. Likewise, the prehistoric cultural periods can, relatively successfully, be combined to linguistic processes in the Finnic area commencing with the late neolithic period (Carpelan 1999, 2000, 2001, Carpelan & Parpola 2001, Fogelberg 1999, Gallén 1984, Häkkinen 1996, Terho Itkonen 1972, 1983, Koivulehto 1999a, 1999b, Moora 1956, Sammallahti 1977).

Traditionally, the following Finnic languages have been distinguished, partly on geopolitical grounds: Finnish, Karelian, Olonetsian, Lude, Veps, Ingrian, Vote, Estonian and Livonian. The taxonomy ignores many areal isoglosses that cross the main boundaries as demonstrated in a detailed analysis by Viitso (Viitso 1998: 103–105, 2000). Various converging phenomena are typical of the Finnic varieties of Ingria and South-East Estonia, South Estonia, East Finland and Karelia, as well as of the area between Lake Onega and Lake Ladoga. In these territories, innovations do not always match with conventional language boundaries and the assumed genetic relationship.



Map 1. The geographical core area of the Finnic languages.

Given that political, administrative and even taxonomic boundaries are often arbitrary, and the shift from dialect isogloss to language isogloss is gradual, research on the Finnic languages is often more typically research on the Finnic dialects (Laakso 1999, Viitso 1998: 103). A dialectal map of Finnic would include from two to almost ten dialects in almost every language.

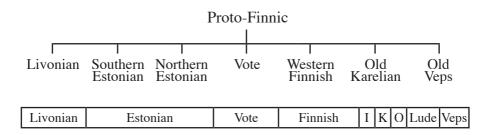
2.1 Genetic relationship between the Finnic languages

Classification of the Finnic languages has mainly been drawn from conclusions based on their diachronic development (Koponen 1991, Laakso 2001a, Sammallahti 1977, Salminen 1998, Viitso 1998, 2000). The age, order and hierarchy of phonological changes are the most frequently applied criteria,

although some morphological differences have been applied in the taxonomy as well. The Finnic languages have been divided into various subgroups, such as western and eastern Finnic languages or northern and southern. Recently, the latter view has gained more popularity and it has been used to illustrate both synchronic relations and historical development (Laakso 2001a: 204–207, Laanest 1982: 26–35, Salminen 1998b, Sammallahti 1977, Viitso 1993). The common genetic background of the Finnic languages is so striking that their typological divergence has accordingly been given much less attention.

The common genetic heritage of the Finnic languages is illustratively seen in their lexicon and grammatical foundations. The historical declension of the Finnic languages from a common proto-language, i.e. Proto-Finnic is illustrated in figure 2.1, based on Salminen (1998b: 392).

Figure 2.1. The historical diverging (A) and the present-day taxonomy (B) of the Finnic languages according to Salminen (1998b). (I = Ingrian, K = Karelian, O = Olonetsian.)



The shift from Western to Eastern Finnic languages is gradual, whereas on the north-south axis adjacent languages are mutually more unintelligible. Sámic is geographically the closest Finno-Ugric language and historically the distribution of Sámic has been in an area of close contacts with northern Finnic, and it has often been proposed as the closest Finno-Ugric branch to Finnic (Erkki Itkonen 1960, Korhonen 1981, Sammallahti 1998).

As regards the present study, the genetic and taxonomic position of Finnic inside the Finno-Ugric language family is not very important. The previous lines rather seek to illustrate Finnic as a similar linguistic laboratory as are the present-day Romance languages descended from Latin. The historical splitting of the Finnic languages is not, however, to be compared with the explosive diffusion resulting from Roman political power and linguistic dominance. Nor is there any richly documented ancient literary language onto which modern varieties can be projected: after all Proto-Finnic is just a hypothetical, yet plausible reconstruction and historical projection of its synchronic state. It must be emphasised that unlike the Romance languages, there is no limited geographical territory, from which the Finnic languages gradually diffused to their documented locations. It is commonly maintained that the modern distribution of the Finnic languages was preceded by a stage during which there were probably several prehistoric Finnic core areas around the Gulf of Finland (Häkkinen 1996: 77–102, Terho Itkonen 1972, 1983, Laanest 1982: 26–35).

2.2 Language ecology

The maximal geographical distribution of the Finnic languages in their modern forms was reached by the end of the 19th century. The beginning of the 20th century was a culmination point which was then followed by a gradual assimilation of new colonisations and the endangering of many traditional core areas that had been Finnic-speaking for centuries and even much longer (Jokipii 1995, Salminen 1993). The sociopolitical difficulties and cultural changes in many Finnic-speaking areas are reflected in the decrease of the number of speakers. The main reasons for the increasing serious language survival problems are political changes, wars, ethnic catastrophes and general population decrease. The expansion of the Russian language and the extension of Russian political power have had an immense influence on the development of numerous languages of indigenous peoples in North Eurasia.

The maximal territory of Livonian dates back to the 13th century AD and is described in early historical chronicles, most notably in the chronicle of Henry of Livonia, alias Henricus de Lettis (Auns 1994, HLK). It had disappeared from North-West Latvia and the shores of the Gulf of Riga in historical Livonia already by the 19th century (Viitso 1993: 61–63, Vääri 1995: 131–135).

The establishing of the capital of Russia (St Petersburg) at the estuary of the River Neva in 1703 gradually pushed the Finnic-speaking population back from the most adjacent surroundings of the river. The Finnish settlements in Sweden and North Scandinavia and the Estonian colonies in Latvia and Russia have gradually assimilated during the 20th century. The fate of the youngest Estonian and Finnish immigration areas in Siberia and North America has been identical to that caused by the ethnic and linguistic assimilation of many similar immigrant populations. The large Karelian colonies in inner Russia, in Tverskoe oblast⁴ are seriously threatened by assimilation too, while two Finnic varieties, Livonian and Vote, are already facing extinction (Salminen 1993, Halling-Kukk 1996, Heinsoo 1995, 1996, Wurm 2001, Vääri 1995).

It is practically impossible to completely ignore the incompatibility of the Finnic language data, which has been caused by language ecological factors as far as the printed sources are concerned. The history of written Estonian and Finnish began in the 16th century, although the local language gained more social and practical significance only in the 19th century. There have been attempts to create literary standards for the minor Finnic languages as well. However, those efforts made in 1930s were almost completely annulled by the destructive nationality policies of the Soviet Union. Ethnic and linguistic minorities gained more political freedom in Russia at the beginning of the 1990s, which, in principle, brought new optimism in the fight against assimilation. However, the basis for favourable development of the minor Finnic languages had changed considerably. The demographic development and language ecological situation is a result of the conscious neglect of those human rights that today are commonly considered to be the foundations of a multicultural world. These facts present an almost insurmountable threat to the future perspectives of numerous minorities, such as Finnic varieties other than Finnish and Estonian. Present-day conditions are also unfavourable for succesful progress in propagating a young literary variety that might otherwise have helped them survive.

For the reasons listed above the applied Finnic data is almost inevitably ambivalent: observations on Estonian and Finnish are sometimes rather more like echoes of a normative society than autonomous language change. The form of the illative in Standard Estonian, for instance, reflects both autonomous change and conscious language planning. Basically, there are two alternative illative forms, that is, a flexive illative often identical with the partitive and a suffixal illative: *pesa* 'nest': *pessa* 'nest.ILL': *pesa-sse* 'nest-ILL'. The earliest descriptions of Estonian grammar mention both types, and prescriptive grammars traditionally allow both forms. However, the flexive illative is the prevailing one in written Standard Estonian and in text data many nouns do not display the long variant (Hasselblatt 1999, 2000).

The dominance of flexive illative forms in modern written Estonian completely corresponds to the opinion of early 20th century Estonian language planners who recommended its intensification and extention to forms in which they did not initially exist. Nevertheless, the rejection of the suffixal "long illative" forms that had actually been suggested as early as in 1870s and recommended in the 1910s (Raimo Raag 1999: 66–70, 126–127, Virve Raag 1999: 610–612) has never been completed to such an extent that it would have been entirely replaced. Tauli (1968: 189) claimed that in the case of Estonian, it is almost worthless to draw conclusions on the basis of written texts, because they reflect not the linguistic concept of the authors, but rather the purism of language correctors and supervisors.

The impact of normative "language directives" has been partly overestimated by those scholars who have maintained that Estonian provides evidence of successful change in language type that could have been caused by language planning (for literature, see Virve Raag 1999). This view results from a misunderstanding of the relationship between natural and artificially invoked change.

2.3 Typological divergence between the Finnic languages

The focus on Livonian, Veps, Estonian and Finnish in the current work has been motivated by various factors. In comparison to other Finnic languages Estonian and Livonian are morphologically more complicated, especially in the way in which flexive morphonological alternation has replaced affixal marking. There are categories and stem types in which flexion plays a significant role. The rise of stem alternation and its typological consequences has been a frequently repeated topic in the debate on Finnic morphological typology, but has not really been discussed in a larger morphosyntactic context. Viitso (1990: 548) describes Estonian as quasi-agglutinative and rejects the notion of a flexive type. After all, many phonological changes such as the loss of word-internal and word-final vowels, and certain word-final consonants (*k, *h, *n) as well as the increasing importance of stem alternation (op. cit. 544) undoubtedly have affected the development of Estonian noun inflection.

Another salient difference in the morphology of the Finnic languages is that Livonian and Veps, which are at the geographical periphery, are characterised by a lack of consonant gradation, a morphonologically conditioned alternation of stops that fundamentally affects the inflectional morphology of the Finnic languages. Standard Finnish, then, represents a phonologically less eroded and morphologically more conservative Finnic language that provides illustrative contrastive material for pointing out the characteristics of other Finnic varieties.

Furthermore, compared to Estonian and Livonian, Finnish and Veps represent language types in which stem alternation is phonological by nature (Finnish) or very marginal and in practice often completely non-existent (Veps). Veps morphology is diachronically important to the current study for another reason: Veps displays several recently suffixed postpositions and the case system has been undergoing a strong transition. In particular this process has affected the systemacy of adverbial cases, most notably the local case system, while other examples of suffixed cases in Finnic seem to be more independent of grammatical interrelations and pre-existing categories. Vote, Lude and Olonetsian represent geographically and sometimes typologically, intermediate Finnic languages that would equally be worth more attention, although they have been given a more marginal role in this work. Vote, for instance, shares many characteristics with Estonian, on the one hand, and with Finnish on the other. Like Finnish, its inflectional morphology is, in principle, based on segmental case suffixes, except for the genitive which is distinguished by morphonological alternation of the word-final vowel. Like Estonian, it has developed secondary case suffixes, such as the terminative *-ssā* and comitative *-kā*.

South Estonian is commonly regarded as an independent Finnic language. In comparison to North Estonian dialects and especially Standard Estonian it definitely shows many interesting features that would deserve specific attention (Keem 1997, Koponen 1998, Pajusalu 1996).

Generally speaking, the most notable characteristics of the morphological strategies and the discussed morphosyntactic aspects of Finnic can be sufficiently elucidated by Livonian, Veps, Estonian and Finnish. On the evidence of these four Finnic varieties it will be possible to discuss the synchronic divergence and various diachronic strategies that affect the development of the Finnic case and adposition system.

2.4 Basic differences in noun inflection

The morphological differences of the Finnic languages are presented in table 2.1. This sums up the inflection of the so-called grammatical cases, i.e. the nominative, genitive(-accusative) and partitive, as well as two of the adverbial cases, the illative and elative. The inflectional strategy includes both vowel and consonant permutations in Livonian and Estonian, and forms a sharp contrast to Finnish that has an overt affixal marker for every form except the unmarked nominative.

	Livonian	Estonian	Finnish
nominative	kēl!*	nälg**	kieli* / nälkä**
genitive	kīel	nälja	kielen / nälän
partitive	kieldõ	nälga	kieltä / nälkää
illative	kīelõ	nälga	kieleen / nälkään
elative	kīelstõ	näljast	kielestä / nälästä

Table 2.1. Erosion of Estonian and Livonian inflectional suffixes in comparison to Finnish (*'tongue; language', **'hunger').

In Estonian the partitive and illative forms of the given declension type (*nälga*) are completely identical. The consonant permutation of the stem (g : *i*) distinguishes them from the genitive(-accusative) (*nälja*), but none of these forms is suffixal. The existence of inflectional affixes can only be seen from the elative form (*nälja-st*). However, it should be observed that Estonian actually has a great array of case suffixes, and the list presented in table 2.1 is not exhaustive. The partitive and illative are not entirely flexive in Estonian, either, and there are word types that do mark them with a suffix. It is interesting to contrast this with Finnish that has a special suffix for all case forms in table 2.1: nälkä 'hunger' (NOM) : nälä-n hunger-GEN : nälkä-ä hunger-PART : nälkä-än hunger-ILL : nälä-stä hunger-ELAT. The inflection of Livonian kel' 'tongue, language' reveals a contrast with Finnish kieli id., as well. Firstly, as in Estonian, there is no genitive, and secondly, the flexion affects the vowel of the first syllable, while in Finnish the diphthong *ie* remains unchanged. The partitive kieldo and elative kielsto forms display both flexion and a case suffix. The point is that typologically, the Finnic languages do not form as coherent a continuum as they do dialectologically or genetically.

The erosion or complete loss of affixal markers not only influences the morphology, but presumably also has consequences for the morphosyntax of certain grammatical categories. The loss of the genitive ending in Estonian and Livonian corresponds to similar processes known from the history of Scandinavian languages in which the loss of case affixes triggered an increase in adpositional constructions. This change has been dated to the Old and Middle Swedish periods (Haugen 1982: 89–105, 167–168, Norde 2001 246–248, Trosterud 2001).

As regards the whole case paradigm of the Finnic languages, the morpheme boundaries are basically clear and grammatical elements segmental. In Estonian and Livonian the mechanical agglutinating of suffixes is blurred by flexion and a pervasive inflectional homonymy in certain noun types, which especially affects the grammatical cases (nominative, genitive, partitive) and the illative. The paradigms of individual languages vary from the most eroded, Livonian and South Estonian, to the recombinative and reproductive paradigms of the Eastern Finnic languages, i.e. Karelian, Lude and Veps.

	Livonian	Estonian	Finnish	Veps	Vote
nominative	Ø*	Ø*	Ø	Ø	Ø
genitive(-acc.)	Ø*	Ø*	+	+	+*
partitive	Ø / +*	+/Ø*	+	+	+*
dative	+	-	-	-	-
illative	+*/Ø	+ / Ø*	+	+	+*
inessive	+	+	+	+	+
elative	+	+	+	+	+
allative	(+)**	+	+	+	+
adessive	(+)**	+	+	+	+
ablative	(+)**	+	+	+	+
approximative	-	-	-	+	-
approximative ²	-	-	-	+	-
egressive	-	-	-	+	-
terminative	-	+	-	+	+
prolative	-	-	-	+*/-	-
translative	+*	+	+	+	+
essive	(+)**	+	+	+	+
comitative	+*	+	(+)**	+*	+
abessive	-(+*)	+	+(**)	+	+

Table 2.2. Inflectional case system in Finnic.

 \emptyset = no affixal marking

* = possibly subject to inflectional homonymy

** = no longer a productive case

Despite the complete loss of its affix the genitive(-accusative) category has been morphologically preserved in the Livonian and Estonian case paradigm (cf. table 2.1 above). In Estonian the morphological status of the genitive(-accusative) is clearer, since in the singular it is mainly indicated by word stem permutation, and in the plural it has an affixal marker (-*de*). In Livonian the genitive(-accusative) more frequently merges with the nominative. The syncretism between these two cases is wide-spread in the singular and regular in the plural forms (except for pronouns). Boiko (2000) lists 123 noun inflection types in Livonian (based on Tiit-Rein Viitso's classification (p.c.)). A total of 73 nouns do not distinguish between the GEN.SG and NOM.SG, whereas 40 nouns do have different forms for these cases. (Seven are pronouns and three are numerals.)

Those cases from the illative to the prolative presented in table 2.2 are different types of local cases. The most notable difference between the Finnic languages in this domain is that Livonian has only one productive set of local cases, whereas Veps at the other extreme, has three distinct local case sets. In Livonian the exterior local cases, occasionally referred to as the "*l*-set" (the allative, the adessive and the ablative), occur only in connection with a few nouns, such as $m\bar{o}l$ 'in the interior (land), among the Latvians', *louvõl* '(to) upon the bed', $p\bar{o}rand\bar{o}l$ 'on the floor', and some adpositions, such as *sizal* 'in, inside' and adverbs *ležõl* 'near, close to', *uońdžõl* 'in the morning' (MSFOu 106: 133, 147, Posti 1942: 73, 270, 281). Synchronically, they are no longer productive morphological affixes.

A complete paradigm of productive Livonian (cf. Boiko 2000: 132–139, Kettunen 1938: XXXVIII–LI) and new Standard Veps (Nina Zajceva 1995: 181) cases is presented in table 2.3. The latter displays both Northern and Central Veps features.

Standard Finnish provides an example of the relative frequency of various case affixes. The so-called grammatical cases, i.e. the nominative, genitive(-accusative) and partitive are the most frequent to occur. However, the local cases are very important too, since on average every tenth word in a text occurs in one of the local cases. In all, the local cases comprise approximately 30% of all inflectional case endings (Leino 1993: 175).

Table 2.3. Inflectional cases in Livonian (cf. Boiko 2000: 132–139, Kettunen 1938: XXXVIII–LI) and new Standard Veps (Nina Zajceva 1995: 181).

	Livonian	Veps
nominative	<i>läpš</i> 'child'	suga 'comb'
genitive(-acc.)	laps	sugan
partitive	lapsta	sugad
dative	lapsõn	-
illative	lapstõ	sugaha
inessive	lapsõs	sugas
elative	lapsõst	sugaspäi
allative	-	sugale
adessive	-	sugal
ablative	-	sugalpäi
approximative	-	sugannoks
approximative ²	-	suganno
egressive	-	sugannopäi
terminative	-	sugahasai
prolative	-	sugadme
translative	lapsõks	sugaks
essive	-	sugan
comitative	lapsõks	suganke
abessive	-	sugata

2.5 Key hypotheses concerning diachronic change in the Finnic case and adposition system

The term noun phrase is frequently used to refer to different types of relational marking of the noun. In uncovering liaison between synchronic relations and diachronic changes, the interdependence between suffixing of postpositions and re-establishing lost inflectional categories is a concrete process that demonstrates the functional bridge between the different morphological and syntactic units.

Of those numerous aspects concerning the noun phrase that are represented in the extensive EuroTyp volume (Plank 2003a) dedicated to this issue, the current work pays special attention to the morphological coding of the external relations of the noun phrase using case affixes and adpositions. A noun phrase consists of a head noun plus one or more modifiers with various semantic and pragmatic functions. An affix, an adposition or both, typically mark a noun phrase. Thus, it may consist of various kinds of morphosyntactic constructions, many of which may correspond to one functional metatype (Blake 1994: 63-67, 99, Givón 1984-1990: 455-513, 1995: 72). Phenomena such as case affixes and adpositions are not only linked as a diachronic chain but also by their functional properties. This is most illustratively manifested in those theoretical approaches to case that depart from the extended notion for case and argue that both casehood and adpositionhood are complex properties consisting of sets of more basic properties (Blake 1994, Kilby 1981, Mel'čuk 1977, 1986, Plank 1992). The syntagmatic relations between the noun phrase constituents are most relevant in the diachronic processes that can be identified in an otherwise restricted language group such as the Finnic languages.

The assumption of the compatibility of case endings and adpositions is repeated in many works, although often more in the form of an intuitive hypothesis than a profoundly argued fact. It has been maintained that American structuralism, for instance, and early generative grammar did not differentiate between a syntactic structure and a morphological one, since these theories essentially treated morphology and syntax as parallel phenomena of the same domain (Anderson 1992: 346). The distinction between case affixes and adpositions is mainly syntactic by nature in so far as case affixes are morphologically bound to words whose syntactic relations they encode, while adpositions express grammatical relations within a syntactic construction rather than with respect to an individual constituent (Plank 1992: 19). In a functional perspective structural differences are often not so decisive, if case is defined as a category such as possession that marks particular morphosyntactic functions rather than a grammatical element or an inflectional form (Mel'čuk 1986: 37, 45-48). For this reason, inflectional case suffixes and adpositions are often mutually interchangeable. Diachronically it is worth noting that case affixes, adpositions and constituents of adpositional phrases are all sensitive to various forms of erosion and the possible loss of affixes or entire morphological categories.

The present study focuses on the form of adverbial cases and the interdependence between constructions that express spatial (local) and various instrumental relations. The main working hypotheses that have prompted the

current study of synchronic and diachronic relations in the Finnic case and adposition system are presented in a nutshell in the following list:

1. Language change involves multiple forces and may often be controversial in nature in that the direction of morphological change, for instance, is not uniform. Synchronic typological divergence is affected by a multiplicity of diachronic strategies.

2. Although morphological and syntactic developments clearly influence each other, they cannot always be retrieved from identical evolutional mechanisms.

3. Phonological erosion and the attrition of morphological units may, but does not inevitably, have consequences for the marking of grammatical relations and distinguishing between various constituents.

4. Language contacts are important for the development of individual languages. However, one may assume that foreign interference in morphosyntax is more likely to occur under favourable conditions and a contact-induced reanalysis is possible if certain preconditions are fulfilled.

These assumptions are a sort of thematic key to questions that have to be discussed in the light of empirical data. The first three affect the description of the word order asymmetries of the Finnic adposition phrase. The development of the Veps local cases examines, broadly speaking, all these aspects, whereas the analysis of the Southern Veps prolative-comitative and Livonian translative (alias translative-comitative) mainly concentrate on the first, second and fourth issues.

3. Erosive and preservative forces in morphosyntactic change

This chapter focuses on the general nature of morphosyntactic change. The principal hypothesis is that morphosyntactic change and typological evolution are not a simple one-way reductive steady stream, but a complex process consisting of forces that influence different parts of grammar in different ways. Although not always explicitly manifested, an assertion of a gradual reduction in language change is frequently repeated in linguistic literature. Grammaticalisation theory (Heine, Claudi and Hünnemeyer 1991, Heine 1992, Hopper and Traugott 1993, Lehmann 1995) is one of the most recent programmes with this basic approach to language, just to name one example. Although many changes undoubtedly are reductive, the details of various diachronic processes vary considerably. This claim is based on the empirical evidence of chapters 4, 5 and 6.

Compared to the consistency of a reductive phonological change, morphology and syntax do not necessarily follow the same regular path (Lass 1997: 246-252, Spencer 1997: 44-45, Werner 1987). A sound historical treatment of historical morphology has often faced great difficulties. Schneider (1997) lists six nonlinear processes that affect the dynamics of linguistic change. Considering the relationship between morphology and syntax, the most important claims are 1. the tendency of chaotic systems to return temporarily to ordered states, 2. the irreversibility of processes, 3. the aperiodicity of processes, 4. the unpredictability of processes but explainability of past processes and 5. the interaction of different factors. An assumption of irreversibitility can be criticised, because there is adequate evidence on preservative changes that functionally or even morphologically re-establish pre-existing categories (cf. section 3.2). Furthermore, although diachronic changes are often unpredictable, the conditions under which lexical and grammatical changes take place are different and it is likely that one language is more sensitive to change under certain circumstances than another. However, as a whole, one may agree with Schneider that morphosyntactic change is far from uniform and, indeed, not unidirectional. There are different types of diachronic change with very different points of departure. The importance of the original structure may vary a lot and the adoption of innovations may take place through implementing completely new categories or adapting them into earlier patterns.

As the title of the present chapter suggests, the hypothesis to be applied to this work is that language change is multidirectional. The assumption is that examples of degrammaticalisation, for instance, rather reflect the multitude of forces involved than they do a mere mirror of grammaticalisation (cf. Plank 1995). Campbell and Harris (1995: 89-90) distinguish between a preservative and an innovative reanalysis. I have extended this distinction in the current work by assuming that innovative and preservative morphosyntactic changes represent the more general principles of language change. Numerous innovative changes such as the suffixing of postpositions are undoubtedly reductive, but not all changes are reductive. Moreover, since a preservative change may be an innovation in comparison to an earlier state, I have used the terms erosive and *preservative* change to denote the distinction between various types of morphosyntactic change. I consider the spread of analogical inflectional forms as one of the most concrete diachronic processes that decrease the effect of language erosion and often compensate erosion causing changes. Consequently, individual changes may depend on one another, although the change does not always affect one single form and category. They often generate subsequent changes, although their mutual dependence may not be very transparent at first sight. Norde (2001), for instance, argues that there are opposite forces in linguistic evolution and deflexion, i.e. the intensive loss of inflectional affixes and disappearance of grammatical categories in Germanic languages was not a straight-forward process, but was connected with many preservative, systemmaintaining changes.

The assertion of a causal relationship between individual changes repeats an old idea that a language first attempts to maintain and rebuild those categories that already exist. At the beginning of the 20th century Meillet, for instance, explicitly suggested that language actually consists of a delicate and complicated system where everything is rigorously held in place and that there are system-maintaining and re-creating operations (Meillet 1958 [1912]: 132–148). On the basis of his hypothesis Meillet excluded the possibility of random changes in language evolution.

More recently, the interdependence between universal typological similarities and inherent language-specific features have encouraged the application of new methods in typological research. The change in methodology has evoked a more flexible attitude towards language-specific features, and the relationship between typological divergence and inherent characteristics as well (Croft 2001, Aikhenvald & Dixon 2001a).

The view that constructions tend to be language-specific and consist of a set of individual properties supports the hypothesis that there are different types of diachronic change as well. Similarly, because different synchronic morphological strategies may be characterised as complementary (Plank 1999) rather than opposite, one may assume that endogenous diachronic changes display complementary strategies as well. We may therefore assume that there are both erosive (reductive) and preservative changes that are manifested differently in diachronic change.

3.1 Inflectional elements in change

The question how and why inflectional elements change is relevant, because it posits morphology and syntax into parts of the same diachronic transition. Although they often occur as parts of the same chain, inflectional elements do have their specific history, in which morphological productivity and inherited characteristics are at least as important as random reduction of syntactic units. Lost inflectional categories can be reproduced and morphological gaps filled in by morphological means. There is also a considerable difference between derivational and inflectional morphology in diachronic processes, because inflectional forms are integrated in paradigms, whereas derivational forms are lexical properties (Wurzel 1995). A consequence of this is that foreign interference affects derivational morphology relatively easily, whereas borrowing of inflectional elements means a serious invasion in the language system (Boretzky 1995: 55).

There are two possible explanations for the productivity of the Finnic case system and great number of case suffixes (cf. table 2.2 and 2.3 in section 2.3). Firstly, there may be special reasons why former syntactic units (postpositions) are suffixed and why they have become inflectional elements. Secondly, it may be asked whether the morphosyntactic typology of Finnic is generally favourable for suffixal elements, and whether the existence of case suffixes is almost inevitable in the light of universal typology. In other words the mutual interaction of morphological elements and categories contradicts too straightforward a reconstruction of suffixes as morphologised syntax. The evidence from morphology suggests that rich inflectional morphology may be inherent. In the present work the renewing mechanisms of case system are discussed in more detail in chapter 5 in the light of the Veps local case system.

The abundance of suffixal elements and the preference for postpositions instead of prepositions has been known since the earliest comparative observations of the Finno-Ugric languages in the $17^{th} - 19^{th}$ centuries, and these characteristics can be brought back to the oldest reconstructable protolanguage stages. Various Finnic languages (most typical examples come from Estonian, Vote and Veps) display case suffixes that have developed from postpositions. Word-final elements and the morphology of Estonian and Veps have eroded considerably, which has had obvious consequences for morphemic boundaries and the morphological relationship between adjacent

units. However, the vast majority of the cases are not of postpositional origin as far as it is possible to reconstruct their historical development. In Finno-Ugric studies it has traditionally been maintained that many Finno-Ugric case suffixes do not descend from earlier postpositions, but originate from combinations of other suffixal elements and other morphological changes (Tauli 1956, 1966: 12–13). It is therefore necessary to decide whether the case system should be considered an inherent characteristic of this particular language group or whether it reflects some universal implications.

The basic correlation between word order and affix placement was initially pointed out by Greenberg (1963: 72–73) and later supported by cross-linguistic analysis (table 3.1).

Table 3.1. Correlation between word order and affix placement in the world's languages.

	Prefixes	Suffixes
VO Prep + NP	Х	Х
OV NP + Postp	Ø	Х

The point is that SOV languages have a clear statistical preference for postpositions and suffixes, whereas the morphological asymmetry is much more striking if the basic order is SVO that does not have such obvious structural implications. Adpositions are often but not always preposed and affix placement is divergent, although suffixes are very common in SVO languages as well and statistically of much greater frequency than prefixes in both word order types. In case marking suffixes are universally preferred to prefixes. (Bybee et al. 1990: 6–10, 15, 34–35, Hawkins & Cutler 1988: 288, 294, Hawkins & Gilligan 1988: 220, 228, 230, 249.)

In the light of this basic pattern the Finnic adpositional phrase is somewhat ambiguous, because it displays SVO order consistently, and yet postpositions are more frequent than prepositions (table 3.2).

	Prefixes	Suffixes
VO Prep + NP	Ø(X)	Х
VO NP + Postp	Ø(X)	Х

Table 3.2. Finnic word order (SVO) with respect to adposition and affix placement.

On the basis of cross-linguistic data the dominance of postpositions and postposing grammatical elements such as suffixes in Finnic would suggest that the basic word order is probably SOV. The lack of prefixes is almost absolute, if verb prefixes (most notable in Livonian) are not taken into account. However, affix placement alone does not cause further structural implications, because suffixes are much more frequent in both SVO and SOV languages. Given the psycholinguistic preference to process stems before affixes (Hawkins & Cutler 1988: 295–331) lexical morphemes such as prepositions are much less likely to fuse in pre-stem position than in post-stem position (Hall 1988: 334), which in turn increases suffixing preference.

Diachronically, the prevalence of postpositions in Finnic is more important. This characteristic is closely connected with genitive marking strategy, i.e. a genitive that typically precedes the (possessed) noun. Both of these features are more typical of SOV languages, which is no surprise, because the Finnic languages are considered to have been SOV languages earlier as most of the other Finno-Ugric languages, as a rule, are. The prepositions do not cover more than 20–25% of the Finnic adposition data. Moreover, the prepositional phrases have a clear structural constraint, because their proto-typical case government (partitive) diverges from that of postpositional phrases (genitive). Consequently, the introducing of prepositions is a construction-specific feature instead of a result of a more holistic process in the Finnic languages. Although adpositions commonly develop out of genitive phrases (Greenberg 1963: 99, Bybee 1988: 353–354), this is not the source of Finnic prepositions, rather they appear to reflect an alternation in word order that ultimately has led to asymmetry in adposition placement. However, there is no direct evidence that a change in the Finnic basic word order alone would have led to a change in the location of adpositions and launched the use of prepositions, although it would be favourable to it. (For further empirical evidence, see chapter 4.)

Schwegler applies a completely different parameter to discover the relationship between word order and morphological strategies in an illustrative account of syntheticity and analyticity in the development of the Romance languages. In his view disagreement about the morphological typology of modern French undeniably results from a lack of uniformity in the types of data used to substantiate the various claims (Schwegler 1990: 147). The conclusion (op. cit. 151) that word order and syntactic flexibility are the most crucial factors in determining the level of synthesis in those languages is an interesting parallel to what has been reported concerning the relationship between word order, affixal marking and suffixing preference.

As regards Finnic the ostensible inconsistency between basic word order and the location of adpositions is not as exceptional as it at first appears, because these languages display other features that are more typical of SOV languages as well, most notably the order of the genitive and the noun. It is characteristic of postpositional SOV languages and, as mentioned above, genitive constructions are a productive source of new suffixes. Yet, the prevalence of postpositional and related kinds of phrases does not explain the richness of the case system.

Many works implicitly anticipate that the tendency to use suffixes is inherent and new word-final elements are often not "yesterday's syntax", but originate from affixes. However, since it was stressed that many affixes never were free words, it must be emphasised that there is no reason to assume that present-day case suffixes would descend only from affixal elements either. As will be shown in chapter 5 the suffixing of postpositions and recombination of morphological elements are not necessarily two opposite strategies in morphosyntactic change, but they may well interact in re-establishing lost morphological categories.

Lass (1997: 305) distinguishes between three paths for the emergence of innovation in language: first, utilising or transforming existing material, second, borrowing, and third, eventual inventing. He suggests a preferencehierarchy of changes, namely phonological change > morphosyntactic change by analogy or reanalysis > morphosyntactic borrowing > absolute invention. Lass (op. cit. 209) also maintains that the difference between endogenous and contact-induced change (borrowing) is based on the fact that endogenous change is parsimonious, whereas borrowing is never necessary by nature. The feasibility, probability and importance of an absolute invention remains obscure, especially if it is presumed that "it involves the forging *ex vacuo* of new material".

Considering Lass's alternatives, the Finnic case suffixes seem to consistently represent only transformed material, either morphological or syntactic. We may therefore conclude that alongside general morphological versatility the Finnic languages probably have some other morphosyntactic characteristics that make conditions favourable for a rich case system. The constituent order [[N+GEN]+Postp] of the postpositional phrase, for instance, is very sensitive to suffixing new cases. Furthermore, as with many other Finno-Ugric languages the Finnic languages have word-initial stress and most presumably used to have it in earlier proto-language stages, as well. So, if phonological reduction takes place, it is likely to influence unstressed word-final units, such as suffixes (Korhonen 1996 [1980]: 184) that will then either be completely lost or reproduced. A similar reference to phonology is made by Carstairs (1987: 125), who concludes that one explanation for the stronger tendency to systematic homonymy in languages with less suffixal morphology might be that agglutinating languages tend to be phonologically more conservative than many of the flexive ones. In other words, phonological structure may be favourable to suffixal morphology.

In typological studies three explanations are often given for the dominance of suffixes in comparison with other affix types: (1) the commonly reductive direction of morphosyntactic change, (2) the principle of lexical processing (psycholinguistic) and (3) statistical evidence that shows strong suffixing preference in the world's languages (Bybee et al. 1990, Hawkins and Cutler 1988, Hawkins and Gilligan 1988: 237–243). Because suffixes very often originate from earlier syntactic units, it has been proposed that "today's morphology is yesterday's syntax" (Anderson 1992: 337–350, Givón 1971) and a reanalysis of an earlier syntactic complex. Although this is true to a large extent, not all affixes descend from free words even if it is more difficult to demonstrate their origin.

The concept of reanalysis has been treated in many ways in linguistic works. Here, I have adopted the view that reanalysis is possible, if there are two or more different interpretations of a construction, and the change includes a formerly unknown interpretation (Campbell and Harris 1995: 30, 61, Haspelmath 1998: 326). In other words, reanalysis primarily affects function more than form and does not necessarily involve any modification in form.

The development of the Finnic local cases suggests that the morphological system itself and the interdependence between mutually related morphemes such as local case suffixes may increase their number. The evidence from the Veps local case system is so strong that we may add morphological systematics to the assumed reasons for suffixing preference. In chapter 5 I shall argue that the interdependence between local cases and their functions are more relevant to the suffixing of ablative cases in Veps than the erosion of a syntactic structure. The transferring of suffixal elements through diachronic processes and the reinforcement of eroded categories has presumably had a great influence on the development of the Finnic case system (cf. Tauli 1956). Conclusively, the evidence from the Finnic languages suggests that the agglutinative structure of

various Finno-Ugric languages is a consequence of both syntactic reduction and morphological productivity.

Unlike suffixal grammatical material, flexion is undoubtedly an innovation in Finnic. Estonian and Livonian display grammatically distinctive flexive forms, whereas other Finnic languages do not. Moreover, the flexive forms are morphosyntactically less independent than those with overt suffixal marking, because they often do manifest the same morphosyntactic properties as suffixes. There is even an indication that, for instance, Estonian dialects have undergone additional changes in order to avoid too extensive an inflectional homonymy between flexive forms and, more precisely, identity between forms that in the most extreme cases might have led to the merger of the genitive(-accusative), partitive and illative (Riho Grünthal 2002: 28–29). Neither are there any signs that flexive forms would replace lost flexive forms, while secondary suffixes often replace earlier suffixes and earlier morphosyntactic properties may be transferred to secondary ones.

More generally speaking, morphonological non-affixal stem alternation is infrequent in the Finno-Ugric languages, although the stem formation rules are far from simple in individual languages, especially some Sámic and Samoyedic languages.

3.2 Preservative processes in diachronic change

The problem that typological observations have often faced is that synchronic divergence between morphological strategies and construction-specific characteristics cannot be mechanically transformed into diachronic processes. This is illustratively seen in the development of morphological units, such as case suffixes, which show the importance of bound morphemes. The way cases and adpositions are created and what consequences their loss may have is a different matter. Surprisingly enough, although it is non-linguists that are often convinced of the decay of language rather than progress, many linguistic works approach language change in a similar way. The assumption of language decay, a change from a more solid or perfect state towards a less perfect one has actually also been the subject of many linguistic works (Aitchison 1991, Keller 1994: 7–8, 69, Lass 1997: 292).

The hypothesis that there are both erosive and preservative changes implies that the assumption of irreversibility and unidirectionality of morphosyntactic changes, as suggested by grammaticalisation theory and other similar concepts, is unsatisfactory. It appears that reductive morphosyntactic change is a unidirectional process, yet not all changes are reductive. A preservative change affects the form of grammatical units as well, but as far as direction is concerned, it is not progressive but regressive. The empirical evidence in the following chapters suggests that if a certain type of diachronic change is to take place it must fulfil certain preconditions (cf. Faarlund 2001b; in the current work, see especially the conclusion to section 6.5). The preconditions under which a subsequent change is possible are either structural (morphosyntactic) or relational (diachronic order of subsequent changes). Although morphosyntactic change and the erosion of a given morpheme are often rectilinear, functional processes are much more ambiguous. The next section will consider preservative morphosyntactic changes that interact with pre-existing morphosyntactic properties.

3.2.1 Preservative morphosyntactic change

At the beginning of the 20th century Meillet (1958 [1918]: 70–73) pointed out that the Indo-European languages generally tend to replace flexion with auxiliary verbs, which is caused by the interaction between grammatical structure and phonological demands. A logical conclusion was that the tenseaspect-mood-negation system of verbs was tightly controlled by systeminternal considerations, and it was affected by a tendency to maintain preexisting categories in natural language.

In the present work I have extended the notion of a preservative change into a more general process in language evolution. The concept of preservative strategy illustrates a mechanism that has a similar importance to the ascribed reductive changes. However, the difference between a preservative and a reductive change is that a preservative one interacts with the pre-existing grammatical – both formal and functional – properties of a given language, whereas erosive change occurs independently of these. A prototypical preservative change is a diachronic process that decreases or eliminates the effect of reduction. An erosive change is basically more mechanical.

Besides preservative reanalysis, Campbell and Harris (1995: 318– 320) call attention to grammatical operations which they call prevention (prophylaxis) and compensation. The extended use of the term preservative change in the present work covers these two notions. The order of prevention and compensation with respect to a given change is posterioric, and they are both macro-level morphosyntactic processes.

Aikhenvald and Dixon (2001: 16) maintain that contact-induced changes may take place as system-maintaing processes as well. This claim is based on the view that the adoption of independent morphological stems is used to preserve certain functional categories. Aikhenvald and Dixon use a zoological analogy and call this kind of change the 'hermit crab' (cf. Heath 1998). Moreover, although there are no absolute constraints on foreign interference, there are a number of things that make contact-induced change linguistically and socially possible (Thomason 2001: 129–153). However, given that endogenous changes may be functionally preservative, there is no special reason why a preservative change should be a characteristic of contact-induced changes only. The interrelation between the preservative suffixing of a former postposition and pre-existing constructions will be discussed in more detail in chapter 5 in the light of the Veps local case system. It will be demonstrated that the loss of the ablative local cases was compensated by the suffixing of a secondary case ending that is both morphologically and functionally motivated.

Although the morphologisation of syntactic units may be characterised as preservative, since they provide suffixal morphology with new material, the majority of suffixed postpositions in the Finnic languages do not have any preservative influence on the grammatical system. The suffixing of the comitative case ending in Estonian (-ga < Old Literary Estonian kaas ~ kahs) and Vote ($-k\bar{a}$), for instance, added one more suffix to the case paradigm, but did not prevent the loss of a former construction nor compensate for one. In this sense, it appears to be more coincidental that a former postpositional phrase [[N + GEN] + Postp] changes into a case form [[N + GEN] + cx]. Despite the strengthening of the suffixal morphology the change is, after all, erosive. In both Estonian and Vote the suffix is the last member of a chain of diachronic changes and does not share the properties of some older category that was later lost.

If the assumption of preservative changes is correct, these must be primarily language-specific and subject to initial morphosyntactic conditions. This hypothesis evokes a further assumption that the language system is not anarchic, but the "invisible hand" affects both the structure and functionality of language. This view is supported by the fact that while individual functors are commonly lost, the wholesale loss of a set of function words does not occur in practice (Spencer 1997: 46). Linguistic evolution is definitely a cumulative process (Keller 1994: 146).

3.2.2 Analogy

The role of analogy has been widely discussed in research on synchronic grammar and diachronic processes. This section asserts that analogy strongly affects the systemacy and structural coherence of language in its evolution. As a matter of fact, Anttila (1977: 68) labels analogy a conservative (preservative) or innovative (restoring) power that has considerable importance in diachronic change. Emphasising the significance of analogy in both synchronic and diachronic processes is open to some pitfalls, because the time relationship is different in these two linguistic orientations. However, in both contexts

analogy provides a possibility for finding explanations for regularities (Anttila 1977: 71–72). Considering diachronic changes, the identification of an analogical change helps to identify various stages of a given process, such as the adaptation of phonological and morphosyntactic changes. In the neogrammarian context analogical changes were accounted for as exceptions in historically determined (reductive) sound changes (Anttila 1977: 66–67, Lass 1997: 250), although the regularity of sound change is obviously affected by analogy as well. However, in this context sound change is regular, even though it may increase irregularity, whereas analogy is irregular and yet strives towards regularity, simplicity and uniformity (Anttila 1989: 88, 94–98). Basically, an analogical form or an analogical change is posterior.

Synchronically, the nature of analogy is more ambiguous. The principal presupposition is that analogy is primarily concerned with the link between sound and meaning. The role of analogy in grammatical systems is seen in the manner in which it maintains this link by keeping sound structure, grammatical structure and semantic structure in line (McMahon 1994: 70, Vincent 1974). The complexity of analogy was shown by Paul Kiparsky (for literature, see introduction in Lahiri 2000), who pointed out that actually all forms of change have an effect on the grammar. The conclusion is that many changes are not necessarily straightforward grammatical simplifications nor reductive. Many papers published in Lahiri (2000) confirm that seemingly capricious analogy is not actually random and is ruled by an entire grammatical system. The discussion of analogy's omnipresence has been extended to all structural levels. Meillet (1958 [1912]: 130) considered all regular forms in language analogical, because they are based on existing models and can be recreated any time.

It is noteworthy that the importance of analogy has been recognised in generative research as well, and there are a number of reasons for believing that, on the one hand, morphology is rule-governed, but on the other, it is driven by analogy, and both approaches are needed. The demand for analogy-based explanation comes from two directions: first, from rule-changing innovations of low type frequency, and second, from certain lexicalised forms. Bauer (2001: 75–99) concludes that the rule-governed concept of morphology actually equates with productivity, whereas an analogical approach corresponds to creativity.

Morphological adaptation of new loanwords and adjustment to productive inflectional patterns speaks for strongly integrative forces in morphology (van Marle 1994), which is compatible with the influence of analogy. The introduction of new loanwords into the inflectional system takes place through adjustment to the morphology of a given language. In Finnish, for instance, this is seen in the form the stem takes in the inflection of new loanwords: *biisi* 'song; melody' (etc.) (NOM) : *biisi-n* (GEN) : *biisi-ä* (PART) (< English *piece*),

dokumentti (NOM) : *dokumenti-n* (GEN) : *dokumentti-a* (PART) (< *document*). In the vein of mechanically agglutinating stems such as *biisi* and stems that are adjusted to consonant gradation such as *dokumentti*, that represents an old stem alternation type, which is frequent and productive in some stem types. Disyllabic nouns that have an *A*-final stem with a labial vowel in the first syllable, for instance, lose their word-final vowel in the plural (*škoda* : *škod-i-en* (GEN) : *škod-i-ssa* (INESS) (< *škoda* 'Škoda' [car]) (Terho Itkonen 1984–85).

Metaphor, semantic roles and changes have been proclaimed for one type of analogy, too (Esa Itkonen 1998: 22–23, Onikki-Rantajääskö 2001). Basically, there need not be any triggering model or source of semantic extension which would correspond to analogy in phonological or morphological changes. The grammaticalisation of body-part nouns into adpositions, for instance, is largely based on metonymy (Ojutkangas 2001: 195) and the concept of analogy is not indispensable in the description of this process. However, it is not possible to avoid the conclusion that morphosyntactic change, which after all is a diachronic process, is strongly influenced by analogy (Anttila 1989: 102–103, Hopper & Traugott 1993: 33, Esa Itkonen 1998: 26).

As regards the topic of the current chapter, analogy is clearly preservative and different from reductive changes, and occasionally it may compensate for or eliminate the influence of erosion, such as phonological loss. It is obvious that the coherence between morphosyntactic structures, such as Finnic postpositional and prepositional phrases (see chapter 4), and the configurational identity between inflectional subsystems, such as the Finnic local case sets (see chapter 5), resembles the regularity of analogy in many ways. In the current of diachronic changes and language evolution, analogy is a strong preservative, system-maintaining power, although certainly not the only one that decreases the effect of reductive changes. More generally speaking, analogical (diachronic) change and analogical (synchronic) form are two sides of the same coin. Analogical change is possible, if it is preceded by another change. Analogical form becomes possible if a form exists against which it can be projected. Hence, in linguistics analogy is always a secondary correlate and projection against some other property of language. In typological evolution it decreases diversity and increases regularity.

3.3 Conclusions

In this chapter I have argued that there are two major strategies in morphosyntactic change: erosive and preservative. An assumption of unidirectionality and irreversibility in morphosyntactic change loses its explanatory value in the light of a multidimensional functional approach to language evolution. The identification of opposite powers does not necessarily increase the predictability of the change, although one of these may constitute the possibility and probability of language change on the basis of certain preconditions. Individual changes are probably not always as random as they may appear at first sight.

Taking into account the impact of analogy in diachronic processes one may conclude that there are at least two general tendencies, an erosive and a preservative one, that affect linguistic evolution and are ultimately represented in typological divergence. If this conclusion is correct, it becomes necessary to consider the possibility of other preservative means. In chapter 5 I shall argue that the importance of preservative forces in the evolution of Veps is seen in the morphological interdependence between individual suffixes. The evidence from inflectional subsystems such as local cases has special significance in determining the reasons why suffixing is more prevalent than other affix types in the world's languages.

4. The Finnic adpositional phrase

The Finnic adpositional phrase has a double character typologically, because both prepositions and postpositions are attested in all Finnic varieties. Generally speaking, mixed adpositional systems are exceptional in the world's languages (Koptjevskaja-Tamm & Wälchli 2001: 711). Finno-Ugric languages other than Finnic and Sámic languages do not have prepositions and are more consistent in this respect. They display the statistically expected implication that languages with SOV word order are almost exclusively postpositional (Greenberg 1963: 62, Cutler et al. 1985: 727–730, Hawkins & Gilligan 1988: 219–220, 250–251). The Finnic languages that presumably have changed from a historical SOV to SVO are predominantly postpositional, while their prepositional phrases have clear structural and semantic restrictions. (For difficulties in determining word order principles in Finnish and European Uralic, see Vilkuna 1989, 1998.) The number of prepositions does not exceed 20–25% of all adpositions in Finnic. It is notable that the change in word order cannot be the only factor contributing to the appearance of prepositions in Finnic, because the case government of prepositions is, in principle, different from that of postpositions.

Numerous diachronic processes that are reflected in the order of the constituents, the degree to which adpositions are inflected, and the form of the noun complement, have affected the historical development and synchronic form of the Finnic adpositional phrase. This chapter suggests that the basic structure of the prepositional phrases and postpositional phrases is rather stable, because the various eroding processes do not easily corrupt the morphosyntax of these constructions. The adpositional system is not very sensitive to contactinduced changes, nor to a massive implementation of borrowed adpositions (cf. chapter 7). I shall begin with a brief historical overview of the grammatical and lexical background to Finnic adpositions (sections 4.1, 4.2 and 4.3). This will be followed by a more detailed quantitative analysis of Finnic adposition classes (section 4.4) and description of the morphosyntactic structure of adpositional phrases with special reference to the inflectional form of the head and the noun complement (section 4.5). The Livonian postpositional phrase (section 4.6) provides concrete evidence of an erosive diachronic change that affects the form of the construction but preserves the key morphosyntactic characteristics of the expression. Finally, it will be shown how the various developments affecting the inflectional forms of the noun, particularly the genitive, give rise to different morphosyntactic structures (4.7).

4.1 The syntactic ambiguity of the adpositions

Although some adpositions are syntactically ambiguous and may be used both in pre- and postnominal positions, there is a restricted number of words that can only be used as prepositions. Here, those adpositions that may occur in both positions are called bipositional adpositions. The ambiguity of the adpositional phrase provokes a question concerning its diachronic background, because it suggests an eventual typological change. This is the most straightforward explanation for the appearance of prepositions in languages that normally use postpositions. There are other parallel typological differences between the Finnic, Sámic and other Finno-Ugric languages, such as the question of basic word order (SVO \sim SOV) that potentially some implications for the adposition type (preposition \sim postposition) likely in a language. However, questions involving the appearance of prepositions will not be elaborated on in detail here, because the focus is directed at the intertwining between adpositions and case inflection.

Generally speaking, adpositions form a syntactically determined lexical group with no absolutely clear boundaries between them and nouns and adverbs. Although new adpositions are not introduced completely randomly, and the group of opaque adpositions changes very slowly, new members may basically enter the class of adpositions any time and they are characterised by extensive variation in meaning, and degree of lexicalisation. Adpositions are universally very common, and only rarely do languages not have this particular group (Esa Itkonen 1997: 32, 145-150). Most of those scholars (Jaakola 1997, Karelson 1972, 1985, Ojutkangas 2001) who have analysed the Finnic adpositions have alleged that adpositions per se are a lexically identifiable set of words. Historically they originate from three main sources, namely, nouns, syntactically reanalysed adverbs and lexicalised denominal infinite verbs (Auli Hakulinen & Fred Karlsson 1979: 154, Erkki Itkonen 1966: 230, EKG II: 38, Majtinskaja 1982: 38–45). As a rule noun-based adpositions are much more typical than verb-based ones. The claim that all Finnish adpositions are petrified or transparent inflectional forms of earlier nouns (Lauri Hakulinen 1979: 501) is only slightly exaggerated.

The morphological regularity and the inflection of adpositions have both synchronic and diachronic significance. The clearer the morpheme boundaries are, the more transparent the meaning and the composition of a given adpositional phrase is. The vast majority of Finnic adpositions either display earlier inflectional elements or share some of the same inflectional properties with nouns, such as possessive suffixes and local case endings, even if their etymological origin is no more transparent (cf. (Finnish) *alle* (ALL) '(to) below': *alla* (ADESS) 'below': *alta* (ABL) 'from below' (cf. section 4.2.1). Opaque adpositions, however, are not as numerous as those with a parallel noun, which makes the distinction between nouns and adpositions often ambiguous. Diachronically, it is noteworthy that lexicalised adpositions cannot be "renominalised", that is, in many cases it is not possible to restore the adposition's synchronic state as a relational noun. Nor do they inflect in number (Haukioja 2000).

An adpositional phrase consists of an adposition and a noun, including the case affixes (and/or inflectional stem alternations) of the noun and possibly those of an adposition. It is characteristic of Finnish adpositional phrases that especially prepositional phrases are exocentric, because neither of the two constituents can be omitted (Fred Karlsson 1994: 136–137). Postpositional phrases are basically exocentric as well, but postpositions are syntactically more flexible than prepositions. This is based on the similarity between many adpositions and adverbs. The deletion of the noun is possible in certain cases, because the grammatical relations change simultaneously when the adposition is transformed into an adverb. So, in Finnish the adposition becomes an adverb and a dependent of the verb, if the noun complement is deleted. Another characteristic of adpositions is that no attribute may be attached to them (Auli Hakulinen & Fred Karlsson 1979: 154, Haukioja 2000: 96, Heine et al. 1991: 96).

Given that numerous words can be used as nouns or adverbs and adpositions, their close relationship poses a considerable challenge to grammatical description (EKG I 33–39, Auli Hakulinen & Fred Karlsson 1979: 84–85, 154–155, Haukioja 1998, 2000, Leino 1993: 214–216, Ojutkangas 2001: 48–49, Penttilä 1963). The main difference between adpositions and adverbs is a difference in syntactic status. The adposition always includes the morphosyntactic locus of an adpositional phrase, which is a phrasal dependent of a verb, whereas an adverb does not exhibit syntactic relations to any noun. Thus, the relationship of an adpositional phrase ([Prep + N] or [N + Postp]) to a verb is the same as that of an adverb alone (Erkki Itkonen 1966: 218). A distinction between adpositions and adverbs is not so necessary in other syntactic environments.

4.2 Historical preamble

4.2.1 The age of old adpositional stems

Most Finnic adpositions display elements of productive noun inflection and frequently apply one of the local case sets. In addition to these there are some lexicalised adpositions. They display affixes that have ceased being productive in the given function long ago, but can be compared to reconstructed regularly inflected nouns. In historical Finno-Ugric studies this has been interpreted

as an indication of the nominal background of lexicalised adpositions. In Finnish, for instance, the inflection of taa(kse) : taka-na : taka-a (behind: to/ at/from) displays assumed former local case endings. The two latter forms (the locative and the ablative, which is a predecessor of the present-day partitive) have shifted to other functions while the first (the lative) is not attested in the case paradigm of modern Finnish. Although the inflectional properties of postpositions such as Finnish *takana* etc. provide concrete evidence regarding the morphology of prehistoric Finno-Ugric varieties, the inflectional endings need not necessarily represent the same historical stage of language as the etymology of the word stem suggests. This is concretely shown in table 4.1, which presents an old Finno-Ugric adpositional/adverbal stem **al*- 'under' and its descendants in six Finno-Ugric languages.

	'under (to)' [under[Loc+]]	'under (at)' [under[Loc=]]	'under (from)' [under[Loc-]]	'under (via)' [under[PATH]]
North Sámi	vuollái	vuolde	(vuolde)	(vuoli)
Finnish	alle	alla	alta	(ali(tse))
Mordvin (E)	alov	alo	aldo	alga
Udmurt	ule	ulin	ulįś	uleti
Mansi	jolipālen	jolipālt	jolipālnel	
Hungarian	alá ~ alulra	alatt ~ alul	alól ~ alulról	

Table 4.1. The adpositional/adverbal stem **al*- and its inflection in six Finno-Ugric languages.

The table shows that the Proto Finno-Ugric (PFU) stem in question **al*- (SSA 1: 66, UEW 6) is shared by all these languages but the inflectional affixes differ considerably. This is due to the fact that inflectional elements do not represent the same historical layer as the word stem and may be subsequent innovations. North Sámi *vuol-de*, Finnish *al-ta* and Mordvin (Erzya) *al-do* all share a historically common affix, whereas Udmurt *ul-iś*, (Northern) Mansi *joli-pāl-nel* and Hungarian *al-ól* ~ *al-ul-ról* do not. This is an illustrative example of the disharmony between the age of the lexical stem and the affix.

Although *al- has a wide distribution in the Finno-Ugric languages as a postposition, it has been repeatedly asserted that this particular adposition has a nominal background as almost all others do. The most radical restructuration is seen in the Mansi compound forms. Hungarian displays only suffixal elements, but they cannot be derived from the same proto-forms as the Finno-Permic adpositions. (For additional examples of the synchronisation of the postposition inflection, see section 4.5.1.2.)

The traditional view on the age of postpositions in Finnic and other Finno-Ugric languages has been based on etymological observations, and the most typical conclusion has been that adpositions as a syntactic category are a relatively late innovation in the Finno-Ugric languages (Majtinskaja 1982: 37, 57–69, Ravila 1953: 45, Tauli 1966: 12). This view was based on the fact that the vast majority of adpositions in present-day languages are etymologically transparent and recognisable inflected nouns. Gheno (1975: 48) reports that 69% of his Mordvin, 78% of Hungarian and 58% of Finnish adposition data consist of transparent nouns. The conclusion in earlier studies was that the opaque adpositions descend from earlier nouns (Ojutkangas 2001: 29, 75). Majtinskaja (1982: 37, 57–69) simply concluded that because the adpositions in the Finno-Ugric languages employ different case suffixes, their use as postpositions cannot be dated back to Proto-Finno-Ugric (PFU) or Proto-Uralic (PU).

Regardless of the point of departure, the fact that adpositions, even those formed from ancient stems, tend to be re-equipped with currently productive affixes, suggests that their prehistoric development may have included other similar forms of restructuring. The differences between present-day suffixes and adposition systems are no obstacle to positing adpositions as a category belonging to the earliest reconstructable proto-language stages. As Majtinskaja unintentionally points out, the conclusions concerning the age of postpositions in Finno-Ugric languages have been methodologically dictated by etymological analyses. There are only a few adpositional stems that can be reconstructed at a PFU / PU level, such as **ala* 'Raum unter etw. [PU], Unter-, das Untere', **e&e* 'das Vordere, Raum vor etw., Vor der' [PFU], **pälV*| 'das Innere' [PFU], **taka* 'Hinterraum; das Hintere' [PU] and **wülä* (~ **wilä*) 'Oberfläche, Ober-, das Obere' [PFU] (SSA 1: 66, 108, 3: 257, 490, UEW 6, 71–72, 364, 506–507, 573–574).

There is not much concrete evidence against the assumption that postpositions – not only prepositions – are a relatively late category in the Finno-Ugric languages. However, adpositions do appear in most of the world's languages. The uniformitarian principle suggests rather that postpositions are a very old characteristic of the Finno-Ugric languages, in so far as such an entity can be reconstructed, and the assumption of a primitive proto-language without word classes is incorrect (cf. Laakso 1990: 157). Similarly, Schwegler (1990:

190) emphasises that as in French and other modern Romance languages, analytic and synthetic tendencies have coexisted through the history of the IE languages, and the degree of analyticity and syntheticity as such are not quantifiable absolute parameters.

As regards the inflectional forms displayed by the Finnic adpositions, the three-dimensionality of spatial expressions is widely shared by postpositions in contemporary Finno-Ugric languages. There is ample evidence to suggest that Finno-Ugric local cases and the inflection of postpositions had their roots at the earliest identifiable proto-language stage (PU / PFU) (Korhonen 1974, 1991, Majtinskaja 1982: 26–36, 59–69). (Section 4.5.1.2 presents an overview of the relevant inflectional categories of the postpositions.)

Majtinskaja is very critical of classifying adpositions languageinternally according to the manner in which they are inflected. She makes the generalisation that adpositions are not inflected in the Finno-Ugric languages and words like the Finnish *pää-lle* 'on' (ALL), *pää-llä* (ADESS), *pää-ltä* (ABL) or Hungarian *mell-ê* 'beside' (LAT), *mell-ett* (LOC), *mell-ől* (ABL) merely represent the inflection of the original noun (Finnish *pää*] 'head', Hungarian *mell* 'chest') and concludes that the lack of inflection is not a decisive characteristic of the adposition. (Note also that in Hungarian these affixes are unproductive and the ablative functions have been transferred to other suffixes (*-tól*, *-től*).)

Various historical changes may blur the traces that earlier adpositions left in living languages. Analogical morphological processes, such as the adaptation of old postpositions to productive morphological rules may take place, as can be seen, in various Finno-Ugric languages. A given morphosyntactic property expressed by a local case suffix, for instance, does not imply that the morphosyntactic representation remains unchanged.

4.2.2 Suffixed postpositions and their morphological adaptation

The diachronic development of nouns into adpositions and eventually case endings is often very rectilinear. The change of status predominantly begins with spatial expressions that may shift to more abstract functions and less transparent forms (Haase 2001, Heine et al. 1991, Heine 1992, Blake 1994: 167–168). This process can be seen in the gradual erosion of lexical items, relational nouns that become bound morphemes and eventually inflectional elements. At the final stage, suffixed postpositions such as the Estonian comitative *-ga* (Vote *-kā* < **kansa*; the former postposition is attested as a free word in early Estonian literary records), do not differ at all from any other paradigmatic inflectional affix. Syntactically, the postpositional origin of this particular affix can still be seen in that the adjective attribute has no case agreement if it precedes a noun in the comitative as in *punase auto-ga* red.GEN car-COM 'with a red car'. The terminative, essive and abessive suffixes, of affixal origin, are similarly constrainted in Standard Estonian (cf. Nevis 1988).

The lack of case agreement shows that syntactic integration does not proceed simultaneously with morphologisation. There is no general rule that would determinate the speed of adaptation. The degree to which given case suffixes are adapted to agreement rules is both language-specific and construction-specific. So, a rapid adaptation into agreement rules is possible, too. Veps case endings provide examples of consistent syntactic adaptation in the use of recently suffixed postpositions. In Northern (1) and Central Veps the attribute quite frequently agrees with the noun in the comitative or one of the secondary ("propinquative" or "approximative" set) directional local case endings (Tikka 1992: 141, 159).

(1) *keskmäiže-nke ńeitše-nke pańi-he magat-ta* intermediate-COM girl-COM put-REFL.SG3 sleep-INF '(S)he went to sleep with the middle maid.' (MSFOu 100: 94)

The adjective attribute (*keskmäiže-nke*) and the noun (*neitše-nke*) have the same suffix as most adjective attribute constructions.

The transformation of a postposition into a case affix does not necessarily generate any subsequent functional changes in the affix. This is evident in the development of the above-mentioned Northern and Central Veps comitative case ending (< *kerta 'with'). In the long run, the original order of the free and bound morpheme (the genitive -n) has been preserved and the last morpheme to have been an independent syntactic unit is located at the end of the word. The sole change is that a free morpheme has become bound and an analytic construction has become synthetic. The development of the Estonian comitative is quite identical with the Veps, although the semantic properties have been extended to instrumental functions in Estonian.

When a postposition loses its word status and becomes a case affix, the process is followed by other important changes. Firstly, the item at issue will probably adjust itself to the phonological properties and variants characteristic of its host, and secondly, it will become a member of a much more limited set of forms (Blake 1994: 169–170). The affix is often semantically reanalysed and functional changes accompany the reduction of form.

The manner and extent to which secondary case endings have been adjusted to inflectional morphology and its rules, varies considerably. A given construction may be a transparent descendant of an earlier postposition phrase or it may have lost all traces of its earlier morphosyntactic structure. Path 'along', for instance, is expressed by a postposition (*möto*) in Northern Veps, while in Central Veps it has become an affix (-(d)me). In Southern Veps (-mu)

it has been reanalysed as a prolative-comitative case ending without traces of the earlier partitive case ending (-d < *tA), the suffix of the noun complement (Tikka 1992: 50–51, 114–117, 164–178; see also section 5.2). One of the clearest examples of morphonogical adaptation is the adjustment of the new suffixes to vowel harmony or rather, in the case of Veps, in the neutralising of vowel harmony, such as by the replacement of a front vowel and also front-vowel word stems with a back vowel (*-mu << möto*).

It has been proposed that in those Finno-Ugric languages in which the nominal complement of the postposition is in the nominative, suffixing of postpositions would be more typical and structurally more motivated than in those in which the complement is in the genitive (Korhonen 1996 (1981): 200–205, Ojutkangas 2001: 49–50). This assertion is incorrect as the evidence of Veps shows (see above on the Northern Veps comitave *-nke* which includes the historical genitive *-n* of the noun complement). There are examples of suffixed postpositions with a noun in the genitive, partitive or one of the local cases. So, the suffixing of postpositions in Veps alone indicates that the number of morphemes and the morphosyntactic structure is probably not at all decisive. If the noun is inflected the primary case ending is likely to be incorporated into the suffixed morpheme, or eventually it may become completely lost.

Although the suffixing of postpositions is typical of Hungarian and attested also in the Ob-Ugric languages Mansi and Khanty, some Ob-Ugric dialects that display the same basic morphosyntactic pattern [N[NOM] + Postp] in postpositional phrases as does Hungarian, really have minimal case paradigms compared to other Finno-Ugric languages. There, corresponding expressions have not given rise to the suffixing of postpositions. Note that in addition to Veps, suffixing of postpositions is attested also in other Finnic, Sámic (Korhonen 1981: 225-226, Sammallahti 1998: 69–70) and Permic languages (Bartens 2000: 79, Kel'makov–Saarinen 1994: 97–99; for comparative data on Finno-Ugric languages, see also Majtinskaja 1979: 105–113, 126–136, Tauli 1966: 112–118).

Consequently, the morphosyntactic structure of the adpositional phrase (the presence or absence of inflectional affixes between the noun stem and the adposition) does not seem to have any decisive effect on the suffixing of postpositions. The causalities behind the changes in the morphological status of the adpositions are to be found elsewhere, if it is possible to identify them at all.

4.3 Adpositions in a contact-linguistic perspective

In one of the few comparative studies on Finnic adpositions Stoebke (1968) provides a summary of the etymologies of various adpositions and distinguishes between endogenous and borrowed ones.

As noted above, there are both postpositions and prepositions in all Finnic languages. However, postpositions are far more frequent and play a more central role than prepositions even in languages like Livonian and Veps that have been subjected to strong foreign influence, and in Estonian, which have all been influenced by the attrition of inflectional elements. Livonian, for instance, which has been thoroughly affected by Latvian both syntactically and lexically, displays only very few prepositions of Latvian origin.

Earlier studies (Majtinskaja 1982: 17, Stoebke 1968: 3, 254, 286) concluded curtly that the prepositions originate etymologically from two sources, first from borrowed elements in neighboring Indo-European languages (Russian, Latvian), second from reanalysed adverbs and existing elements assuming a generally young age for adpositions in the Finno-Ugric languages. Although this may be true as an etymological observation, the claim that prepositions have been borrowed from Indo-European languages does not really explain the parallel existence of the word order types in the Finnic adpositional phrases, because it completely overlooks the role of language-internal factors.

It is often argued that adpositions (besides pronouns) are not as likely to be borrowed as other word classes, the commonly assumed hierarchy being noun > adjective > verb > adverb > adposition (Lass 1997: 190). This view is strongly supported by the current analysis of Finnic adpositions. Livonian, despite its immense Latvian interference on the Livonian vocabulary, phonology (Kettunen 1938, Posti 1942, Suhonen 1973, Winkler 1994, 1999, 2000) and syntax (de Sivers 1971), has never borrowed such a great number of adpositions, let alone inflectional elements, from Latvian. The morphology and morphosyntax of Livonian have remained mostly intact. Similarly, neighbouring Indo-European languages have influenced the Sámic languages but adpositions have not been borrowed (Bartens 1974).

Nevertheless, this does not mean that there would be no prepositions of Latvian origin in Livonian, or respectively, prepositions of Russian origin in Veps. In fact, there are a couple of Latvian prepositions that have definitely intruded into the grammatical system of Livonian, namely two that are frequently used, $b\ddot{a}s(s)/b\ddot{a}z$ 'without' and pa 'to' (the latter will be discussed in more detail in section 6.3), and two infrequently used ones that are included in Kettunen's (1938) vocabulary but occur in texts only randomly, namely $l\bar{l}dz$ 'until' and $sp\bar{l}t$ 'despite'. Stoebke (1968: 3, 254, 286) suggested that Livonian $l\bar{l}dz$ 'until' is one of the few direct borrowings from neighbouring Indo-European languages into Finnic (< Latvian $l\bar{l}dz$ id.), but did not check

its frequency in text samples. Kettunen (1938: 197) does not provide the corresponding prepositional meaning (German 'bis') and in none of his phrase examples is Livonian $l\bar{l}dz$ used as a preposition. The assumption of its use as a postposition is probably based on Kettunen's reference to Salats Livonian (extinct from the 19th century) in which the word $l\bar{l}dz$ is reported to be both an adverb and a preposition 'bis' (Sjögren 1861, Winkler 1994: 178).

Actually $l\bar{l}dz$ occasionally occurs as a preposition in the Livonian dialects of Kurzeme (MSFOu 106: 91, 127), though much more randomly and not at all as systematically as *bäs* and *pa*, the two other prepositions of Latvian origin. The two latter prepositions are the only Latvian prepositions that have been integrated into the Livonian grammar, while $l\bar{l}dz$ has a Livonian synonym (*sonõ*) which is more frequently used than $l\bar{l}dz$ (cf. section 6.3.6).

The resistance to Latvian prepositions is of particular interest, considering the hierarchies for the acceptance of foreign elements, as several Latvian prepositions were borrowed into Livonian as verb prefixes (Mägiste 1937, de Sivers 1971), for instance, *aizvieddõ* 'wegführen', *iesōdõ* 'erlangen, erhalten', uzvõttõ 'aufnehmen' etc. (Mägiste (1937: 82-84) reports the occasional use of some Russian verb prefixes in Veps, but the influence is not compatible with Latvian influence on Livonian.) Like German (cf. auf dem Tisch; and aufschreiben) modern Estonian (cf. ta astus üle tee he/she walk-IMPF.SG3 over street '(s)he walked across the street'; *üle andma* over give-INF 'give, deliver, transfer', cf. Hasselblatt 1990), and many other languages, Latvian exploits the same lexical elements as prepositions and verb prefixes (cf. uz '(up)on': uzdot 'give (on) to'). Livonian displays some endogenouns postpositions as verb prefixes, but of the Latvian-originating verb prefixes only pa is used as a preposition. So, there is a clear difference in the way in which these foreign elements are applied in Livonian. The verb prefixes seem to be more sensitive to foreign influence than the class of adpositions as a whole.

One may interpret this not only as a characteristic of adpositions, but also as an indicator and preference of language-specific features even in such far-advanced bilingual communities as the last Livonian villages were before World War II. Indeed, the weak acceptance of Latvian prepositions into Livonian supports the view that some lexical and syntactic properties are borrowed more easily than others.

A fairly similar situation to Livonian prevails in Veps. Stoebke (1968: 253–254) lists Russian prepositions that she defines as new loans into Veps, e.g. *poperok* 'across', *krome* 'without', *krugom* 'around' and *posle* 'after'. However, these prepositions are not recorded in the largest existing, albeit not thoroughly reliable, Veps dictionary (Zajceva & Mullonen 1972), which does not include any other transparent Russian loan words either.

Actually, at least one Russian word is commonly used as an adposition in Veps, viz. *bok*l 'side, flank': *ńevestan boka-späi* bride side-ELAT 'from

the bride's side' (MSFOu 100: 210-212). Interestingly, the same word has been borrowed into Mordvin (bokas '(to) beside', bokava 'along the side of'; Gheno 1976: 65-66) and Komi, in which it is used as both a noun and equipped with local case suffixes to become a postposition (boke, bokin, bokis, bokti) in exactly the same way as in Veps (Rédei 1962: 79). In general, the grammaticalisation of words denoting body-parts is very common (Kovács 2000, Ojutkangas 2001). The use of bok as a postposition is clearly a Veps innovation, not an indication of Russian influence on the Veps adposition system. Kettunen (1943: 538-545) provides examples of two genuine Russian prepositions both of which have been adjusted to the partitive-governing structure of a prepositional phrase: kromje händas-t except (s)he-PART 'except of her/him', mesto liha-dlinstead meat-PART 'instead of meat' (one nominativegoverning: krugom vode-d around year-PL 'around the year'). However, the adoption of the Russian prepositions is not as simple as the borrowing of bok as a noun, because the syntactic position is borrowed directly from Russian, but the structure corresponds to that of Veps prepositional phrases.

More importantly, however, Russian prepositions in Veps are often used together with other Russian elements in cases of apparent code-switching or code-mixing (2).

(2) netsi-d, posl'e grazdanskoi voin, ol'-i-ba this-PL, after civil war, be-IMPF-PL3 sa-du-d vintofka-d get-PASS.PTCP.PST-PL gun-PL
'these guns were received after the civil war' (Virtaranta & Suhonen 1983: 44)

The Russian preposition *posl'e* occurs within a Russian NP, although it does not display the expected case government (the genitive form of Russian *vojna* is *vojny*), a phrase-like expression in which the corresponding Veps preposition *gäl'ghe* 'after' has not been used. One would also assume on the basis of Veps prepositional phrases that the noun (*voin*) following the preposition would be in the partitive (*voina-d*), which, however, is not the case. The strange thing is that it does not follow the genitive government of the Russian preposition, either.

As Sarhimaa (1999) points out, the border between code-switching and code-mixing is often very ambiguous and syntactic transfer as a whole is a very complicated process. Bilingualism and the different phenomena involved in it, such as code-switching, have been the subject of many recent studies. Since the target of the present work is set on other issues, let it suffice here to refer to Sarhimaa's study of Karelian-Russian bilingualism, in which it is suggested that bilingual native Karelians have a fluency in not only two (Karelian and Russian) separate codes but also others. This observation opens a new perspective on the increased divergence and lack of systemacy in adpositional phrases as well.

This section has briefly examined the stability of adpositions as a class and demonstrated that they are not very sensitive to contact-induced change. In what follows, I shall not deal any further with the etymological background of adpositions. Before proceeding to the synchronic structure of the adpositional phrases and its relationship to case inflection, I shall briefly deal with the question of the relative number of adpositions in various Finnic languages. The different numbers given in various sources do not indicate actual differences between languages; rather, they indicate the incompatibility of applied methods.

4.4 Defining the number of adpositions in Finnic

The idea of a comprehensive and exact list of adpositions is, in principle, contradictory, because of their many connections with nouns, adverbs and grammatical affixes, with which they interact in diachronic processes. However, this is the context, in which the twofold nature of adpositions can best be viewed: the synchronic character as the head of an adpositional phrase and the diachronic state after becoming a bound morpheme. Openness to change in the relational marking of nouns and readiness to introduce new nouns into adpositional usage reflects the rich variation in noun semantics and grammatical potential of metaphoric expressions. However, the most abstract and the most clearly lexicalised adpositions, and adpositions petrifying into bound morphemes, provide eloquent evidence of a long diachronic development that begins with the loss of lexical transparency and may end up in becoming a suffix.

In individual grammatical descriptions and lexical overviews the number of adpositions varies greatly and depends on the way they are determined. Moreover, the exact numbers of adpositions in the Finnic languages highly depend on the size of available dictionaries, how profoundly the dialects have been described and which language variety the compiled data represents. The numbers that Stoebke (1968: 257) gives are: Finnish (and Karelian) 117 stems, Veps 47, Vote 39, Estonian 89 and Livonian 46. Since the vast majority of these adpositions display inflectional elements to a limited extent, one lexical stem may be used in many adpositions. It is also worthy of note that because most present-day adpositions are morphosemantically transparent, there is no clear boundary between adpositions and inflected nouns.

A minimal list of Finnish adpositions by Fred Karlsson (1978: 218–220) includes 74 postpositions, of which the majority express spatial relations. The

diachronic nature of postpositions as a basically open and somewhat irregular word class is illustratively seen in the Finnish grammar by Penttilä who lists almost 400 modern Finnish words that follow a noun in the genitive and should be classified as grammatical elements, i.e. postpositions (Penttilä 1963: 337-343). This list contains only the most frequent postpositional phrase type [[N + GEN] + Postp]. Penttilä (op. cit. 402–403, 414, 430) also presents a few additional postpositions attached to nouns in one of the local cases, such as the elative, illative and ablative instead of the prototypical genitive. (For examples, see section 4.5.1.1.) However, if the list by Penttilä were to be tested according to those criteria that are characteristic of adpositions and will be presented below (see table 4.4.), the definition as an adposition should be reconciled.

Tauli (1980: 113) lists 140 Estonian postpositions of which some may be used as prepositions as well. The dictionary of Standard Estonian (EKSS) gives a somewhat larger number and totals approximately 185 adpositions (in my data 183; see table 4.2). 135 are exclusively postpositions and 29 exclusively prepositions. 19 adpositions are bipositional and may occur either as a postposition or preposition. (Note that the statistics are tentative, because not all of the volumes have been published yet. In order to get an extensive overview, I complemented the published data with the unpublished parts (T–Ü) of the manuscript of EKSS and used the Estonian–English dictionary by Saagpakk (1982) for comparative data.)

The variation in the entries of the Standard Estonian language provides an illustrative example of the lexical and morphosyntactic ambivalence of adpositions. Some of the entries are presented and reported as adpositions, whereas others are presented within their historical framework as subentries of adverbs, nouns or denominalised verbs. In respect of the discussion concerning a hypothetical typological shift from a proto-language stage, postpositional SOV-language to a modern prepositional SVO language, it is worth noting that 74% of the words are reported to be exclusive postpositions, 10% may occur both as pre- and postpositions, whereas only 16% are exclusive prepositions.

More important for a functional description of the grammatical character of the adpositions is that the vast majority of adpositions express more or less concrete spatial relations, that is, functions and their metaphoric extensions that are commonly denoted by local case endings. Inspection of the column of postpositions in table 4.2 also illustrates the role of local case endings.

An arrow (\rightarrow) indicates that the given adposition governs another case as well. In the main columns superscript (as in *otsa*²) indicates that the same adposition is mentioned in a previous column. The list of EKSS actually contains some lexemes, such as *algult, alguni, manu, perra, pikku*, that should be characterised as archaistic or dialectal (Metslang, personal communication). Synchronic data (EKG II: 137–139) may provide the group of adpositions with words, such as *abil*, *jooksul*, *näol*, which are not included in lexically defined lists (EKSS).

	[Prep+	[Prep+	[Prep+
	[N+GEN]]	[N+PART]]	[N+cx[other]]]
1. PREPOSITION		allapoole, allpool, altpoolt, eespool, enne, keset, kesk, piku, pikuti, põiki, risti, sealpool, sealtpoolt, seespool, sissepoole, väljaspool, ülalpool, ülaltpoolt, ülespoole, ülevalpool, ülevaltpoolt [21]	<i>ilma</i> (+ABESS), <i>koos</i> (+COM), <i>kuni</i> (+TERM), <i>kõige</i> (+COM), <i>käsikäes</i> (+COM), <i>paitsi</i> (+NOM), <i>tänu</i> (+ALL), <i>väljas</i> (+ELAT) [8]

Table 4.2 Adpositions in Standard Estonian, based on EKSS.

	[[N+GEN]	[[N+PART]	[[N+cx[other]]
	+Postp]	+Postp]	+Postp]
2. POSTPOSITION	aegu, aegus, alguks, algul, algule, algult, alguni, all, alutsi, arvel, asemel, asemele, eel, ees, eest, ette, haaval, hulgas, hulgast, hulka, jalgu, jalus, jalust, jaoks, jooksul, juurde, juures, juurest, jälil, järel, järele, järelt, järgi, kallal, kallale, kallalt, kannul, kannule, kannult, kaupa, keskel, keskele, keskelt, kestel, kilda, killas, killast, kimpu, kimpus, kiuste, kohal, kohale, kohalt, kohta, kombel, korral, kukil, kukile, kukilt, kulul, kõrval, kõrvale, kõrvalt, käes, käest, kätte, külge, küljes, küljest, küüsi, küüsis, küüsist, ligidal, ligidale, ligidalt, lähedal, lähedale, lähedalt, manu, meelest, nahka, najal, najale, najalt, otsa (\rightarrow), otsas, otsast, paigale, paiku, peal, pealt, perra, pihta, pool(\rightarrow), poolest, poolt(\rightarrow), puhul, põhjal, pähe, päralt, ringis, saadetusel, seas, sees, seest, seltsi, seltsist, sisse, suhtes, taga, tagant, tagatsi, takka, tarvis, teel(\rightarrow), tõttu, vahel, vahele, vahelt, vahepeal, vahepeale, vahetsi, vastas, veerde, veeres, veerest, viisi, võrra, äärde, ääres, äärest [131]	pidi, ringi (→) [2]	otsa² (+NOM), pool² (+ADESS), poolt² (+ABL), ringi² (+NOM), saadikl(+ELAT), saati (+ELAT), teel² (+ADESS) [7]

	[[N+GEN] +Postp]	[Prep+ [N+PART]]	[Prep+ [N+cx[other]]]~ [[N+cx[other]] +Postp]
3 BIPOSITION	alla, alt, eel (postp; \rightarrow), kaudu (postp; \rightarrow), läbi, peale (postp; \rightarrow), piki (postp; \rightarrow), pikku (postp; \rightarrow), pärast(postp; \rightarrow), päri (postp), seltsis (postp; \rightarrow), vastu (postp; \rightarrow), üle, ümber [14; 8 of which govern the genitive as postpositions and the partitive as prepositions]	<i>eel</i> (prep), <i>kaudu</i> (prep), <i>ligi</i> , <i>mööda</i> , <i>peale</i> (prep), <i>piki</i> (prep), <i>pärast</i> (prep), <i>päri</i> (prep), <i>tagapool</i> (prep; \rightarrow), <i>vastu</i> [11; 10 of which may govern another case as well]	hoolimata (+ELAT), seltsis (prep+COM), tagapool (postp+ELAT), vaatamata (+ALL) [4]

In the main the lists of adpositions in Veps and Livonian correspond to the numbers provided by Stoebke (1968: 257). The largest available Veps dictionary (Zajceva & Mullonen 1972), consisting of a little less than 8000 entries, distinguishes adpositions with a special note, and altogether contains 51 adpositions. The prepositions of Russian origin included in Stoebke's list are not included in Zajceva & Mullonen (1972) and the number of adpositions is slightly higher in Stoebke. There are also some nouns that could well be classified as adpositions, such as *bok*l 'side, flank' (Zajceva & Mullonen 1972: 45–46) *ģür*l 'root' (op. cit. 91), in their local case forms. Example (3) illustrates the elusive boundary between the attribute phrase *kuzon ģürüu* and a typical postpositional phrase [[N + GEN] + [N [Rel ~ Postp] + ADESS]].

(3) išt-ta kuzo-n ģürü-u
 sit-INF spruce-GEN root-ADESS
 'sit under a spruce tree' (Zajceva & Mullonen 1972: 91)

The etymological cognate of *gür*| 'root' in Finnish is represented in Penttilä's (1963) list of Finnish genitive-governing postpositions by five inflected forms: *juuri* 'root' – *juurelle*, *juurella*, *juurelta*, *juureen*, *juuressa* (the allative, adessive, ablative, illative, inessive).

Regardless of the classification of individual words, the number of Veps adpositions in a corpus such as Zajceva and Mullonen's dictionary and published sources is limited. In general, the acceptance of several additional members into a group of adpositions is more a question of grammatical description than of classifying lexicalised and morphologised elements known as adpositions.

The lexical stock of Livonian is best known from Kettunen's (1938) work, which is about the same size as the Veps dictionary by Zajceva and Mullonen (1972). Because Kettunen's Livonian dictionary does not note the word class in question, the adpositional status of an entry has to be decided on the basis of phrasal examples, translation and resulting etymological cognates. Totalling approximately 8,000 entries, the dictionary contains hardly more than 40 adpositions (my score was 42). Some adverbs that should most likely have been classified as adpositions, such as *sillõ*, *sizzõl* 'into, *sizal* 'in(side)' and *sizald* '(from) in(side)' (Kettunen 1938: 365–367), were not included in the list because of the lack of satisfactory evidence in the given entry. This test, based on a text of roughly 20,000 words (MSFOu 106), provided a list which, although not quite the same, nevertheless, was of roughly the same size, and consisted of a little more than 40 adpositions, including three prepositions of Latvian origin, *bäs*, *līdz* and *pa*. The percentage of prepositions (not more than 20%) is roughly the same as in Estonian.

For the sake of comparison, modern Indo-European languages are characterised by their abundance of prepositions, but postpositions are occasionally met in some of them. In Lithuanian and Latvian dialects the inflectional case paradigm was enlargened with secondary cases having a postpositional origin (Stang 1966: 175–176). Standard Latvian displays one single lexicalised postposition $d\bar{e}l$ 'because of'.

In the case of Livonian, nouns that correspond to postpositions could be added to the list as in any other language. This is illustrated in (4) in which the construction *neidzd baras* is morphosyntactically similar to any Livonian postpositional phrase. The morphosyntactic locus is clearly located on *baras* (heard-INESS), whereas *neidzd* is identical with the noun complement of a postpositional phrase. (The noun complement normally occurs in the genitive, but because no distinction is made between the noun and the genitive in the plural, the form *neidzd* is identical with the nominative.)

(4) *nuormiez um neidz-d bara-s* youngster is girl-PL heard-INESS
'the youngster is among the girls' (Kettunen 1938: 21)

The example re-evokes the question of language contact, because *bara* is actually one of numerous nouns of Latvian origin in Livonian (< Latvian *bars* 'flock, heard, troop'). Nevertheless, the etymological origin of the noun does not play any role in the grammatical use of the word in Livonian just as it did not have any significance in the case of the Veps *bok* above. The lexical and semantic properties of the word define its grammatical relation to other

constituents. Likewise, there are also other Livonian nouns, such as *aiga* 'ufer, rand, gegend', *keiž* 'hand', *piera* 'boden, grund' and *rīnda* 'brust' (Kettunen 1938), which are inflected in the interior local cases and could quite justifiably be considered adpositions. Halling (1993) shares this opinion and proposes that Livonian has about 80 adpositions, six of which are prepositions (about ten bipositional ones occurring as both pre- and postpositions). She includes only two prepositions of Latvian origin, *bäs*, *līdz*, while the third one, *pa* (for more discussion, see section 6.3), is not included in her list. The higher number is based on a more flexible (although not explicitly declared) interpretation of postpositions and includes postpositionally used relational nouns, such as *sālga* 'back', *sidām* 'heart', *tutkām* 'beginning/end, point' in the list.

There are some universal tendencies that do not support the import of new prepositions into Finnic languages. Namely, there is a clear implication between the word order of adpositional phrases and genitive constructions. The order of the genitive and the (possessed) noun [GEN + N] in Finnic as in Finnish is characteristic of postpositional SOV-languages, while the opposite order [N + GEN] is typical of SVO-languages and more favourable to prepositions. Although this is not the only way new adpositions are created, the implication is of special relevance for the development of the Finnic adpositional phrase, because new adpositions are commonly created from the nouns preceding or following the genitive (Hawkins 1988: 19-20). So, the order of the genitive and the noun in Finnic is a versatile source for new postpositions but not for prepositions, although the basic word order is SVO. The reason for this inconsistency is historical, because the Finnic languages most obviously used to display a word order that should rather be characterised as SOV than something else. SOV is more wide-spread in present-day Finno-Ugric languages (cf. Vilkuna 1998).

In sum, the list of fully grammatical adpositions in Livonian and Veps could be completed with examples that are not included in available dictionaries. However, a clear boundary between bipositional and positionally stable adpositions could probably never be drawn because of the characteristics of this word class. The simple aim of this section is to demonstrate the quantitative role of adpositions as a word class among others.

The purpose of the following sections is to discuss the grammatical dynamics of the adpositions with reference to the general evolution of the case system and noun inflection in Finnic. At the general level, the morphosyntax of adpositional phrases is of special importance for two reasons. First, the form of the construction will presumably elucidate the importance of case marking as a means of distinguishing between grammatical relations. This aspect is especially significant for the historical development of the Livonian dative suffix. Second, the syntactic structure opens a new perspective on morphological adaptation and the adjustment of inflectional elements into

grammar and morphosyntactic rules. The attrition of morphological elements affects the independence of suffixes and may result in the coalescence of two affixal elements, but it also contributes to the identification of the noun stem (see section 4.7).

4.5 The morphosyntax and case government of adpositions

The present section will proceed with a more detailed analysis of the morphosyntax of the adpositional phrase and the various aspects of morphosyntactic change. The conclusions will be drawn predominantly on the evidence of postpositional phrases (PostpP), the more frequent and the oldest Finnic adpositional phrase type, which also illustrates the different stages of a diachronical process. Compared to PostpP, prepositional phrases (PrepP) are more limited both functionally and structurally, and less susceptible to morphosyntactic change other than word order. The prevailing morphosyntactic structure of these two construction types are presented in table 4.3, in which [Loc] refers to the tripartite local case sets consisting of a lative, locative and ablative case (for additional comments, see chapter 5).

Table 4.3.	The	morphosyntactic	structure	of	Finnic	adpositional
phrases.						

Adposition type	Inflection of noun	Inflection of adposition
Preposition	N + PART	No inflection (possibly unproductive but historically identifiable local suffixes)
Postposition	N + GEN	Commonly inflected; most frequently a local case suffix

There is no obvious correlation between the age of the adposition and the structure of the adpositional phrase. Thus the distinction between primary and secondary adpositions is not relevant in this respect. In what follows I shall distinguish between various PostpP types by labelling them according to the inflectional form of the noun. The prototypical PostpP in table 4.3 will be

referred to as a genitive-governing PostpP or a genitive-governing postposition. Analogically a distinction will be made between a partitive-governing PostpP/ PrepP, nominative-governing PostpP, etc.

Although prepositions and postpositions belong to the same lexical group and grammatical category and the same items may in certain cases even be used both as prepositions and postpositions, their syntactic location and relation with respect to the noun differ in many ways:

1. Prepositions and postpositions have different case government rules. The noun complement of a prepositional phrase is predominantly in the partitive (occasionally in the genitive or in an instrumental case), whereas the noun of a postpositional phrase is predominantly in the genitive or in some cases some locative case (or the nominative).

2. The degree to which prepositions and postpositions are inflected is different. The vast majority of adpositions express various spatial relations, and the importance of these functions is reflected in those postpositions that commonly display either a set of productive local cases or earlier local case endings. These prepositions are more seldom inflected like nouns; an example of the few exceptions is the Finnish construction *keskellä metsää* middle-ADESS forest-PART 'in the middle of the forest', where the preposition *keskellä* is in the adessive. In Veps a local case, the inessive, is applied to the preposition *d'äl'ges* in a similar way: *d'äl'ges kül'betid* after-INESS sauna-PART 'after the sauna'.

3. In those Finnic languages that have a possessive declension (i.e. Finnish, Karelian and Veps) only postpositions may take possessive suffixes, whereas prepositions never take them: (Finnish) *sinun takana-si* your behind-SG2 'behind you'. Like the previous example, this reflects directly the degree to which pre- and postpositions are inflected in Finnic.

4. The division of Finnic adpositions into pre- and postpositions also reflects functionally complementary relations. If an adposition expresses path ('via, along' etc.) or a circumspatial meaning ('in the middle of, around'), then it is probably a preposition, or, at least, may be used as a preposition, cf. Finnish *keskellä tietä* (with a postposition *tien keskellä*), Estonian *keset teed* i in the middle of the road', Veps *rat'k korvīš* 'through the ears', Livonian *pits riekkõ* 'along the road'. If an adposition expresses one of the more basic spatial relations ('in, on, at, beside, below, under, upon, to, from'), it is a postposition.

5. Only bound morphemes are allowed between a noun and a postposition (Finnish *talo-ni takana*), whereas a prepositional phrase may contain modifiers of the noun and determinant deictic pronouns that occur as parts of the noun phrase but are located between the preposition and the noun. This strategy corresponds to the way these elements are treated in English (*in that big house*), Swedish (*i detta stora hus* id.) and other Indo-European languages. (However, Indo-European languages show considerable variation in their use of articles in adpositional phrases as well (Himmelmann 1998: 327–333).)

A different relationship between the adpositional phrases and more limited types of noun phrase is seen in examples in which a noun phrase consisting of a genitive attribute and a noun, for instance, is a phrasal complement of the adposition (EKG II: 137). This explains why an attribute or other modifier may occur between a preposition and noun. Yet, the fact remains that as clause constituents the adjacency of prepositions and postpositions with respect to the noun is different and no free syntactic unit including modifiers may intervene between a noun and postposition.

This different adjacency principle in PrepP and PostpP has a great influence on the morphosyntactic development of these constructions, especially the possible affixation of a given adposition. It is maintained that prepositions do not reduce to prefix status because other elements intervene between preposition and noun (Hall 1988: 334, Kahr 1976). This is one of the facts that increases the quantitative superiority of suffixes with respect to other affix types in the world's languages.

The most salient differences between a Finnic PrepP and PostpP are summarised in table 4.4.

Prepositions	Postpositions
predominantly partitive- governing	predominantly genitive- governing
low degree of inflection, occasional case inflection	higher degree of inflection, case inflection to some extent
no possessive suffixes	may take possessive suffixes, if a given language has them
prevailing semantic roles: path, circumspatial	prevailing semantic roles: spatial
additional NP determiners such as pronouns and attributes may be located between the two components of PrepP	no free word may be added between the noun and the postposition

Table 4.4. The morphosyntactic characteristics of the Finnic PrepP and the PostpP.

The morphosyntactic splitting of PrepP and PostpP is closely related to the properties of the Finnic genitive and partitive. The most salient characteristic of the genitive is to mark possessive relations. The genitive attribute phrase structurally resembles postpositional phrases and in many ways increases the frequency of genitive-governing syntactic constructions. As regards the PrepP, similarities can be found in the use of the partitive especially in comparative constructions.

Some other Finno-Ugric languages share the characteristics of the prototypical Finnic PostpP and display genitive-governing postpositions, although it is not regularly represented in all branches. In Nenets, for instance, adpositions that denote spatial relations have case forms (a special set of local case suffixes) and a full possessive declension, and are genitive-governing. Postpositions denoting other than spatial relations are not case inflected (Salminen 1997: 132–133, 1998a: 540). Because the nominative-governing PostpP is more commonly met in the Finno-Ugric languages, it has been maintained that in the Finno-Ugric languages the PostpP with noun in the nominative represents a more natural and historically more original type (Alhoniemi 1988: 28, Majtinskaja 1982: 18–22, Ravila 1941: 129). In practice, there are differences between the Finno-Ugric languages in the form of the PostpP. In the Permic languages the noun is in the nominative predominantly and in the Ugric languages exclusively. There is a simple explanation for the morphosyntactic pattern displayed by the Ugric languages; they do not have a specific genitive case suffix. In Permic the loss of the original genitive case ending has been compensated by a secondary genitive suffix, whereas in Ugric possessive relations are mainly expressed by means of possessive suffixes.

The pattern [[N + GEN] + Postp] also has a wide geographical distribution and occurs commonly in the Finno-Permic and Samoyedic languages, and it has also been claimed that this type already existed at the earliest reconstructible proto-language stage (Korhonen 1996 (1979): 176).

Given that Livonian often displays the same "nominative construction" $[N + \emptyset + Postp]$ as do the Permic and Ugric languages, the Livonian PostpP is of special interest. Diachronically it is an innovation, which is illustrated by the fact that there are lexicalised word forms and morphological traces that give witness to an earlier morphosyntactic structure of the PostpP. The diachronic loss of the case affix has some obvious consequences for the syntax, as will be shown in a detailed study of the Livonian adposition phrase in section 4.6.

As regards the PrepP, the general rule in Finnic is that prepositions need a complement in the partitive. Haukioja (1998) maintains that the partitive government of Finnish prepositions is semantically motivated given its semantic characteristics. The functional shift of the partitive from an earlier local case ending to become a grammatical case is supported by synchronic evidence, too; some adpositional phrases display a noun in one of the local cases, a group to which the partitive historically used to belong. The productive local cases that are occasionally governed by postpositions are the elative, illative, ablative and allative; more seldom the inessive and adessive.

Naturally, not all adpositions yield themselves to the classification presented above in table 4.4 and they form subgroups with special characteristics. There are some adpositions in the Finnic languages that have a common etymological background and syntactically much in common but are still not applied uniformly in the different Finnic languages. In Estonian *enne* (*enne seda* 'before it') is exclusively a preposition, but its etymological cognate *ennen* occurs both as a preposition and postposition in Finnish: *ennen sitä / sitä ennen* 'before it'. In both cases the noun is in the partitive. In Veps the partitive-governing preposition $ed\bar{u}$, edel, $ed\bar{o}$ 'before' is based on an old Finno-Ugric word stem. In Livonian the same stem forms a tripartite

postposition set that indicates 'towards (in front of)', 'at (in front of)' and 'away from (in front of)': *jõddõ*, *jõds*, *jõds*, *jõds*, *but* is genitive-governing as is to be expected of a postposition.

The semantic antonym of 'before', namely 'after', shows both lexical and morphosyntactic dispersal between different word stems and word order patterns. Finnish *jälkeen* 'after' is used both as a preposition and a postposition, and *jäljessä* 'after' only as a postposition, but in both cases the noun complement is in the genitive. The Veps word *d'äl'ges* 'after' that etymologically and semantically corresponds to a Finnish equivalent is used as a partitive-governing preposition. Estonian *järel*, *järele*, *järelt* 'after' with a different nominal origin (< *järg* 'order, turn') are genitive-governing postpositions, whereas *pärast* 'after' is a partitive-governing preposition. To complicate the picture even more: the Livonian cognate of the latter, *pierāst* 'because of', is a genitive-governing postposition. So is the corresponding Finnish postposition *perästä* 'after'.

Also some other adpositions may be used as prepositions and postpositions. It is possible to find such adpositions in all Finnic languages, e.g. Livonian *aldõ kätā* under-ABL händ-PART '(from) under the hand' *läbūd aldõ* window-PL.NOM(-GEN) under-ABL '(from) under the windows' (see also Halling 1993: 34). This is typologically somewhat confusing, because the vast majority of the world's languages display either prepositions or postpositions but not both. It has been claimed that in languages exhibiting prepositions the genitive almost always follows the noun, while in languages with postpositions it almost always precedes the syntactic head (Greenberg 1963: 62, Cutler et al. 1985: 727–730, McMahon 1994: 142–146).

In Finnic, which principally is a SVO language, a problem arises because the postposition syntactically governs the genitive-marked constituent and may take a possessive suffix. Especially, constructions like the Finnish *sinun edessäsi* you-GEN front-INESS-SG2 'in front of you' display the order of noun followed by the genitive (as in Finnish *sinu-n talo-si* you-GEN house-SG2 'your house') that is more characteristic of SOV languages, cf. Mari *tudô-n ergô-že* (s)he-GEN son-SG3 'her/his son'.

There is no obvious explanation as to why some adpositions are bipositional and blur the syntactic consistency of adpositional phrases. In this case historical development has not led to increased coherence but rather to an intensified syntactic alternation.

It would be tempting to explain the ambiguity between PostpP and PrepP as related to the general morphological characteristics of individual languages. However, insofar as the evidence from the Finnic languages is taken into account, it does not seem reasonable to look for an explanation for diverging syntactic mechanics solely on the basis of the degree to which a language displays affixal inflection or follows assumed word order strategies. As emphasised in the introductory sections, the Finnic case and adposition systems provide examples of divergent and somewhat mutual controversial changes that may chronologically be either parallel or successive.

A feature that seems to remain unchanged in an adpositional phrase is the distinction between functional and syntactic heads, to the extent that the adpositions maintain their position as free words. The morphosyntactic locus is not easily transferred from the adposition, even if it undergoes considerable morphological reduction. Both prepositions and postpositions are heads that include the morphosyntactic locus of the adpositional phrase and, consequently, syntactic heads of the adpositional phrase (Erkki Itkonen 1966: 294, Jaakola 1997: 124, Penttilä 1963: 337).

In sum, there are clear morphosyntactic differences between Finnic prepositional and postpositional phrases not merely in the word order but also in the phrase structure and inflection of the constituents. The syntactic relationship between the noun and adposition is clear in the prototypical PostpP [[N + GEN] + [Postp + cx]]. If the noun is in the partitive or a local case, the constituent order is more flexible. Consequently, a partitive-governing adpositional phrase is a construction type in which the ambiguity of the adpositional phrase is most authentic and sensitive to many other cross-referential syntactic processes. In synchronic syntax this is concretely made manifest by the existence of prepositions and bipositional adpositions, which may occur as both pre- and postpositions.

4.5.1 The morphosyntax of postpositional phrases

The prototypical morphosyntactic representation of adpositional phrases was presented in the preceding section in table 4.3 and it can be concluded that postpositions are, in principle, genitive-governing, while prepositions are partitive-governing. Table 4.2 presented a morphosyntactic grouping of Estonian adpositional phrases according to the form of the noun complement and the location of the adposition. I shall now seek more extensively to illustrate the morphosyntax of the postpositional phrase with special reference to the form of the noun. This will be followed by remarks concerning the form of the adposition.

4.5.1.1 The inflection of the noun complement

The statistical dominance of genitive-governing postpositions is considerable in Standard Estonian. 120 of the 124 listed unambiguous postpositions are genitive-governing and four (4) are partitive-governing. Four adpositions show other kinds of case government, forming PostpP's with a noun in some other case (the nominative, adessive or ablative) in addition to the expected genitive. One of the bipositional adpositions (*seltsis*) may sometimes form a PostpP with a noun in the comitative, another (*tagapool*) with a noun in the elative. The way adpositional phrases have been determined by the authors of the EKSS is somewhat aprioristic, because the allative that is involved in many syntactic and semantic restructuring processes in Finnic is never reported to be governed by any adposition. This is obviously due to its divergent semantic roles, but would deserve a more detailed analysis as the Livonian dative suggests in section 4.6.2.

The real syntactic divergence between adpositional phrases and these kinds of constructions is often not as logical as the organisation of the data suggests. Other cases do play a significant role in the evolution of postpositions as the suffixing of adpositions in Veps indicates (see chapter 5). What is coherent and strict in a standard language need not be coherent in spoken varieties including dialects. A statistically less frequent case, say any of the local cases, may, nevertheless, play a very important role in the morphologisation of former adpositions.

As was stated earlier, a more complete list of the morphosyntactic variants of the Finnic PostpP includes postpositions that govern both grammatical and oblique cases. The manner in which adpositions are listed in the Finnish grammar by Penttilä (1963) demonstrates this illustratively. The alternating case government of the noun complement is noted in the descriptive Estonian grammar as well (EKG II: 137–139). Furthermore, the forthcoming descriptive Finnish grammar shares the view that the structure of adpositional phrases may vary quite considerably. The data applied in that work provide reliable empirical evidence of the difficulties of describing semantic roles by mechanically following the syntactic structure. Although the genitive, for instance, is undeniably the most frequent case for the noun complement, an evident conclusion of the relationship between various morphosyntactic patterns is that local cases are more intensively used in adpositional phrases than one would expect on the basis of prescriptive grammars of standard literary languages. It must also be noted that the same words that are used as adpositions often occur as adverbs that emphasise spatial relations. In particular, illuminating examples of this can be found in examples (5) and (6).

Livonian

(5) *nadtõ lā-nõd sie-zõ piškī-z tubbõ sil'lõ* they.be.SG3 go-PTCP.PST it-ILL little-ILL room.ILL into 'they have gone into that little room' (MSFOu 106: 67)

Finnish

(6) *he o-vat men-nee-t sii-hen piene-en tupa-an sisä-lle* they be-PL3 go-PTCP.PST-PL it-ILL little-ILL room-ILL in-ALL 'they have gone into that little room' (MSFOu 106: 67)

In (5) Livonian *sil'lõ* and in (6) Finnish *sisälle* is used as an adverb that repeats the morphosyntactic information of the illative case ending of the preceding noun phrase. Both words are used as postpositions in other contexts and the adpositional status of the word is based on the genitive form of the noun elsewhere (cf. Finnish *tuvan sisälle* room-GEN inside). So, there are many interacting and partly overlapping ways of expressing the same spatial relations: case endings, postpositions, inflected postpositions, the choice of which may depend on stylistic or regional variation, textual or discourse strategies, etc.

In Finnish the postpositional stem *sisä*- 'in' is inflected in all six local cases consisting of both the interior *sisään* (7) and exterior *sisälle* (8) local case set. There is no rule that forces the use of an exterior local case ending instead of an interior one (*sisään* in-ILL 'into'), agreeing in case with the noun *tupaan*, in the Finnish translation (5) for the Livonian example above.

- (7) *He men-i-vät sisä-än.* they go-IMPF-SG3 in-ILL 'They went in.'
- (8) *He men-i-vät sisä-lle.* they go-IMPF-SG3 in-ALL 'They went in.'

The corresponding Estonian word *sisse* 'in' has a considerable inflectional handicap with respect to its Finnish cognate, because it is inflected in one (interior) local case set only and does not decline in both local case sets (interior and exterior). In (9) *sisse* 'into' formally agrees in case with the preceding noun *tuppa*.

(9) *nad on läi-nud sinna väikese-sse tuppa si-sse* they are go-PTCP.PST there(to) little-ILL room.ILL in-ILL 'they have gone into that little room'

The Livonian postposition $sil'l\tilde{o}$ 'into' (~ $sizz\tilde{o}l$ id. MSFOu 106: 75) has lost its compatibility with synchronic noun inflection, since the former exterior

local cases (the *l*-set) are not a productive category. The Finnish (6) translation drawn from the Livonian text source and the Estonian (9) translation are both somewhat artificial, because the sentence-final adverb (*sisälle*, *sisse*) would be omitted in a normal declarative sentence that does not need additional elements for focusing a given action. Rather, their purpose is to illustrate the different degrees of inflection and the way inflection affects syntactic cross-reference. An unfocused Finnish and Estonian clause would not need the sentence-final adverb (Finnish *sisälle*, Estonian *sisse*), unless the "inside" property is specifically emphasised.

The next examples illustrate the use of various cases in adpositional phrases and demonstrate the variation in the case-government of the postpositions. The list includes the nominative (10), partitive (11–13), comitative (14–15) and various local cases (16-21). Note that although according to the Standard Estonian dictionary there are only two adpositions that may alternatively be used as elative-governing postpositions (*läbi*, *tagapool*), Penttilä (1963: 402–403) presents around twenty constructions consisting of a noun in the elative and a postposition or a postposition-like element. Laanest (1956: 160– 161) points out the importance of the illative and elative in Veps adpositional phrases. Finnish *päin* may take the ablative and emphasises the direction of a given action. We shall return to the development of this postposition into a case affix in Veps in chapter 5. Section 4.6 discusses the various aspects of the genitive-governed PostpP and its relationship to the dative in Livonian, and the translative in the PostpP is the subject of section 6.3.

Estonian

(10) *Öö otsa sada-s vihma*. night end.ILL rain-IMPF.SG3 rain.PART 'It rained all the night.' (EKSS 4: 74)

Finnish

(11) *kaikk-i-a lapsi-a varten* all-PL-PART child.PL-PART for 'for all children'

Northern Veps

(12) käu-škat'-he päl'itši Äńiže-s silda-d möto.
 walk-INCH.IMPF-PL3 over Onega-INESS bridge-PART along
 'They walked over lake Onega across the bridge.' (MSFOu 100: 12)

Estonian

(13) *Vet-t* pidi on sinna paar kilomeetri-t. water-PART along is there(to) couple kilometer-PART 'The way there is two kilometers by the water.' (EKSS 4: 293)

Estonian

(14) *Pid-i-n teis-te-ga seltsi-s mine-ma*. must-IMPF-SG1 other-PL-COM company-INESS go-INF 'I had to go with the others.' (EKSS 5: 409)

Estonian

(15) *Pid-i-n teis-te seltsi-s mine-ma.* must-IMPF-SG1 other-PL.GEN company-INESS go-INF 'I had to go with the others.'

Note that the adverb *seltsis* and the comitative case ending of the noun *teistega* actually exhibit the same morphosyntactic information in (14). The comitative ending, making the adverb *seltsis* functionally redundant, pushes it into the role of a verb-dependent adverb and keeps it more distant from the stem than the genitive-governing postposition. The morphological effect of the comitative suffix (*teiste-ga*) is concretely seen in the alternative morphosyntactic pattern with the same noun in the genitive *teiste seltsis* (15). Here, there is no affix between the stem and the postposition. As in (5) and (6) above, the morphosyntactic alternation between *teistega seltsis* in (14) and *teiste seltsis* in (15) provides the variation needed for expressing different semantic shades or information structures, but does not change the basic meaning of the utterance.

Examples of the use of various local cases in the noun complement in postpositional phrases follow below and include the illative (16), elative (17–19), allative (20) and ablative (21).

Finnish

(16) *Poika juoks-i koti-in asti.* boy run-IMPF.SG3 home-ILL until 'The boy ran all the way home.'

Finnish

(17) Ään-i-ä kuuluu ranna-sta päin.
voice.PL-PART sound.SG3 shore-ELAT from
'Voices can be heard from the shore.' (Penttilä 1963: 403)

Estonian

(18) Suve-st saadik pole te-da näi-nud. summer-ELAT since is.NEG (s)he-PART see-PTCP.PST '[X] has/have not seen her/him since summer.' (EKSS V: 253)

Livonian

(19) ta vaj-iz puolast sāńiz mā sizzõ
(s)he sink-IMPF.SG3 knee-ELAT from earth into
'(S)he sank up to her/his knees into the earth.' (MSFOu 106: 311)

Finnish

(20) *1990-luvu-lle men-ne-ssä* 1990-number-ALL go-INF-INESS 'By the 1990s'

Finnish

(21) *Linnu-t lens-i-vät kirko-lta päin.* bird-PL fly-IMPF-PL3 church-ABL from 'The birds flew from the direction of the church.'

Through this morphosyntactic panorama I will endeavour to illustrate the wide spectrum of case marking in the Finnic PostpP, although it has already repeatedly been stressed that the genitive-governing PostpP is the most typical and most widespread. The variation in case marking is especially engaging viewed over a long diachronic period as indicated by the intensive suffixing of postpositions into case affixes in Veps (Kettunen 1943: 279–293, 331–333, 359–370, 1960: 18, 46–47, Felix Oinas 1961, Tikka 1992). Evidence from Veps suggests that the choice of case in the PostpP is after all not quite so essential for the suffixing of postpositions. Earlier morphosyntactic properties may be represented in traces of a former partitive, illative or a marker of an interior (*-s-*) or exterior (*-l-*) local case set. Obviously, the suffixing of the postposition

is not triggered nor accelerated by the morphosyntactic structure but by other causes (cf. chapter 3).

I shall not analyse the spectrum of morphosyntactic variation in any further detail. Introducing this issue provides the necessary background for further consideration of the morphosyntactic change and the diachronic relationship between case suffixes and the adpositional system as will be demonstrated in chapters 5 and 6. The next section summarises the inflectional properties of the postpositions.

4.5.1.2 The inflection of postpositions

Given that the vast majority of adpositions express some kind of spatial relation, it is only logical that inside the most frequent morphosyntactic pattern [[N + GEN] + Postp] the most frequent subtype is [[N + GEN] + [Postp + cx [Loc]]]. Typically, the pattern [Postp + cx [Loc]] adheres to the model of regular noun inflection, but there are also some adpositions that show historical [cx [Loc]] forms instead of synchronically productive morphology.

As can be seen from table 4.2 above 83% of unambiguously genitivegoverning Standard Estonian postpositions (101 out of 120) carry a productive local case ending. The percentage is even higher if lexicalised irregular or marginal case-like forms (alutsi, tagant, tagatsi, takka, vahetsi) are taken into account. The existence of lexicalised postpositions that display earlier noun inflection (for instance, Livonian tagān 'behind' that corresponds to the Finnish *takana* id., both showing the old Uralic local case suffix *nA) partly contradicts Stolz's (1992: 75) contention that nouns must share the inflectional properties of postpositions. That conclusion is correct diachronically but not synchronically. Correspondencies can be found, but they are restricted to lexicalised items (Finnish koto-na home-ESS 'at home') and the affixes are not productive in the given function. Considering the fact that the interior local cases (illative, inessive and elative) denote more concrete spatial relations than the exterior ones (for evidence from Veps, cf. chapter 5), it is somewhat surprising that Estonian postpositions most commonly display the adessive (28/120). However, this would appear logical in the light of the diachronic change that has influenced the exterior local cases in a number of Finnic languages.

In Livonian the basic corpus is much smaller (see, section 4.4). Yet, it includes postpositions such as $aig\tilde{o}$ (ILL), $aig\bar{a}$ -s (INESS), $aig\bar{a}$ -st (ELAT) ($aig\bar{a}$ 'shore, coast, edge'), $k\ddot{a}dd\tilde{o}$ (ILL), $k\ddot{a}d$ -s (INESS), $k\ddot{a}d$ -st (ELAT) ($kei\breve{z}$ 'hand'), etc., that show how important noun inflection and the local case system are in producing material for new adpositions. As noted above, it is also characteristic of the close relationship between nouns and postpositions that the inflection of

postpositions may be synchronised according to the changes that have taken place in noun inflection, and earlier suffixes become replaced by productive ones (cf. table 4.1). The use of the same marker (*-päi*) as an ablative/elative local case ending demonstrates this process in examples (22) and (23).

- (22) *stola-n taga-päi l'ibu-tazę kaik šeištši...* table-GEN behind-[DIR] rise-PASS all standing 'All are standing up behind the table.' (MSFOu 100: 114)
- (23) *hetse prihäihe pätšin alpäi hüppäst'* this boy stove-GEN under-ABL jump-IMPF.SG3 'The boy jumped out from under the stove.' (MSFOu 100: 86)

In languages like Estonian, Finnish and Veps that have either preserved or recovered the tripartite local case system, adpositions most commonly display the same local case endings as nouns. The semantic, lexical, diachronic and general grammatical proximity of adpositions and nouns can be seen here. Adpositions follow changes in noun inflection quite rigorously. The morphosyntactic locus of the ablative case (*alpäi*) and the corresponding forms (*tagapäi*) in examples (22) and (23) shift to an innovation in noun inflection and inflectional endings of adpositions.

Stolz (1992: 107) argues that the inflection of many local postpositions in three case forms is also motivated by the fact that it is more economic than grammaticalising specialised relational nouns. In my view the inflection of postpositions is supported more by the structure of a language and the conservative powers in a language than by principles of economy. By applying morphological innovations they participate in maintaining the language system and inherent characteristics such as the existing inflectional categories, even though the form may change. The conclusion is that postpositions are clearly sensitive to the synchronic properties of nouns, a fact, which is also evidenced by diachronic development. This tendency lessens the influence of reductive evolutional changes such as mechanical, unobstructed erosion of form and change of meaning. In general, the tripartite local case system appears to be resistant to reductive phonological change and if such change does occur, the former pattern can be re-established.

4.5.2 The morphosyntax of prepositional phrases and bipositional adpositions

Compared with postpositional phrases, Finnic prepositional phrases are more uniform. A prototypical PrepP consists of a preposition and a noun in the partitive form [Prep + [N + PART]]. As in the case of postpositions, there are some individual prepositions that may govern other cases, thereby increasing the structural diversity of the prepositional phrase. Instrumentality (both the affirmative "with" and negative "without") tends to trigger double marking. This is also seen in the case government of Estonian prepositions expressing comitative relations (table 4.2). In addition to the partitive case, some Veps prepositions denoting path, circumspatial or comparative relation govern a local case. The preposition *edemba* 'in (more) front (than)' is the only preposition in Veps that contains the comparative suffix *-mb*- (24) and is elative-governing.

(24) ištta ede-mba päčišpäi
sit-INF front-CMPR stove-ELAT
'to sit further from the stove' (Zajceva & Mullonen 1972: 73)

This particular construction may be diachronically symptomatic, since it provokes the question of whether the morphosyntax of a PrepP has developed in conjunction with the comparative construction, cf. (Finnish) *hiirtä suure-mpi* mouse-PART big-CMPR 'bigger than a mouse' ~ **hiirestä suurempi* mouse-ELAT big-CMPR id. ~ **suurempi hiirestä* big-CMPR mouse-ELAT id. ~ *suurempi hiirtä* big-CMPR mouse-PART id. Unfortunately it is not possible to devote more attention to this tempting issue here. It must suffice here to refer to table 4.2 and those prepositions (*läbi*, *väljas*) that govern or may govern a local case.

Table 4.5 presents a summary of the case government of Veps prepositions. The partitive dominates here, too, but the proportion of prepositions governing a local case is relatively high. It is noteworthy that many prepositions, that historically may represent the elative as well, govern the inessive. As regards the inflectional productivity of the prepositions, quite a number of them display local case affixes ($ed\bar{u}$ front-ADESS 'before', $d'\ddot{a}l'ges$ print-INESS 'after', $d'\ddot{a}l'ghe$ print-ILL 'after', $kesk\ddot{a}u$ middle-ADESS 'in the middle of', poikheze across-ILL 'across').

Table 4.5. The case government of Veps prepositions according to Zajceva & Mullonen (1972) supplemented with data drawn from MSFOu 100 and Marija Zajceva (2001: 35–36).

[Prep+[N+PART]]	[Prep+[N+cx[other]]]
edū (edel, edō), d'äl'ges (jäl'ges, gäl'ges), d'äl'ghe (jäl'ghe, gäukhe), kesk, kesked(kesküu), l'äz, (l'äzn), pidust', poikest, poikheze (poik), ümbŕi [9]	edemba (+ELAT), ilma (+ABESS), l'äbi (+INESS), [pidust' ² (+INESS),] pit'kin (+INESS), poikpol'i (+INESS), rat'kl (+INESS), ümbŕi (+INESS) [7]

The word *päl'iči* 'over, across' should be added to the list in the non-partitive governing preposition column in table 4.5. It had been claimed to be bipositional (Zajceva & Mullonen 1972: 452), although in my data it occurs very rarely as a postposition. As a preposition it governs a local case (synchronically the inessive that historically coincided with the elative) in texts collections. The noun complement *göge-s* river-INESS 'in the river' of the preposition *päl'iči* is in the inessive in (25).

(25)	l'äk-s	päl'iči	ģöge-s	aja-ma-ha
	leave-IMPF.SG3	over	river-INESS	drive-INF-ILL
	'(S)he began to	cross the	e river.' (MSF	Ou 100: 261)

The use of the noun in the inessive is difficult to explain in the light of other Finnic languages and Kettunen (1943: 295), for instance, calls it an elative on historical grounds.

Although historically prepositions themselves have an adverbal or a nominal background, just as postpositions do, they are a more specific subgroup than postpositions. The degree to which they share the characteristics of noun inflection is lower, although some Veps prepositions do display case suffixes. Estonian prepositions based on the word *pool* 'half' are an exception as well, because they are inflected in (some of) the local cases. However, most Finnic prepositions cannot be identified as inflected forms of nouns. One must also recall that the number of prepositions is considerably smaller than the number of postpositions.

Semantically, the Finnic PrepP can be grouped into three main types. These three characteristic functions are: path ('along, across, through'), circumspatial ('around', also special types of spatiality such as 'in front of', 'after'), instrumental ('with') and the negative instrumental ('without'). The term circumspatial emphasises the distinction between principal spatial relations, such as 'in, on, under, at', and more distant spatial expressions especially denoting 'path', such as 'along, across, through, around, against, in the middle of', etc.

The geographical distribution of constructions marking path gives a possible clue to the context in which an adposition could have first been posited in front of a noun complement. Other Finno-Ugric languages do not possess prepositions and many of them (Mordvin, Permic, Samoyedic) express path with a special case suffix, whereas the Finnic languages frequently express it with a PrepP.

In Veps path is indicated by prepositions such as *l'äbi* 'through', *pidust'* 'along', *pit'kin* id., *poikest*| 'across', *poikheze* id., *poikpol'i* id., *rat'k*| id. The word *päl'iči* 'across, over' may occur as both a pre- or postposition, but as stated it is actually much more frequent as a preposition than as a postposition. One example was given above in (12) in section 4.5.1.1. The only (Northern) Veps partitive-governing postposition *möto* 'along' denotes path also (on the suffixing and reanalysis of this postposition see section 6.2).

Semantically and even morphosyntactically, but not necessarily etymologically, corresponding prepositions such as Livonian *il*1'across, over', *pits* 'along', are found in other Finnic languages, too. Estonian *mööda* 'along', *piki*, 'along', *päri* 'along' and Finnish *pitkin* 'along' are partitive-governing prepositions. In Finnish, *kautta* 'through, by, via' is a genitive-governing and *myöten* 'along' a partitive-governing postposition (Penttilä 1963: 370–371), and Estonian *kaudu* id. is predominantly a postposition although reported as bipositional (cf. table 4.2). Finnish *halki* 'across, athwart' and *poikki* id. are genitive-governing bipositional adpositions, Estonian *põiki* 'across, athwart' and *risti* id. (< *rist* 'cross') partitive-governing prepositions. (EKSS, Penttilä 1963: 337–342, 370–371.)

Interestingly, Livonian *aldõ* 'from under', historically belonging to a widely spread adpositional stem in the Finno-Ugric languages (see table 4.1, section 4.2.1), has become bipositional, partly detached from an old set of spatial postpositions and is often used as a preposition. Likewise, Estonian *alt* 'from under') is occasionally used as a preposition. Note that Livonian *aldõ* 'from under' like other postpositions and variants of the same stem is genitive-governing, but as a preposition has become partitive-governing and displays the prototypical morphosyntactic pattern [Prep [Path] + [N + PART]] of constructions expressing path (26).

rad'l'iz eižmis-t kõrd a-ldõ (26) *tämā* kä-tā. (s)he hit-IMPF.SG3 first-PART time under-ABL hand-PART kakš kõrd perīń kä-tā two time along hand-PART '(S)he struck once below the hand, twice across the hand.' (MSFOu 106: 110)

As far as other Finnic prepositions denoting path are concerned Livonian *leb* 'through' (Estonian *läbi*, Finnish *läpi* id.) is bipositional and genitive-governing regardless of its syntactic position. Similar to the Veps *päl'iči* 'across, over', this functionally corresponding adposition is bipositional and genitive-governing in Finnish (*yli* ~ *ylitse*), Estonian (*üle*) and Livonian (*il'*) 'across, over', although they are no etymological cognates at all for the Veps word. As regards suffixes, the Veps (-*či*) and Finnish (*-tse*) adpositions and some nouns have an unproductive suffix that denotes path [!], traditionally called the prolative (quasi-) case, whereas Estonian and Livonian do not display any inflectional elements that have the same meaning (Suoniemi-Taipale 1994).

The term circumspatial illustrates many characteristics of individual prepositions that can be presented under the same title. This is illustrated in table 4.6.

	Livonian	Estonian	Veps	Finnish
'before', 'ahead of'	jedtsõ, jõdmõl	enne	edū (edel, edō)	ennen*, edellä*
'in the middle of'		keset, kesk	kesk, kesked (kesküu)	keskelle*, keskellä*, keskeltä*, kesken*
'around'	immõr	ümber*	ümbŕi	ympäri*
'near'			l'äz, (l'äzn)	lähelle*, lähellä*, läheltä*
'behind', 'after'	pier, pierrõ, pierāst	pärast*, tagapool*	d'äl'ges (jäl'ges, ģäl'ges), d'äl'ghe (jäl'ghe, ģäukhe)	
'against'	vast(õ)	vastu*		vasten*, vastoin*

Table 4.6. Finnic prepositions expressing circumspatial relations. (Bipositional adpositions indicated by *.)

The list is far from exhaustive and could be complemented with additional examples or synonyms. Hopefully, it succeeds in illustrating the circumspatial adpositions and pointing out the functional parallelisms, which I consider a generally important aspect in the historical development of the prepositions. The wide distribution of prepositions that share the same functional properties and conceptual space suggests that the tendency to express the same functions with prepositional phrases are deeply rooted in the history of the Finnic languages. Convergent development is obviously not caused by random factors, if one recalls the relatively low percentage of prepositions. (Interestingly, some Sámic dialects display a circumspatial adposition in both a pre- and postnominal position as Lule Sámi *tjårråka pirra* heard.GEN around 'around the heard' and *pirra kuolpee* around floor.GEN 'around the floor' testify (Bartens 1974: 157).

A special group still to be mentioned is formed by Estonian prepositions that consist of an adverbal/adpositional element and the word *pool* 'side'. As a rule they denote a relational direction and often distinguish between three states 'to', 'at' and 'from': *allapoole* 'downwards', *allpool*| id., *altpoolt* id., *eespool* 'further', *sealpool* 'on the other side of etc.', *sealtpoolt* id., *seespool* 'inside, within', *sissepoole* id., *tagapool*| (bipositional) 'behind', *väljaspool* 'outside of', *ülalpool* 'above', *ülaltpoolt* id., *ülespoole* id., *ülevalpool* id., *ülevaltpoolt* id. The inflection of the end component of a compound adposition is striking, because Finnic prepositions are often not inflected. Likewise, the Livonian *ullõpēdõn* 'outside of' consists of two word stems, the second of which has an (original) inflectional suffix and corresponding adverbal constructions are also found, such as *sizal(t)-pēd'i, -ped'd'* 'inner, inwendig', *sizal(t)-pēd'õn, -pēd'in, -pēd'i, tagant-pēd'õn* 'von hinten her', *tagapod'* 'unter', *uldõ-pēd'õn* 'von der äusseren Seite' (Kettunen 1938: 367, 406, 450).

In addition to the principal morphosyntactic structure [Prep + [N + PART]], there is a uniform expression for 'without' denoting the lack of something, which will be called "the negative instrumental" as opposed to the instrumental 'with'. This is a third type of PrepP shared by several Finnic languages in which the interaction of form and function is decisive to the order of the constituents.

The inflectional paradigms show a special case ending, the abessive, denoting 'without'. In spite of the existence of an inflectional abessive case ending, the meaning 'without' is frequently expressed by a double-marking construction [Prep + [N + ABESS]]. This construction occurs throughout Finnic, although in Livonian and Finnish it is partly being pushed aside by the partitive-governing morphosyntactic characteristic of the PrepP. In Livonian, this has been due to the fact that the abessive does not belong to the case system any more, and abessive forms have mostly merged with the partitive or been replaced by a PrepP (Halling 1993: 40, Kettunen 1947: 71). Traces of the older abessive affix can be detected only in some petrified forms such as those mentioned below.

The following list provides an overview of consistently uniform expressions for the negative instrumental in Finnic. Although the Estonian abessive can appear together with the preposition *ilma* 'without' (EKG I: 60, 66–67) and thus has wider syntactic use than its Finnish counterpart, it is basically one of the most infrequent case endings in Finnic. However, it plays an important role in the construction at issue (Ariste 1968: 109, Riho Grünthal 2000: 49, Ikola 1996, Kettunen 1947: 71, Penttilä 1963: 436, Nina Zajceva 1981: 87, Zajceva & Mullonen 1972: 147).

'without'	Livonian	Estonian	Vote	Veps	Finnish
Prep +	bäs rō-tõ	ilma raha-ta	ilmā raha-tta	ilma minu-ta	<i>ilman</i> <i>raha-tta</i> (dial.)
[N+ABESS]	without	without	without	without	without
	money-	money-	money-	I-	money-
	ABESS	ABESS	ABESS	ABESS	ABESS
	'without	'without	'without	'without	'without
	money'	money'	money'	me'	money'

Table 4.7. The negative instrumental in Finnic

In Finnish, the [Prep + [N + ABESS]] construction has been deemed "pleonastic" by language planners and thus rejected in the standard language, but it is common in the Finnish dialects (Ikola 1996). As the Livonian example indicates, however, this morphosyntactic pattern is so characteristic in expressing the negative instrumental in Finnic that the preposition $ilm\bar{a}$ with cognates in other Finnic languages has simply been replaced by a new loanword $b\ddot{a}s$, $b\ddot{a}z$ withouth changing the case marking of the noun. Consequently, morphosyntactic adaptation has been so strong that the borrowed preposition has become accepted into the preexisting morphosyntactic pattern, and no morphosyntactic borrowing has taken place.

As the abessive in Livonian has mainly merged with the partitive, the [Prep + [N + ABESS]] construction is of crucial importance for the status of the abessive in Livonian grammar. Posti (1942: 269) considered that the abessive might have analogically spread to some other more commonly partitive-governing prepositional phrases, such as *jedtsõ broutšõmõt* before driving/riding-ABESS 'before driving', *pierrõ mīmtõmõt* 'after the distributing the bride's gifts'. However, the morphosyntactic properties of the partitive and abessive in this particular verbal noun form are not so relevant that there would be any reason to define the forms as abessive.

In general, nouns tend to eliminate the distinction between the partitive and the abessive in Livonian, and the two examples are more a sign of morphosyntactic change in the given constructions. Many nouns that might eventually distinguish between the partitive and the abessive actually cannot make a morphological distinction between them: $pied\bar{a}g|$ 'pine' (NOM) : $pied\bar{a}k$ -t ~ $pied\bar{a}k$ -tõ pine-PART : $b\ddot{a}s \ pied\bar{a}k$ -tõ without pine-ABESS(-PART), $k\bar{n}d\delta ks$ 'threshold' (NOM) : $k\bar{n}d\delta ks$ -tõ PART : $b\ddot{a}s \ k\bar{n}d\delta ks$ -tõ threshold-ABESS(-PART) (Kettunen 1938: LVII–LVIII). The word $r\bar{o}t\bar{o}$ money-ABESS represents an infrequent noun type that is still able to distinguish between the abessive and partitive. Most nouns do not make this distinction.

Givón (1995: 60) notes that recently grammaticalised and morphologically special expressions are often structurally "over-marked". The negative instrumental in Finnic ['without' + [N + ABESS]] is obviously over-marked which raises the question of whether it is a "recent" innovation. However, the wide distribution of this construction and the replacement of the earlier preposition with the Latvian loanword *bäs* suggests that the innovation is not new, especially if compared to postpositions with a considerably narrower geographical distribution and a transparent nominal origin.

It is interesting to note that the antonymic expression for the negative instrumental, 'with', is often similarly double-marked in corresponding prepositional phrases in Estonian and Vote: (Vote) $k\bar{a}sa t \bar{a}m\bar{a}-k\bar{a}$ with (s)he-COM 'with her/him', *üheza lahs-ī-kā* together child-PL-COM 'together with the children', (Estonian) *koos tema-ga* together (s)he-COM 'together with her/him'. This is extended to other instrumental prepositions, too, such as (Estonian) *kõige* '(with) all' and *käsikäes* 'together' (literally 'hand in hand') (table 4.2). The cited prepositional phrases double-mark their morphosyntactic information just as the negative instrumental does. The syntactic use and position of adpositions, such as in the examples above, probably do not so much reflect the exceptionality of syntactic rules as construction-specific features.

In the same vein as the prepositional phrases denoting 'with' in Estonian, the sole Estonian preposition which governs the terminative *kuni* 'until' (consisting of an interrogative pronoun stem *ku*- and a terminative ending *-ni*) agrees in case with the noun: *kuni hommikuni* until morning-TERM. (For the suffixal background to the terminative case in Estonian see Alvre 1971. A semantically corresponding terminative case denoting 'until' originating from a postposition exists in Vote and Veps.)

In sum, the Finnic PrepP shows a strong tendency to favour the partitive case. The renovator of Standard Estonian, Johannes Aavik, proposed in the early 20th century that flexive genitive possessive relations could in addition be expressed by using a completely artificial preposition *no* (*tingimusel no täieline alistumine* 'in terms of a complete resignation'). However, this proposed artificial preposition could never enter the language system (Ehala 1999, Erelt & Metslang 1998: 658–659). The reasons for rejecting the proposed construction are obvious from a typological viewpoint, the suggested structure violating the morphosyntactic rules of Estonian. In the first place, prepositions normally require the partitive form of the noun (**no täieli-st alistumi-st*), and in the second, the modifier (*täieline alistumi-st tingimusel*). Ehala (1999: 32–34)

emphasises that the word order of Estonian was also unfavourable to the adoption of the suggested prepositional gentive.

The central role of the partitive case in many diachronic processes is illustratively seen in the structure of the PrepP and in the morphosyntactic alternation of bipositional adpositions. Estonian bipositional adpositions, for instance, provide concrete evidence of syntagmatic adjustment of the adpositional phrase depending on the constituent order: as postpositions they are genitive-governing, whereas the change into prepositions renders them partitive-governing (cf. table 4.2). The noun complement of the postpositions kaudu and vastu is in the genitive in a PostpP as in sõbra kaudu friend.GEN through 'from a friend' and ukse vastu door.GEN against 'against the door'. In a PrepP the same adposition governs the partitive as in *kaudu seinu* along wall.PART.PL 'along the wall' and vastu us-t against door-PART 'against the door'. However, morphosyntactic alternation does not imply change in the position of the adposition. There are several examples of bipositional adpositions that govern the same case, regardless of their position, for instance, läbi 'through' as in ukse läbi and läbi ukse 'through the door'. Consequently, the morphosyntactic structure of adpositional phrases may also be caused by a secondary adaptation into the constituent order. It is therefore likely that adpositions first became bipositional and only then began to make a more concrete morphosyntactic distinction that is synchronically characteristic of the Finnic PrepP and PostpP.

In summing up the characteristics of the Finnic PrepP it can be stated that a more detailed survey would reveal a more complicated picture of the various morphosyntactic patterns that occur in prepositional phrases. As in the case of the PostpP, the local cases also open up a noteworthy aspect for the study of the PrepP, which although statistically marginal is functionally significant.

4.6 Morphosyntactic change in the Livonian postpositional phrase

In the introductory sections (cf. tables 2.1, 2.2 and 2.3 in chapter 2) of this work it was noted that Livonian has undergone thorough inflectional reduction. This section aims at illustrating the connection between phonological reduction, particularly the loss of the genitive suffix (-*n*), and morphological changes in morphosyntactic processes, in the light of the Livonian PostpP. Section 4.5.1 discussed the morphosyntactic characteristics of the Finnic PostpP and it was found that the most prototypical construction is [[N + GEN] + [PostP + cx [Loc]]]. This pattern is the most characteristic of all in Finnic languages, although in Estonian and especially in Livonian the morphophonological nature of the genitive diverges fundamentally from the northern Finnic languages because Estonian and Livonian no longer display a genitive suffix. As Estonian and Livonian have both lost their original genitive(-accusative) suffix, this case is only marked by means of stem alternation, and this can be assumed to have consequences for the analysis of those syntactic constructions in which the genitive is involved.

The Livonian prepositions $(ald\tilde{o}, b\ddot{a}s, il', imm\tilde{o}r, j\tilde{o}dm\tilde{o}l, leb, perīń, pierāst, pits, puolstõ, ullõpēd'õn, vast(õ)) will not be analysed in any more detail in this connection, because they also consistently display the [Prep + [N + PART]] pattern also typical of other Finnic languages. Only two of the prepositions ($ *leb*'through' and vast(õ) 'towards; against') share case government with the PostpP and precede a noun that is in the genitive (*leb jālga*'through the foot'). The word aldõ may be used as both a preposition and a postposition, although as a preposition it is partitive-governing (aldõ kätā '(from) below the hand'), while the genitive is used only if it occurs as a postposition.

4.6.1 Remarks on the Livonian genitive-accusative

4.6.1.1 The paradigmatic and syntagmatic genitive-accusative

Although the present section focuses on the Livonian postpositional phrase, I shall first elucidate the character of the genitive(-accusative). Discussion of its role as a form of noun complement in the PostpP will therefore be preceded by some remarks on its importance as the object case. In considering the diachronic development of the Livonian PostpP, my point of departure is that like its language relatives, Livonian also used to have a genitive suffix (-*n*).

Forms that are mainly recorded in texts as compound words, such as $lov\bar{a}$ -n- $al\bar{a}$ bed-GEN-under.ALL '(to) under the bed', $lov\bar{a}$ -n-all bed-GEN-under.ADE 'from under the bed', $p\bar{a}$ -n- $all\tilde{o}$ head-GEN-under.ADESS 'under the head' are evidence that Livonian noun inflection used to have a suffixal genitive(-accusative) case suffix, as indeed most of the Finnic languages still do, cf. Finnish genitive(-accusative) -n. Synchronically, the genitive often merges with other cases in both Estonian and Livonian, although in Estonian the syncretism is far less systematic, influences several case endings and is often made syntactically unambiguous (Riho Grünthal 2001; cf. table 2.2 in chapter 2). In Livonian the syncretism between the nominative and the genitive(-accusative) is more widespread (cf. Boiko 2000), systematic in the plural and does not extend to other cases. Although its paradigmatic status is clear, merging with the nominative considerably decreases its applicability in a syntactic context.

Looking at the larger grammatical framework it turns out that Livonian has not merely lost this particular suffix. The change in the inflectional system has influenced the argument structure as well and it has considerably blurred the morphological distinction between the main nominal constituents. The loss of the affix evokes the question of whether or not it has affected the relationship between the syntactic and functional heads, although the Livonian postpositional phrase suggests that morphological marking is not as important as the constituent order for headedness. The loss of the genitive(-accusative) suffix (-*n*) in the noun, which functionally governs the postpositional phrase has eventually led to a situation in which there is no morphological justification for describing the postposition as the syntactic head by referring to the inflectional properties of the noun complement. The genitive attribute is affixally marked in all Finnic languages except Estonian and Livonian. The loss of the affixal marker of the genitive attribute is intriguing from a typological viewpoint, because the merging of two important grammatical cases can potentially have syntactic consequences.

A more detailed analysis of the Livonian PostpP below collates synchronic state and diachronic processes. It may be assumed that the loss of the genitive(accusative) suffix affects a word order in Livonian that should basically become more important and rigid. This hypothesis seems to be supported in Livonian object-marking, for which the genitive(-accusative) is used in Finnic. Because the most important nominal clause constituents, the subject and the object may be identical, it is obvious that other means must be applied to distinguish between the nominal constituents, i.e. shifting to a more rigid word order and morphological marking of those constituents that appear in another semantic role and are sometimes lower in the marking hierarchy. Like Estonian, Livonian does not have a suffixal genitive case ending, but unlike Estonian, the noun inflection shows only sporadic traces of this characteristic. In Estonian the complicated morphonological stem alternation of noun inflection is quite remarkable, in that it distinguishes between the nominative, genitive(-accusative) and partitive.

The lack of an affixal marker for the Livonian subject and object is illustrated in (27), the use of a partitive object in a typical context in a negative clause in (28).

- (27) $tam s \bar{o}t \tilde{o}-n sie puoga t \tilde{o}rg p \bar{a}l$ (s)he.is send-PTCP.PST it boy(NOM-GEN(-ACC)) market (up)on '(S)he sent the boy to market.' (MSFOu 106: 122)
- (28) *mikš ta nāis-ta äb vutā* why (s)he wife-PART NEG take 'Why does he not take a wife?' (MSFOu 106: 335)

Constituent marking in the Livonian transitive clause is more complicated, because Livonian has preserved the partitive (28), the other object-marking case similar to the other Finnic languages. So, as reported by Tveite (2001), unaffixal object forms affect only a limited object type with high transitivity (~ telicity), whereas forms of "reduced transitivity" (Sands & Campbell 2001) are not affected by the loss of the genitive-accusative affix. Unlike other Finnic languages, Livonian in certain cases allows objects in a nominative(genitive-accusative) total object form instead of the otherwise dominating partitive (Tveite 2001: 27-28). This is due to the fact that verb-semantically and contextually dependent parameters of high transitivity may trigger a nominative(-genitive-accusative) object instead of the expected partitive object. Note also that in Estonian the verb particle ära is often used as syntactic compensation of morphological erosion (the use of Livonian *jarā*, *jerā* is a parallel to Estonian). The basic function of Estonian *ära* is to indicate the perfective aspect, just like the genitive-accusative (Villem Grünthal 1941: L-LIII, Metslang 1997, 2001).

However, more generally speaking, there is nothing very striking about Livonian object marking, because regardless of whether the subject and object are marked in a different or in the same way, both morphological marking and unmarking of the object are common in human language (Onishi 2001: 6). In fact, the unmarking of a subject and object is more likely to occur than the unmarking of semantic roles that are lower in the hierarchy (Givón 1991: 353). More exceptional is the oblique case marking of core arguments (Onishi 2001: 43), although the development of oblique argument marking into core argument marking is possible as well (Haspelmath 2001). This can be seen illustratively in the development of the Finnic partitive from a historical local case suffix to the case of object. It has been maintained conclusively that those things that at first glance look non-canonical should possibly not be taken as non-canonical, but as a more complicated grammatical cross-reference (Sands & Campbell 2001: 296-297). So, constituents that do not formally correspond to the properties of an object or subject may well display their role functionally.

In sum Livonian object-marking does not deviate from universal tendencies as much as from related languages that are morphologically more conservative. A transitive clause may display both case-marking and configurational strategies (word order) in distinguishing core constituents. These two patterns are the most common in the so-called "Standard Average European" languages (Haspelmath 2001: 53–56). In addition to fitting neatly into universal tendencies, Livonian displays in many ways a grammatical system that may be characterised as a system in transition. Traces of an earlier system can be found in synchronic data, but the examples speak together for a notably changed system.

Givón (1991: 337, 1995: 28) lists three major criteria for distinguishing a marked category from an unmarked one: structural complexity, frequency of distribution and cognitive complexity. It is obvious that the morphological erosion that has taken place in Livonian has affected the structural complexity, but its influence on distribution and cognitive complexity is not as evident. The loss of inflectional elements, such as the genitive(-accusative) *-n, has influenced many grammatical phenomena and constructions, most notably subject and object marking, and the expressing of possessive relations and other kinds of functions. Nevertheless, unmarking of both subject and object (in the so-called nominative languages) does not directly corrupt the grammatical system. As in numerous other languages, in Livonian they are separated by the verb so that in a basic clause two nominative forms are not even likely to occur together.

The question of whether a language is to be termed predominantly SVO or predominantly SOV has been a frequently raised issue in typological considerations ever since the modern typological tradition launched by Greenberg began to gain a greater foothold. Word order and syntax in general are probably one of the best-developed areas of linguistic typology (van der Auwera 1998a, McMahon 1994: 140–161, Song 2001: 49–137). It has been maintained that a shift from SOV to SVO word order is often triggered by the loss of case markers and, thus, is a consequence of phonological reduction and caused by cliticisation and ambiguity of information flow (Campbell & Harris 1995: 215–220, Newmeyer 1998: 251).

Delsing (2000) and Trosterud (2001) outline a periodised gradual shift in the development of Swedish. The time limits and corresponding structural stage Delsing gives for the changes are (a) the period of OV imposed grammar (-1300), (b) variation grammar (1300–1600), and (c) VO imposed grammar (1600–). Similarly, Old Icelandic shows considerable variation in its word order patterns (Hróarsdóttir 2000). Further observations have followed the establishment of language universals and their implicational relationships. Besides endogenous change, language contact has been reported to trigger changes in word order patterns (Campbell & Harris 1995: 136–141, Comrie 1981: 200–203).

Both endogenous and contact-induced explanations are possible general grounds for the development of Livonian, but as the morphosyntax of adpositional phrases shows (see sections 4.4 and 4.5 above) it is hardly likely that a change in word order would have taken place without changes in cross-referential grammatical relations. The three grammatical features discussed, word order, object marking and the adoption of prepositions in Livonian seem to correspond to generalisations on typological shifts and drift. A common text book assumption in Finnic studies is that the SVO word order has been caused by foreign influence.

However, there is little to support an assumption that the word order (SVO) typical of Livonian, other Finnic languages and Sámic, would have been caused by language contact. Nor is a mechanical comparison with the basic word order of the neighboring Baltic languages or prehistoric Germanic languages any better for that purpose, because the Scandinavian SVO word order, for instance, must be considered to have resulted from a relatively late syntactic change (Delsing 2000, Trosterud 2001). Recent developments in Livonian demonstrate illustratively that word order and object-marking strategies are strongly influenced by language-specific conditions.

Despite a SVO word order that is favourable for prepositions, the role of prepositions is very limited. The rise of prepositions clearly has not been due solely, if at all, to contact influence, which is also indicated by the fact that as a rule Livonian prepositions are endogenous words that follow morphosyntactic rules characteristic of a given category. Livonian has imported many lexical items needed for a more full-scale shift towards becoming a prepositional language, because it has borrowed them from Latvian in the form of verb prefixes. However, as was emphasised in section 4.3 most of these elements are not in use as prepositions in Livonian.

Consequently, the prevalent changes presumably reflect more complicated syntactic processes than mechanical shifts from one type to another or the general adoption of a foreign model. I shall now proceed by discussing those constructions in which the Livonian genitive(-accusative) and the loss of the genitive suffix have a more concrete significance.

4.6.1.2 Genitive attribute and word order

Before entering into a morphosyntactic analysis of the Livonian postpositional phrase it is worth paying some attention to the genitive attribute phrase typically consisting of a possessor and a possessed. Given that the postpositional phrase structurally corresponds to a genitive attribute phrase and the latter may eventually be the historical source of the prototypical PostP, one may presume that they are influenced by the same morphosyntactic processes, especially the relationship between inflection and word order. The genitive attribute phrase and the prototypical PostpP provide illustrative examples of the effect of the loss of the inflectional affix and its consequences for the whole construction.

Finnish (29) represents the most conservative Finnic variety morphologically and has an affixally marked attribute (*kuninkaa-n* king-GEN(-ACC)), while Estonian (30) is somewhere in between the other two with its flexive genitive(-accusative) (*kuningas* (NOM) : *kuninga* (GEN(-ACC)) 'king'). Finally, Livonian (31) does not show any traces of the earlier genitive marking and the genitive attribute $k\bar{e}\hat{n}ig$ is identical with the nominative form.

- (29) *ne kuninkaa-n tyttäre-t näk-i-vät Antsi-n* they king-GEN(-ACC) daughter-PL see-IMPF-PL3 Ants-GEN(-ACC) 'The king's daughters saw Ants.' (MSFOu 106: 111)
- (30) *need kuninga tütre-d näg-i-d Antsu* these king.GEN(-ACC) daughter-PL see-IMPF-PL3 Ants.GEN(-ACC) 'The king's daughters saw Ants.'
- (31) *ne kēńig tidār-d ne-is-tõ ants* they king(-NOM-GEN(-ACC)) daughter-PL see-IMPF-PL3 Ants 'The king's daughters saw Ants.' (MSFOu 106: 111)

Compared with some other Finno-Ugric languages, Finnish and Estonian are not the most consistent either, because the genitive(-accusative) case ending may mark both the genitive attribute (Finnish *kuninkaan*, Estonian *kuninga*) and the object (Finnish *Antsin*, Estonian *Antsu*) in the same sentence. A more ideal case can be found in Mari, for instance, in which the retained genitiveaccusative distinction keeps the possessor attributes morphologically distinct from the objects (32). The genitive marks the attribute (*student-ôn* student-GEN), the accusative marks the object (*šinčômašô-žô-m* knowledge-SG3-ACC) and the dative, that in general may express such semantic roles as the agent, experiencer, benefactive and a whole range of the kind of roles (Alhoniemi 1985: 52–54), marks a quantoral adverbial (*jatôr-lan* lot-DAT) in the example. Finnish and Estonian do not distinguish between the genitive and the accusative, and they do not have a corresponding dative.

(32) čôla tide student-ôn kôzôt-se jôlme mari all this student-GEN modern-ADJR Mari language nergen sinčô-mašô-žô-m jatər-lan kumdaŋda. enlargen-SG3 know-NMLR-SG3-ACC lot-DAT about 'All this enlarges considerably the student's knowledge of the present-day Mari language.'

The Livonian example above (31) points out the most extreme consequences of inflectional reduction in a syntactic context. The grammatical relationship between the constituents is based on juxtaposition and word order only. The contrasting example from Mari (32) indicates that the number of cases is not always decisive for the use of the genitive(-accusative) in the other Finnic languages either, since Finnish and Estonian have to mark different functions, such as object and genitive attribute with only one form, as well.

When considering the diachronic development of word order in Livonian or any other Finnic language it must be borne in mind that word order in the Finno-Ugric languages cannot be reconstructed in the same way as in the Germanic languages, because of the lack of historical records. What makes word order vitally important in Livonian is the distinguishing of subject and object. Both subject and total object (although paradigmatically genitiveaccusative) may occur in the nominative in Livonian. Just as in English, French, Swedish or other languages with no morphologically marked subject or object, it is simply logical that they should be located on different sides of the verb. Given that the eventual merging of subject and object forms demarcates or at least affects the basic syntactic structure, the following demand deals with the differentiation of those clause constituents that cannot be separated by a verb. Thus, the question is how other arguments such as the experiencer, recipient, source, path, goal, etc., are marked, if those most salient are not morphologically marked. This issue is especially crucial for the interpretation of the grammatical impact of the eroded genitive-accusative and the dative in Livonian, which will be discussed in more detail in section 4.6.2.

Regardless of the subsequent order and historical age of changes, the innovative grammatical features, including the basic word order SVO, have created favourable conditions for subsequent innovations in Livonian. This is seen in the attribute phrase, too, in which the fixed order of the constituents diminishes the importance of case marking.

Like the most widespread modern Indo-European languages Livonian is a SVO-language, but word order alone does not necessarily cause largescale losses in the morphological elements as the other Finnic languages demonstrate. The more distantly related Finno-Ugric languages with a considerably richer inflectional system than Livonian – often including more cases and a paradigm of possessive suffixes which may mark the number of both possessors and possessed items – actually show extensive flexibility in word order. Many of them seem to argue against the idea that SOV and SVO would be a rigid criterion of language types. Almost all European Finno-Ugric languages allow permutations of the three major clausal constituents. The two alternative word orders, SOV and SVO, are often perceived to be unmarked (Vilkuna 1998). However, given the petrification of word order and loss of inflectional affixes Livonian seems to support an assumption that a favourable word order cooperates with inflectional reduction if this is phonologically inclined to take place.

I shall now proceed by analysing the Livonian PostpP. Like the attribute phrase above (31), the postpositional phrase forms a concrete syntactic context for discussing the effect of the loss of an affixal genitive(-accusative).

4.6.2 The morphosyntactic structure of the Livonian postpositional phrase

A description of the Livonian postpositional phrase reintroduces the question of the relationship between adpositions and adverbs, because adverbs and adpositions are often formally identical and their syntactic position is very similar. The grammatical relationship between adpositions and noun constituents is based on case inflection and diachronically connected with changes in the case system. Consequently, the morphological status of the genitive(-accusative) in Livonian directly influences the syntactic structure of the postpositional phrase. This section will mainly concentrate on the form of the noun complement in the Livonian PostpP, whereas the inflection of the adposition will not as such be discussed.

In addition to providing a description of grammatical relations, the Livonian PostpP furnishes an example from which to view noun morphology and the interpretation of the genitive(-accusative). Although two views have been expressed on the existence (Boiko 2000, Halling 1999, Tveite 2001) or non-existence (Kettunen 1938, 1947, de Sievers 2001) of a morphological distinction between the nominative and the genitive(-accusative), there should be no doubt about the independence of the genitive(-accusative) case from a morphological viewpoint despite a widespread syncretism with the nominative. Following this concept Halling (1993, 1999) describes the morphosyntax of the Livonian PostpP as [[N + GEN] + Postp], which is supported by evidence from other Finnic languages. Here, the syntactic context is quite decisive for the morphological interpretation of the genitive, because many nouns do not show traces of the earlier genitive case at all.

Following this principle both a genitive attribute and a noun complement of a postpositional phrase may be interpreted as a genitive form on the basis of the syntactic context regardless of whether they are morphologically distinguishable or not. This interpretation is based on the paradigmatic status of the genitive(-accusative), but such an interpretation is not always syntagmatically necessary, because of the frequent merging of the genitive(accusative) and the nominative. From a typological viewpoint this ambiguity indicates a structural dispersal and notable morphosyntactic variation in the constructions at issue: what is reported to be [[N + GEN] + Postp] often corresponds to [[N + [Ø [NOM] +] Postp]. Diachronically the alternation may be interpreted as indicative of syntactic change in the Livonian PostpP and attribute phrase as suggested by the mechanical juxtaposition of *kēńig tidārd* in (31).

The relationship between the Livonian PostpP and morphology is not restricted to the genitive(-accusative), alone. A noteworthy synchronic difference with respect to the grammar of other Finnic languages is the existence of a dative case (-n), which has enormous grammatical importance and is formally identical with the lost genitive suffix. The importance of the dative is especially noteworthy, because a dative-marked constituent often precedes a postposition or an adverb that may be used as a postposition. The syntactic dependence of this constituent directly affects the interpretation of the Livonian PostpP, as well, because adpositions can easily be transformed into adverbs by means of a change in the dependency relationship.

There are, broadly speaking, two alternative morphosyntactic structures that must be discussed in connection with postpositional phrases, or clauses that structurally resemble postpositional phrases. The first represents the prototypical Finnic postpositional phrase, except for merger of genitive and nominative. The second type includes a dative-marked noun and an adposition or an adverb (table 4.8).

Table 4.8. Morphosyntactic alternation in the Livonian PostpP.

[[N+[NOM-]GEN] + [Postp]][[N + DAT] + [Postp [~ Adv]]

These constructions are illustrated in the following examples. The first three shed light on the discussion of the genitive(-accusative). The three latter seek to contrast the various interpretations of the dative-marked constituent.

(33) provides an example of the merger of the genitive and nominative forms of the noun $k\bar{u}z$ 'spruce' ($k\bar{u}z \ al\bar{a}$ 'under the spruce'). In the plural the inflectional homonymy between the nominative and the genitive is systematic throughout the paradigm as illustated by the word *rattod* 'carts' in (34). The paradigmatic independence of the genitive is indicated by the pronoun *täm* in (35).

- (33) $k\bar{u}\check{z}$ mies-tõ tie-nd tul sīņõ six man-PART – make-PTCP.PST fire there sie $k\bar{u}z$ alā that spruce(NOM-GEN-ACC) under-LAT 'Six men [have] made a fire there under the spruce.' (MSFOu 106: 135)
- (34) tam istõ-n nänt rattõ-d sillõ (s)he.is sit-PTCP.PST they.GEN cart-PL(NOM-GEN) into '(S)he has sat on their cart.' (MSFOu 106: 103)

(35) *kui minā ni sō-ks tām jūrõ* how I now get-COND (s)he.GEN to 'How shall I get to him/her now.' (MSFOu 106: 112)

Examples (36) and (37) show that basically the dative-marked constituent is not bound to the following noun, but a dependent of the verb. Consequently $\delta b \bar{z} \delta \bar{n}$ 'to/for the horse' in (36) is not (necessarily) an attribute of the noun 'back' but a dependent of the verb, semantically an experiencer like $\ddot{u}b\bar{z}\delta n$ (the same word form in another dialect) (37). (For additional comparative evidence on the use of the dative see also (43) below.) The interpretation of (36) is not as obvious as that of (37), since in the latter example the noun in the dative has been placed in front of the verb, while in the first case the dative-marked constituent occurs in the position of noun complement to a PostpP. So, the interpretation of $\delta b \bar{z} \delta n$ in (36) can be understood in the same way that $\ddot{u}b \bar{z} \delta n$ is interpreted in (37).

- (36) ants astīz eņt'š õbīzõ-n sälgõ
 Ants step-IMPF.SG3 own horse-DAT back-ILL
 'Ants climbed on the back of his horse.' (MSFOu 106: 111)
- (37) *übīzõ-n pan-d-õd saddõl sälgõ* horse-DAT put-PASS-PTCP.PST saddle back-ILL 'The horse has been saddled.' (MSFOu 106: 193)

In (38), which is an intransitive clause, the dative-marked constituent $\bar{a}rgan$ is bound to the adposition $j\bar{u}s$ and this construction corresponds syntactically to a postpositional phrase. The difference compared to (37) is that neither transitivity nor valence determines the function of the constituents and $\bar{a}rgan$ $j\bar{u}s$ evidently has to be interpreted as a dative-governing PostpP.

(38)	tam	maggõ-n	se	ärga-n	jūs
	(s)he.is	sleep-PTCP.PST	this	ox-DAT	at
	'(S)he s	lept with the ox.	'(MS	FOu 106	5:104)

I shall return to the question of the dative below. The point here is whether the dative-marked constituent is obligatory (38) or not (37) and what its syntactic head is. Basically, the word that follows the dative-marked constituent is functionally similar to any postposition as are many other body-part nouns in the Finnic languages (cf. Ojutkangas 2001).

As assumed by Alvre (1967: 173) there are, indeed, constructions such as (38) in which a noun in the dative case is undeniably a complement of

the PostpP. However, the dative case of the noun is not determined by the adposition at issue and $j\bar{u}s(\tilde{o})$ (respectively $j\bar{u}r(\tilde{o})$ 'to') occurs more typically with a noun in the genitive (respectively genitive-nominative) like other postpositions, whereas dative-marking reflects primarily other relations. Compared to the other prototypical Finnic PostpP construction types with a noun in the genitive, the dative-marked postpositional phrase is much less frequent and more marginal. I shall make some additional comments on this in section 4.6.2.2, after having first dealt with the basic construction.

4.6.2.1 The form of the complement: nominative vs. genitive

The starting point for and the end of the diachronic development represented in the Livonian postpositional phrase are the historically original [[N+ GEN] + Postp] and the synchronically frequent [N + [\emptyset [NOM] +] Postp]. A somewhat similar development can be observed in Estonian, in which the possible syncretism between nominative and genitive is sometimes seen in a similar way. Like Livonian, some noun types do not differentiate between the nominative and the genitive (39), which affects the interpretation of the postpositional phrase.

(39) *Mees maga-s maja taga.* man sleep-IMPF.SG3 house(NOM-GEN(-ACC)) behind 'The man was sleeping behind the house.'

In principle, the PostpP *maja taga* can be interpreted as both [[N + GEN] + Postp] and [N [NOM] + Postp], although other examples on the use show that the postposition *taga* regularly governs a noun in the genitive (cf. table 4.2). The merger of the two cases in Estonian is not as frequent as in Livonian, either. Moreover, inflectional homonymy is not always limited to the merging of nominative and genitive(-accusative), but spreads eventually to other cases. What cases are involved in inflectional homonymy depends on the stem type at issue. The importance of paradigmatic merging decreases in the syntactic context, because merged cases often lose their ambiguity because of other constituents and syntactic factors. In Standard Estonian newspaper texts only some 10-15% of syncretic forms remain ambiguous in their context, while others can be interpreted morphologically on the basis of syntactic rules concerning agreement, negative verb form, etc. (Riho Grünthal 2001, Viks 1984). So, inflectional homonymy is disambiguated in an attribute phrase such as (40)

(40) *Ma otsin punas-t maja*. I search-SG1 red-PART house. 'I am looking for a red house.'

Morphologically *maja* remains unchanged in the nominative, genitive and partitive. However, the case suffix of the attribute *punas-t* determinates the morphological interpretation of the head. The case agreement between the attribute and the noun suggests that *maja* in (40) is in the partitive.

In Livonian the genitive(-accusative) can be identical with the nominative only, while the oblique cases are not involved in the syncretism. The grammatical impact of merged forms is seen in sentences in which one would expect a genitive(-accusative) form on contextual grounds or on the evidence of other Finnic languages, such as the form of the attribute and the noun complement of the postpositional phrase. In (41) both the genitive attribute $iz\bar{a}nd$ and the noun complement $p\bar{u}oga$ of the PostpP display a form that is identical with the nominative.

(41) *un siz se izānd izā kīt-iz* and then this master(NOM-GEN(-ACC)) father say-IMPF.SG3 *se puoga pāl* it son(NOM-GEN(-ACC)) (up)on 'And then the master's father said to that son/boy.' (MSFOu 106: 82)

The above example illustrates the most extreme consequences of inflectional reduction. The argument structure and the distinction between grammatical relations are based solely on word order in such cases as the one above. Since the merger of the nominative and the genitive is rather widespread, sentences with the same structure as (41) are quite common.

In contrast to other Finnic languages the morphosyntax of postpositional phrases in Livonian shows systematic simplification. However, in comparison to many other Finno-Ugric languages the fact that in Livonian a PostpP consists of a noun in the nominative(-genitive) and possibly an inflected postposition is not very remarkable, because many of the Uralic languages actually do display the pattern [[N + \emptyset [NOM]] + [Postp + cx]] (Alhoniemi 1988: 28, Majtinskaja 1982: 18–22). The frequence of the Finnic and Sámic prototypical pattern [[N + GEN] + [Postp + cx]] fades away gradually towards the more eastern Finno-Ugric languages. Mordvin, for instance, displays both patterns [N + \emptyset [NOM] + Postp], Erzya *čuvto alo* tree- \emptyset under 'under a tree', and [[N + GEN] + Postp]: *viŕe-ńt' pačk*l forest-GEN.DEF through 'through the forest' (Bartens 1999: 163–166, Erzyan' kel' 2000: 249–254, GMJa 378–381). Likewise, both morphosyntactic patterns occur in the Mari language (Alhoniemi 1985:

48–49), whereas a noun of a PostpP in any other case than the nominative in the Permic languages is exceptional (Bartens 2000: 298–300). The nominative is unmarked in all Finno-Ugric languages.

So far I have summarised the grounds on which earlier research on historical Finno-Ugric syntax maintained that postpositions were (later inflected) former compound words (Ravila 1945: 319). The conclusion then was that adpositions must be a relatively young category in the Finno-Ugric languages. Nevertheless, as the Livonian data and evidence from other Finno-Ugric languages, and modern typological studies also suggest, the low degree of inflection or morphological reduction of the adpositional phrases do not verify the assumption that the lexical and grammatical category of adpositions is a secondary one and a result of recent innovation. Rather, the methodical constraints of etymology and sound history did not make it possible to draw any other conclusion about the historical state of affairs. As comparative typology and language universals show, adpositions are a very wide-spread category in the world's languages. There is no indication that adpositions only belong to a certain stage in a language's evolution.

Although Livonian has lost an affixal genitive and in many noun types the paradigmatic distinction between the genitive and the nominative does not exist any more, this does not seem to be decisive in the PostpP, because the change seems to re-establish a construction that is common in other Finno-Ugric languages. In comparison to those languages, Livonian uses other morphological categories, such as possessive suffixes, marking of number of possessor and possessees much less, but the degree to which a given language displays inflectional affixes does not directly affect the structure of the PostpP.

However, as stated the merging of the genitive and the nominative influences the making of a distinction between many syntactic constituents, not only those of a PostpP, and generates a further need for maintaining the syntactic hierarchy between the constituents. This hypothetically increases the importance of the verb as a mechanism for separating nominal constituents and deserves further elaboration. The dominating role of the predicate and the subject is best illustrated by a sentence in which the number of constituents is minimal (42).

```
(42) siz līb kurē jūsõ
then is devil at-INESS
'The devil will be present, then.' (MSFOu 106: 71)
```

Here, the subject $(kur\bar{e})$ is located on the right of the verb, although it should normally be posited on the left. The construction $kur\bar{e} j\bar{u}s\tilde{o}$ is identical with a

postpositional phrase consisting of a noun and postposition ("with the devil", "at the devil's place"). However, in this example $kur\bar{e}$ has to be interpreted as the subject of the clause, because otherwise there would be no subject. This eliminates the possibility of interpreting $kur\bar{e} j\bar{u}s\tilde{o}$ as a PostpP and shows the primacy of the subject with respect to adverbial constituents. That $kur\bar{e}$ is the subject is indicated by the context, as well. So the postposition-like particle *jusõ* must be analysed as an adverb and complement of the verb.

Interpretation of the constituents depends on their mutual hierarchy even if the number of constituents increases (43). If the valency of the verb demands both subject and object, the adjacent constituent that otherwise could be interpreted as a postposition ($k\ddot{a}dd\tilde{o}$) must be analysed as an adverb.

(43)	las	ta	ān-dag	sie	bumb	käddõ	tämmõ-n
	let	(s)he	give-IMP	this	ball	hand.ILL	(s)he-DAT
	'Le	t her/h	im give the	ball t	o her/hi	m.' (MSFO	u 106: 62)

Because *bumb* is the object of the clause, it cannot be interpreted as noun complement of a PostpP (*bumb käddõ*), which would otherwise be quite possible as in (44).

(44) *tam andõ-n jõmā käddõ nänt rōntõ-d* (s)he.is give-PTCP.PST mother hand.ILL they.GEN letter-PL '(S)he has given the letter to the mother.' (MSFOu 106: 95)

As with the corresponding body-part noun *käsi* 'hand' in Estonian and Finnish and Mordvin, Livonian *keiž*i 'hand' is commonly used as postposition (Erzyan' kel' 2000: 249–254, Ojutkangas 2000, 2001: 83–188, Wälchli 2000: 217–218).

Example (42) above illustrated a sentence with a minimal number of constituents, which affected the interpretation of the construction $kur\bar{e} j\bar{u}s\bar{o}$. (45) provides an example with more constituents that leads to a different interpretation of the grammatical relations. As a consequence the corresponding construction $kur\bar{e} j\bar{u}r\bar{o}$ gets another interpretation, too, and becomes a PostpP.

(45)	ne	adtõ	lā̈-nõd	tegīž	sie	kurē	jūrõ
	they	are	goPTCP.PST	back	this	devil	to
	'They	y have	gone back to	the devi	il.' (M	SFOu	106: 72)

In (45) the subject of the sentence is *ne* and the PostpP $kur\bar{e} j\bar{u}r\tilde{o}$ is an adverbial complement of the verb. Likewise the syntactic hierarchy between clause constituents is seen in the interpretation of the attribute phrases and the kind of construction. In the most extreme cases the distinctions between clause

constituents are based only on word order and their "invisible" interdependence. In (46), for instance, in principle, two interpretations are possible:

(46) siz ailõ-b kēzar frintsess jūrõ
then rush-SG3 emperor princess to
a. 'Then the emperor rushes to the princess.'
b. 'Then the emperor's princess rushes there.' (MSFOu 106: 147)

This example shows the consequences to which morphological loss can lead. No overt segmental marker is used for relating the two nominals to one another and the word order is crucial. The juxtaposition of the two nouns does not differ from compounding or the simple contiguity of two nouns. The correctness of the two alternatives depends on the interpretation of the syntagm $k\bar{e}zar$ frintsess and, more precisely, whether $k\bar{e}zar$ is the subject and frintsess the noun complement of a PostpP, or whether $k\bar{e}zar$ frintsess is an attribute phrase.

In this case the context is decisive for the grammatical interpretation of the constituents, and shows that alternative b. is the correct one, since the attribute phrase ($k\bar{e}zar$ frintsess) is one of the repeated topics. So, $j\bar{u}r\bar{o}$ is an adverb as is $j\bar{u}s\bar{o}$ in (42) above. Similarly, any interpretation of the adverbial constituent, whether it is a postposition or an adverb, must take a noun in the dative into consideration. Most likely, the loss of the genitive(-accusative) suffix of the PostpP noun complement has pushed the language towards distinguishing clause constituents by other means. This is concretely illustrated in the syntactic dependency of the dative-marked constituent, which will be the subject of the next section.

4.6.2.2 The form of the complement: dative

The previous section demonstrated that although the Livonian PostpP is, in principle, identical with the prototypical Finnic PostpP [[N + GEN] + Postp], the widespread merging of the genitive(-accusative) and the nominative forms affects the interpretation of various clause constituents. It has been shown that the paradigmatic status of the genitive(-accusative) is not always reflected in a syntactic context. It was also stated that the nominative-genitive(-accusative) syncretism has obvious consequences for grammatical interrelations between various syntactic constituents. The ambiguity arising from reduced affixal marking affects the syntactic dependence of both the noun and adposition of the potential PostpP.

However, this ambivalence is not limited to constituents marked by the genitive(-accusative) and its syncretism with the nominative. Although the

dative is regularly marked with a suffix (-n), the role of the dative-marked constituent depends in many ways on similar considerations that have been discussed above. The problems concerning the interpretation of a dative-marked constituent were introduced at the beginning of section 4.6.2 in examples (36), (37) and (38). The complexity in identifying the relationships of (dative-)marked or unmarked constituents shows how dominant the role of the verb is in Livonian syntax.

The dative-marked constituents are in some cases (see example (38) above) undeniably constituents of a PostpP. However, there is no indication that any of the Livonian postpositions are regularly dative-governing, although it has been suggested (Halling 1993: 37, Wälchli 2001: 430–432) that the dative is very commonly used with postpositions. Posti (1942: 73) made a passing remark that the postposition *sizal* 'in, inside' requires a preceding noun to be in the dative, but he did not elaborate his observation with a syntactic analysis. In fact, his claim is incorrect, because there are many examples in which *sizal* follows a noun in the genitive. In general, the hypothesis that the dative is commonly used in connection with postpositions seems to be based on insufficient evidence. It appears that the dative-like affix *-n* in constructions such as $l\bar{o}da$ -*n allõ* table-DAT under '(to) under the table' is not an analogical dative but an old genitive(-accusative) ending.

The unstable relationship in dative-marking and genitive-marking of a noun complement of a PostpP is illustrated by the position of the word *vastõ* in (47).

(47) ni tun-nõd amā-d rous-t tämmõn vastõ now come-PTCP.PST all-PL people-PL (s)he-DAT towards 'Now all the people [have] come to meet her/him.' (MSFOu 106: 139)

In addition to the argument structure this example (as in (42) above) illustrates those word order permutations which are characteristic of Finnic and other Finno-Ugric languages. The subject ($am\bar{a}d \ roust$) should normally be placed on the left of the verb, but in this example it has shifted to the right to become new or rhematic information.

Given that a dative-marked constituent may occur in a PostpP, two alternative interpretations should be given for (47). Either, *vastõ* can be accounted for as an adverb (*tunnõd* – – *vastõ*), or one may assume that it belongs to a PostpP (*tämmõn vastõ*). Presupposing that the Livonian dative originates from the Finnic genitive -*n* (Wälchli 2000: 214–215, 2001: 430–432), which I consider, in principle, a correct hypothesis (cf. Inaba's (2000a, 2000b) convincing analysis of the genitive(-accusative) in Old Literary Finnish), it would appear that *vastõ* belongs to a PostpP. However, this interpretation is confronted with syntactic functions of the dative that will be elaborated on in more detail in section 4.6.2.3. Given the semantic roles characteristic of the dative, *tämmõn* turns out to be the nominal clause argument next to a subject in an intransitive clause. It commonly marks the patient/experiencer of the clause. So, the assumption that *tämmõn* marks the experiencer and not the noun complement of a PostpP appears to be correct and a more exact translation would therefore be '(s)he has met many people' (!). As is often the case, things are more complicated than this, as will be shown in the next section and by the parallel examples that will be introduced for (47).

4.6.2.3 Dative and adverb

Problems with interpreting and illustrating (45) cannot be solved on the evidence of one individual sentence alone. Because no postposition automatically triggers the dative, for the most part it does not have grammatically decisive importance in the PostpP in Livonian. The following description merely aims at pointing out various functions that the dative and PostpP are involved in. The morphosyntactic ambiguity of the PostpP and the interpretation of the dative-marked constituent appears in a different light when compared to a corresponding construction. In (48) the same lexical item *vastõ* occurs as an unambiguous postposition.

(48) *ni* se veļīnai tu-nd täm vastõ now this brotherwife come-PTCP.PST (s)he.GEN(-ACC) towards 'Now the sister-in-law has come to meet her/him.' (MSFOu 106: 139)

Compared to (47), the grammatical relations in (48) are unambiguous and *täm* vastõ is a PostpP, since the two units are juxtaposed and cannot be separated from one another. The noun (*täm*) cannot be omitted without making the sentence grammatically elliptic, whereas in (47) the position of *tämmõn* is not as fixed.

The more ambiguous relationship between a PostpP and a nominal argument preceding an adverb is further evidenced in connection with other postpositional elements, such as $tag\bar{a}n$ in the next examples. The structure of (49) corresponds to a prototypical PostpP with a noun in the genitive: *uks* 'door' does not make any inflectional distinction between the two, nominative and genitive(-accusative). Examples (50) and (51) shed additional light on the syntactic use of the dative.

- (49) mikš sa vaņkļõ-d uks tagān why you look-SG2 door behind
 'Why are you looking behind the door'? (MSFOu 106: 141–142)
- (50) kurē um -- ailõn tegīž näntõ-n tagān devil is -- run-PTCP.PST again they-DAT behind 'The devil has been running after them again.' (~ 'following them') (MSFOu 106: 73)
- (51) tämā um lā-nd ārga-n tagān sūrõ-z mõizõ-z
 (s)he is go-PTCP.PST ox-DAT behind big-ILL manor-ILL
 '(S)he has gone to a big manor after the ox.'
 (~ '(S)he has gone to a big manor to fetch the ox'.)
 (MSFOu 106: 104)

The two latter sentences, (50) and (51), are involved with other grammatical aspects, too, namely verb semantics and the use of *tagān* as a verb particle. The Finnish translation ('härän perässä') published in the original print (1953 = MSFOu 106) assumes a concrete spatial relation of the dative-marked constituent and the following particle and, consequentely, interpretes *ārgan* tagān as a PostpP 'behind the ox'. This, however, appears to be wrong, because *tagān* is used as a verb particle as in many other adverbs in Livonian and the geographically adjacent languages, Estonian, Latvian, Lithuanian and historically German (cf. Wälchli 2001: 413–430). The way Kettunen (1938: 406) translates a corresponding structure reflects more accurately the meaning of the sentence: poiškist voltto ibis tagan motsas 'die Knaben holten das Pferd aus dem Walde'. The semantic alternation 'follow, go after; fetch' is similarly based on the cooperation of a verb, and a verbal prefix in other languages shares these characteristics, cf. German nachholen, nachgehen, Russian id-ti za knigoi go-INF after book 'fetch a book' and Estonian järele minema 'go after, follow; fetch'.

The use of the same particles as adpositions and verb particles may occasionally lead to expressions in which two particles follow one another as in Estonian. In (52) the adjacency of an Estonian PostpP *selle üle* and a verb construction *järele mõtlema* determines the semantic roles.

(52) *Ma hakka-n otsekohe selle üle järe-le mõtle-ma*. I begin-SG1 at once this.GEN over after-ALL think-INF 'I shall begin to consider it at once.' The first of the particles *üle* is a postposition that in more concrete spatial expressions is used as a preposition (*üle tänava* 'over the street'). The latter (*järele*) is used as a verb particle but may occur as a postposition in another context.

The ambiguity in Livonian, such as in the examples (47), (50) and (51), is caused by the fact that a dative-marked noun often precedes an adverb that in a more speficic context is a postposition just like in the Estonian example (52) above. The following two examples open up some additional relevant viewpoints on the functions of the dative.

(53) tam pa-nd se lapsõn iļ pā
(s)he.is put-PTCP.PST it child-DAT over head(NOM-GEN(-ACC))
(S)he has put it [the stone] over the child's head.'
(MSFOu 106: 126)

This transitive clause (53) includes the core arguments and an obligatory adverbial, namely the PrepP ($ilp\bar{a}$). The word ill occurs both as an adverb and a preposition (Halling 1999), but unlike its cognate word in Finnish (yli : yli tien ~ tien yli 'over the street'), only as a preposition in Livonian. The subject (ta[m]) and the object (se) are unmarked, the dative-marked constituent *lapsõn* is an adverbial argument. The hierarchy of the constituents is reflected in their mutual order (subject (tam) < object (se) < adverbial 1 ($ilp\bar{a}$) < adverbial 2 (lapsõn)), although it must be noted that *lapsõn* is the only constituent in this particular example that can be omitted.

The mobility of the dative-marked constituent is better seen in clauses in which the adverb is separated from adpositional elements. This test proves that the dative-marked constituent does not as a rule belong to a PostpP, because no free word can be placed between the noun and the postposition. In (54) there are many constituents between the dative-marked *sinnõn* and the adverb *vastõ* (cf. (47) and (48) above).

(54) ta līb tež sinnõn sāl läbū-d
(s)he be(FUT)-SG3 again you-DAT there window-PL pāl vastõ
upon towards
'(S)he will be at the window to meet you again.'
(MSFOu 106: 146)

Hence, the conclusion that can be drawn on the evidence of (54) is that because the dative-marked constituent $(sinn \tilde{o}n)$ and the adpositional word $(vast \tilde{o})$ may be detached from one another, they are arguments of a verb phrase and do not form a PostpP. The data discussed (48–54) also justifies the way in which (47) has been interpreted.

The above analysis suggests that if a dative-marked noun precedes an adpositional element, the constituents are, as a rule, both dependents of the verb, although individual exceptions do occur as in (38) above. The analysis of the dative can be compared to Estonian, in which the exterior local cases have been influenced by semantic change, especially the adessive. The exterior local cases display spatial relations to a very limited extent, whereas the expression of various possessive relations is more common. As a result, the adessive has tended to become a general marker of the experiencer (Huumo 1997b: 88–90, Matsumura 1994, 1996a, Zsuzsanna Oinas 1993: 537–542). However, it was stressed above that in certain cases like (38) the use of the dative cannot be explained through verb semantics and the syntactically dominating role of the verb. This is most transparent in neutral adverbial clauses such as (55), in which the PostpP indicates a concrete location.

(55) *mõk um võ-nd näntõ-n vāil* sword is be-PTCP.PST they-DAT between 'The sword was between them.' (MSFOu 106: 140)

This parallel verifies the assumption that in (38) $\bar{a}rgan j\bar{u}s$ is a PostpP. The sentence would lose its coherence if any of the two constituents were removed, just as in the case of *näntõn vāil* in (55). The adpositional phrase is clearly exocentric in these examples as it often is, and the phrase becomes elliptic if *näntõn* is omitted.

It has been established that first, as a rule Livonian postpositions follow a noun in the genitive, although the paradigmatic distinction between the genitive and the nominative is often not attestable in a syntactic context. Second, although basically the dative-marked constituents are adverbial arguments, they may occasionally belong to a PostpP. The morphosyntactic pattern of the Livonian PostpP is ambiguous in the sense that besides the prototypical genitive-governing structure some dative-governing constructions occur as well.

Three different patterns are applied in the Livonian PostpP: 1. The PostpP displays an uninflected noun (the merger of the nominative and the genitive-accusative). 2. The PostpP displays a noun in the genitive. 3. The PostpP displays a noun in the dative. Because the nominative and the genitive are distinguished only in certain noun types and never in the plural, one may conclude that the first type is the prevailing one, whereas the third is only marginal. Consequently, a notable syntactic change seems to be taking place in the Livonian PostpP. Since Livonian is on the verge of extinction, any predictions about future development may appear as irrelevant or incorrect.

4.6.3 Grammatical heads and morphosyntactic change

Having outlined the characteristics of the Livonian postpositional phrase I shall now return to some more general aspects, and the diachronic processes that are represented in the divergence between the Livonian PostpP and corresponding constructions in other Finnic languages. Before drawing final conclusions on the Finnic adpositional phrase, I shall proceed with a brief account of the relationship between the constituents of the Livonian PostpP and the question of grammatical heads.

The grammatical hierarchy of the prototypical Finnic PostpP is bicuspid, because the noun is syntactically a complement of the adposition, which thus is the syntactic head. The key question is: how do the loss of inflectional affixes and the subsequent increase of structural complexity affect the relationship between the constituents of PostpP? Does phonological reduction affect the status of the syntactic head, does Givón's "cognitive complexity" remain unaffected and does structural complexity simply disappear?

The following considerations are mainly based on papers published in Corbett et al. (1993) continuing a discussion initiated by Zwicky (1985, 1993) and Nichols (1986). Although the traditional generative concept assumed a single head for the noun phrase, the noun (Payne 1993: 114), the concept of head has been split according to diverse criteria for describing syntactic hierarchy that lead us to an assumption of many heads.

This is illustratively seen in the prototypical Finnic PostpP in which the functional and syntactic heads do not coincide. The noun in the genitive(-accusative) is a modifier and a syntactic complement, but also the functional head. The postposition, inflected or not, is the morphosyntactic locus and the core argument of the PostpP. It is obligatory, lexical, and characteristic of the construction and selects other items, and thus corresponds formally to the requirements of a syntactic head (Bauer 1994: 9). Moreover, in most cases the postposition shows properties identical to the PostpP as a whole and is endocentric to a certain extent. The morphosyntactic information of the phrase is most typically expressed in the inflectional form of the adposition as in Finnish (56).

(56)	talo-n	ede-ssä
	house-GEN	front-INESS
	'in front of the	e house'

One of the key criteria for the identification of a syntactic head is the distinguishing of the morphosyntactic locus (*edessä*), the constituent that is decisive to the relationship between the construction and other syntactic units. Zwicky's (1985: 10, 16–18) conclusion that the morphosyntactic locus should

be identified as the syntactic head of the construction is generally accepted. Another subject that is especially important from the semantic viewpoint is the functor of the clause, the semantic argument (Zwicky 1985, 1993). Distinguishing between these properties is not always clear-cut and it may occur that in some cases the properties of the head appear to be shared between different elements. In Russian numeral expressions, for instance, the head-like characteristics, such as the morphosyntactic realisation of grammatical gender, are distributed between the numeral and the noun (Corbett 1993). Moreover, it is evident that what in one language may be marked within a construction may be signalled with a complement in another (Vincent 1993: 153). Semantically, modifiers, such as the nouns in a postpositional phrase, are functors in Zwicky's (1993) terminology, while arguments, such as the postpositions, are obligatory within the constructions.

The consequence of such conclusions as this is that other postpositions have to be interpreted as syntactic heads, too. Regardless of the degree to which they display inflectional elements they do contain the morphosyntactic locus and are decisive for the construction. Thus, words that do not display productive morphological rules or show traces of earlier inflection are the morphosyntactic locus of the clause in a similar fashion to the Finnish *yli* in example (57).

(57) *talo-n* yli house-GEN over 'over the house'

Distinguishing between functional and syntactic heads cannot be mechanically based on the inflectional form either, because the noun and the adposition may share the same inflectional properties. So, in Finnish and Estonian, for instance, there are some postpositions, albeit not very typical, that require a noun in one of the local cases. Penttilä (1963: 278–279) notes that the elative case ending is common in postpositions that indicate spatial relations as in (58).

(58)	Talo-sta	eteenpäin	men-tä-es-sä	tul-laan	
	house-ELAT	further	go-PASS-INF-INESS	come-PASS	
	järve-n	ranta-an.			
	lake-GEN	shore-ILL			
'After the house we come to the shore of the lake.'					

However, he correctly adds that most elative-governing postpositions actually have not completely reached the status of a postposition, yet, because they may take additional complement. In this particular case the classification of *eteenpäin* as a postposition is ambiguous, because quantifiers, such as *viisi*

kilometriä 'five kilometers' and *vähän* 'a little', can be added between the two constituents. This suggests that *eteenpäin*, in the strictest sense, is not a postposition. A more appropriate example of an elative-governing PostpP in Estonian is presented in (59).

(59) Suve-st saadik pole te-da näi-nud. summer-ELAT since NEG her/him-PART see-PTCP.PST 'I haven't seen her/him since the summer.' (EKSS V: 253)

In general, it is characteristic of the modifier to take additional complements, such as an adjective or genitive attribute, or a determiner, but even in those cases the relationship between the functor and the syntactic head remains unchanged. The Finnish attribute phrase *sen punaisen talon* illustrates this in (60).

(60) *se-n punaise-n talo-n ede-ssä* it-GEN red-GEN house-GEN front-INESS 'in front of the red house'

Both the determiner (*sen*) and the adjective attribute (*punaisen*) agree in case with the noun (*talon*). The relationship between the determiner (*sen*) and the functor, the attributal phrase (*punaisen talon*), is more complex, because any of the two can be deleted without corrupting the structure of the postpositional phrase.

The syntactic dominance of the postposition is so evident that in clauses with numerous complements and more complex syntactic cross-references it is the postposition that does not have to be repeated. Similarly, ellipsis of the syntactic head, which makes extensive use of head-removing operations, is very frequent in Russian (Nichols 1993: 167–171). The fact that the adposition need not be repeated after all nouns raises the question of how correct it is to describe the noun as optional, although it is the modifier and not the argument (cf. Zwicky 1993: 295–296). Although the postposition is the syntactic head, the noun complement turns out to be obligatory as well.

It is most typical for the inflectional form of the noun, the semantic argument, to show its syntactic dependence on the postposition by case marking in the Finnic PostpP. The other end of the continuum is represented by the Livonian PostpP, which may even consist of a completely unmarked noun and postposition. The questions that arise from the changes in Livonian morphology is whether and how it affects the semantic and syntactic argument structure.

The analysed data indicates clearly that the syntactic change strongly affects the noun complement of the PostpP, whereas the postposition maintains its morphosyntactic locus even if it does not display productive case suffixes. This is illustrated in (61) and by many examples in the previous sections.

(61) tämā lek-š leb nīn tarā eńt'š ārga jūr
(s)he go-IMPF.SG3 through town park own ox to
'(S)he went through the town park to her/his own ox.'
(MSFOu 106: 111)

Neither of the two words in the PostpP $\overline{a}rga j\overline{u}n$ displays inflectional elements. The noun ($\overline{a}rga$) does not distinguish between nominative and genitive(accusative) which would otherwise render it an explicit syntactic modifier. However, there is no indication that the morphosyntactic locus would be removed from the adposition that ultimately does not have morphological indicia connected with its syntactic status, either. It is obvious that the reduction, in other respects actively involved in the Livonian PostpP, does not affect the role of the syntactic and functional heads.

The relationship between the noun and adposition is clear, because as a rule they do not exhibit the same grammatical categories. So, the constituent order seems to be more decisive for the question of functional and syntactic heads than for the inflectional categories displayed. The genitive(-accusative) form of the noun of a prototypical Finnic PostpP makes it easy to identify the head and the complement, but is not as decisive as the syntactic and semantic liaisons with which the postposition is involved.

It is interesting to note that in Livonian the morphosyntactic function of the constituents has occasionally been strengthened by other changes. The postpositions indicating such spatial relations as '(up)on' $(p\bar{a}-l\delta$ (to), $p\bar{a}-l$ (at), $p\bar{a}-ld\delta$ (from)), for instance, have been strengthened by productive elements, and an analogical illative $(p\bar{a}-l\delta-z)$ and elative $(p\bar{a}-ld\delta-st)$ suffix have been attached to distinguish them from the earlier adessive $(p\bar{a}l(\delta))$ and ablative (Kettunen 1938: 325). The duplicating of affixal elements emphasises the role of the adposition as the morphosyntactic locus.

The role of the postposition as the morphosyntactic locus appears to be one of the reasons why this category is not easily affected by the various changes that otherwise have a great influence on the language. It also reveals one further reason why Livonian is quite resistant to prepositions and mainly employs postpositions like other Finnic languages.

4.7 The morphosyntax of adpositional phrases in comparison to case inflection

This lengthy chapter has mainly concentrated on various aspects concerning the morphosyntax of the Finnic adpositional phrase. The last aspect remaining to be discussed concerns the form of the noun complement and its importance for morphology. Prepositions do not have any special importance in this section, because their syntactic position differs so fundamentally from postpositions and case endings. So, the discussion that follows will concentrate on the relationship between the latter two.

The hypothesis to be discussed is that regardless of the interaction between the noun complement of a PostpP and other constituents, the identical constituent order in a NP consisting either of a noun and a postposition or of a noun and a case ending opens up a considerable area for the analysis of the evolution of noun morphology. The evidence of the Estonian NP suggests that contrasting postpositions with case endings reveals an integrating morphosyntactic synchronic mechanism and not only the historical processes of suffixing postpositions. The loss of the suffixal genitive(-accusative) has led to a situation in which there is no segmental constituent between the word stem and the case suffix or the postposition in which the morphosyntactic locus is located. However, instead of adapting the word-final element, Estonian seems to be decreasing morphophonological alternation by adapting the word-initial sequence, the word stem, into productive morphological rules.

The diachronic relation between postpositions and case endings is obvious. If postpositions easily become suffixed case endings as indicated by many languages and observed by many linguist generations, then they probably must share some high-ranking properties. The adjacency and exclusion of additional free morphemes between the noun and the postposition (enclitic and possessive suffixes are allowed if they occur in a particular Finnic language) underlines the density between the constituents of the PostpP. This feature resembles the attaching of a case suffix to a word stem and obviously increases suffixing preference.

In the most integrated type of noun phrase, as the Estonian example indicates (for details see below), the case endings and adpositions are syntactically completely compatible, the morphosyntactic pattern of oblique cases and postpositional phrases being [N + GEN] + [cx/Postp]], while segrating languages such as Finnish with its affixal genitive display two patterns: [N + cx] for case inflection (note the role of consonant gradation and other morphophonological alternations) and [[N + GEN] + Postp] for postpositional phrases. In Estonian the case suffix is attached to the genitive form of the noun in all the oblique cases in both singular and plural. It must be noted that in Standard Estonian the singular (*pikk* : *pika* 'long', *sõben* : *sõbra*

'friend' [NOM : GEN]) and plural genitive (*pikka-de* long-PL.GEN, *sõpra-de* friend-PL.GEN) have different stems, because the plural genitive is, in general, formed by means of the singular partitive stem (*pikka* long-PART, *sõpra* friend-PART) (Remes 1983: 58–65). However, this is of only minor importance for the integration that takes place between noun inflection and postpositional phrases, because in both cases the genitive is its basic form. The tendency to use the genitive stem as the unmarked one is also illustrated in Estonian place names that often occur as syntactically elliptic proper nouns formally in the genitive case (Kallasmaa 2000, Kettunen 1955, Pall 1969–1977).

What is important in this discussion is that in other Finnic languages the two constructions referred to above are not syntactically compatible, whereas in Estonian their morphosyntactic pattern is more uniform. This is illustrated in the inessive form of *kirikus* in (62) and the postpositional phrase *kiriku sees* in (63).

- (62) *Ta tööta-s kiriku-s*. (s)he work-IMPF.SG3 church[.GEN]-INESS '(S)he worked in/for the church.'
- (63) *Ta* tööta-s kiriku sees. (s)he work-IMPF.SG3 church.GEN inside '(S)he worked in(side) the church.'

It must be noted that the postposition *sees* actually includes one additional element, the inessive case ending *-s*, but this does not affect the morphosyntactic relationship between the two constructions with respect to the noun *kirik-u*. The concrete spatiality as in (60) can be reinforced as in (61) by including both the case suffix and the postposition in the sentence. However, the syntactic status of *sees* is different, and in (61) it is an adverb that can be omitted without changing the grammatical relations and making the sentence impossible.

(64)	Та	tööta-s	kiriku-s	sees.
	(s)he	work-IMPF.SG3	church[.GEN]-INESS	inside
'(S)he worked in(side) the church.'				

The semantic difference between (59) and (61) is thus reflected in the difference in syntactic structure. However, the point here is the morphosyntactic similarity between (59) and (60). Consequently, two different diachronic strategies illustrate the morphosyntactic relationship between Finnic case inflection and the PostpP. In table 4.9 these are termed *integrating* and *segregating* strategies.

Table 4.9. The noun stem as	a constituent of the infle	ected oblique
case forms and postpositional	phrase.	

correction	1. $[N + cx]$	Finnish, Vote, Veps	
segregation 2. [[N + GEN] + Postp]		(Livonian)	
integration	1. [[N + GEN] + cx [obl]]	Estonian (Livonian)	
integration	2. [[N + GEN] + Postp]		

The integration of case inflection and postpositional phrases is mainly characteristic of Estonian. The Estonian genitive appears to be the unmarked case in the sense that the genitive is the general basis for the formation of oblique cases. Table 4.10 demonstrates the similarity between the morphosyntactic pattern of inflected local cases and postpositional phrases in Estonian.

Table 4.10. Morphosyntactic integration between inflected local case forms and postpositional phrases in Estonian.

	<i>laud</i> 'table' + cx		<i>laud</i> + Postp (<i>sisse</i> 'into', <i>sees</i> 'inside', <i>seest</i> '(from) inside', <i>peale</i> 'on (to)', <i>peal</i> 'upon', <i>pealt</i> '(from) upon')	
	singular	plural	singular	plural
GEN	laua	lauda-de		
ILL	lauda	lauda-de-sse	laua sisse	lauda-de sisse
INESS	laua-s	lauda-de-s	laua sees	lauda-de sees
ELAT	laua-st	lauda-de-st	laua seest	lauda-de seest
ALL	laua-le	lauda-de-le	laua peale	lauda-de peale
ADESS	laua-l	lauda-de-l	laua peal	lauda-de peal
ABL	laua-lt	lauda-de-lt	laua pealt	lauda-de pealt

The illative singular *lauda* is the only form that diverges from the morphologically uniform paradigm. However, there are some considerable differences between different inflection types that affect the relationship between the illative singular and other cases, because some nouns and adjectives do not display a "short" illative corresponding to *lauda* at all. Instead of a a flexive form they have a suffixal form, for instance the word *terav* 'sharp': *terava-sse* sharp[.GEN]-ILL.

The diachronic development of the oblique case forms and postpositional phrases does not affect the morphosyntactic realisation of the relational marker (case suffix or postposition) only, but has considerable significance for the morphological nature of the word itself. This integration may be characterised as predominantly a morphological process, initially launched by phonological reduction. More generally speaking, this process is very natural, because it decreases superfluous allomorphism and increases regularity. This conclusion supports Ehala's (1998) presumption that Estonian morphology will undergo a considerable simplification in the future. Although here this claim is based on the similarities between case inflection and postpositional phrases it obviously does not imply a general integration of relational marking as much as the systematisation of noun inflection. The loss of the genitive suffix just happens to be involved in both processes.

Other Finnic languages seem to be more resilient to the kind of morphological restructuration that is going on in Estonian. Vote shares many morphological innovations with Estonian but displays the Finnish type of noun inflection and segregating system in relational marking. Livonian represents a mixed type, partly because noun inflection is strongly blurred by the widespread merger of the nominative and genitive(-accusative), and complicated morphonological alternation that affects both the vowels and consonants of all affixal case forms. Given the extensive merger of the nominative and genitive in Livonian as described in section 4.6.2, Livonian often shows a similar integration as Estonian but based more on the reinforcing of the nominative than the extension of the genitive. The displayed pattern is frequently (always in the plural) [N + cx/Postp], while the older pattern [N + cx] / [[N + GEN] + Postp] is still attested in the singular.

The difference in the manner in which the Finnic languages integrate the PostpP with morphological rules is illustratively seen in the way possessive relations are encoded. Estonian and Livonian do not have any possessive suffixes at all except for lexicalised forms, whereas Finnish and Veps do. In Vote, possessive suffixes are only reported in folk songs (Laanest 1982: 181–185). Although Finnic possessive marking as a whole is simpler compared to the genetically more remote Finno-Ugric languages (Riho Grünthal 2000: 44–46), the existence of possessive suffixes in particular affects the morphosyntax of postpositional phrases. The lack of possessive suffixes brings

the postpositional phrases closer with case inflection. The segregating Finnic languages may add a possessive suffix between noun and adposition, whereas the integrative type (Estonian, Livonian) does not share this capacity.

In Estonian and Livonian the indication of the subject in possessive constructions is based on the use of an obligatory pronominal marker. The position of the pronoun is the same in the PostpP *sinu laua all* in (65) as in inflected case form *sinu laual* in (66).

- (65) *Raamat on sinu laua all.* book is you.GEN table.GEN under 'The book is under your table.'
- (66) *Raamat on sinu laua-l.* book is you.GEN table[.GEN]-ADESS 'The book is on your table.'

Integration is obvious since both constructions display the same morpheme order: [Pron [Poss] + [N + cx/Postp]]. Standard Finnish, in turn, always attaches the possessive suffix to the noun, which is the semantic head as indicated by the corresponding constructions (67) and (68).

- (67) *Kirja on (sinu-n) pöytä-si alla.* book is (you-GEN) table-(GEN.)SG2 under 'The book is under your table.'
- (68) *Kirja on (sinu-n) pöydä-llä-si.* book is (you-GEN) table-ADESS-SG2 'The book is on your table.'

Colloquial Finnish has not been discussed in this work. Suffice it to note that it shares many reductional characteristics with the more eroded Finnic varieties such as Estonian. One of them is the loss of suffixally marked possessive constructions as in (69) and (70) below. The latter example represents exactly the same construction as in Estonian (66) above.

- (69) *Kirja on su-n pöydä-llä-s*. book is you-GEN table-ADESS-SG2 'The book is on your table.'
- (70) (Se) kirja on su-n pöydällä.
 (it) book is you-GEN table-ADESS
 'The book is on your table.'

Although possessive constructions seem to support the integration hypothesis and increase systemacy it is probable that morphosyntactic uniformity between case inflection and postpositional phrases is rather a result than a motivation for the illustrated process. The frequently reported need for therapeutic syntactic means for replacing phonological erosion and morphological loss seems to be important here, too. The attrition of inflectional suffixes was so intensive that it strongly influenced distinctions between grammatical relations. Therefore, compensation is a more likely explanation for the causalities that led to the similarity between these constructions. It appears that instead of striving towards morphosyntactic systemacy in the relational marking of the noun, these examples demonstrate a change that is ultimately part of a process eliminating complicated allomorphism.

4.8 Conclusions

Numerous problems are connected with the morphosyntactic structure of the adpositional phrase. The analysis of Finnic adpositions reveals both language-specific and general perspectives regarding morphosyntactic change and structural evolution. One of the most salient features is that all Finnic languages display both prepositions and postpositions. Some of the adpositions are bipositional and may occur in a pre- and postnominal position. From a geographical viewpoint it would be very tempting to explain the splitting of this particular word class as a contact-induced typological change. However, adpositions are lexically quite unlikely to be borrowed from neighboring languages as the examples of Livonian and Veps show. The morphosyntactic and constructional properties appear to be much more important to the development of the adpositional phrases than the word order SVO, which unlike SOV basically supports the use of prepositions. The case government of adpositions appears to be most significant for the development of the system. Consequently, no contact-based explanation accounts exhaustively for the processes in the Finnic adpositional phrase, if language-specific morphosyntactic processes are left out of the discussion. Language-internal processes are obviously most decisive in the evolution of adpositional phrases.

The emergence of prepositions in the Finnic languages has not been discussed in detail. Suffice it to say in conclusion here that the morphosyntactic properties of prepositional phrases suggest that both syntax and semantics are strongly involved in the diachronic development of prepositions. This is seen in the fact that prepositional phrases are limited to semantically restricted expressions. Most commonly the noun complement of a prepositional phrase is in the partitive and the prepositional phrase expresses path, circumspatial or instrumental (including negative instrumental) relations. However, it cannot be excluded that the same grammatical relations may later become expressed by postpositional phrases, too.

The ambivalence of the Finnic adpositional system is typologically remarkable and prepositions are an innovation that reflects a considerable change in the system. However, as a rule, postpositions are much more frequent in all Finnic varieties. A prototypical Finnic postpositional phrase consists of a noun in the genitive and a postposition. The vast majority of postpositions express spatial relations and share some characteristics with synchronic noun inflection. Together with this, postpositions may contain inflectional affixes that have lost their productivity and are represented in forms that are more or less lexicalised.

The interrelation between reductive changes, syntactic cross-reference and constituent marking is illustratively seen in the morphosyntax of the Livonian postpositional phrase. The intensive phonological attrition that has deeply affected inflectional affixes provides concrete evidence of a shift from affixal marking to a more rigid word order. However, the development of the Livonian postpositional phrase clearly shows that a fundamental property of postpositions, the morphosyntactic locus, is not removed even if the form of a given postposition erodes. The postposition preserves its status as the syntactic head, although its syntactic dependence is no more based on morphology than on juxtaposition. More generally speaking, the Livonian postpositional phrase does not differ considerably from postpositional phrases in other Finno-Ugric languages, although the loss of the genitive(-accusative) case suffix has influenced its morphosyntactic representation.

The loss of the affixal genitive(-accusative) is one of the generators of morphosyntactic change in Estonian, too. This is illustrated by the structural similarities between case inflection and the postpositional phrase, which shows intensive integration. The integration and order of constituents provides a subject for a discussion of the prerequisites for possible morphosyntactic changes in the future. Yet, it appears that morphosyntactic integration reflects morphological simplification rather than the prediction of future processes in the relational marking of the noun.

5. The evolution of the Veps local case system

5.1 Introduction

This chapter discusses morphosyntactic change in the light of the Veps local case system and aims above all at explaining the interaction between form and function in diachronic processes. The two inflectional local case sets that the Finnic languages share, an interior and exterior set each consisting of three cases, have been partly reorganised in Veps. Given that certain inflectional categories (the elative and ablative) have been temporarily lost, this particular chapter is, to a large extent, about the diachronic development of morphology. This process seeks to illustrate the complexity of the development of inflectional suffixes. Basically, this is a typical example of a simple gradual reduction from syntax to morphology.

The introduction will be followed by a historical preamble in section 5.2. Section 5.3 provides an overview of the functional characteristics of the Veps local cases. This will be followed in section 5.4 by a discussion of the interaction between form and function as well as the elimination of case syncretism in the development of the Veps interior and exterior local case sets. Some general questions to be deliberated on are:

(a) What morphosyntactic aspects have been the most salient in the development of the Veps local cases?

(b) How are synchronic features transferred diachronically?

(c) How is the morphological encoding of various morphosyntactic properties reorganised when the form of the suffixes is influenced by gradual erosion?

(d) What has been the relationship between language-specific and universal mechanisms in the development of the Veps local case system?

There are two major systemic changes that have interacted in the development of the Veps local case system. The first is the suffixing of a postposition onto a secondary elative and ablative suffix. The second is the reanalysis of exterior local cases, especially the adessive. Here, my main emphasis is laid on the former one and the analysis aims at uncovering the various diachronic details of the suffixing with special emphasis on the difference between change in form and function. The correlation between the reanalysis of the Veps exterior local cases and phonological reduction will be discussed in section 5.3.5. These two processes correspond to more general observations on linguistic evolution, namely, the observation that spatial relations are commonly expressed by suffixed case morphemes of nominal origin. The change from free morphemes to bound morphemes and from free words to affixes is one of the most typical. Furthermore, local case endings have been frequently reported to express more abstract and grammatical functions (Blake 1994: 166–168, Heine 1997, 2001, Huumo 1997, Kilby 1983: 48, Onikki-Rantajääskö 2001).

A historical analysis of the Veps case system has to account for, among other things, the causalities behind the secondary case affixes. A mechanical suffixing of many former postpositions has been observed in several studies (Kettunen 1943: 279–293, 331–333, 1960: 18, 46–47, Felix Oinas 1961, Ojutkangas 2001: 45, 69, Tikka 1992). These studies, however, do not discuss all the aspects involved in the change. Hämäläinen (1958: 86–87, 1961: 92–94) points out that the suffixation of secondary local cases by means of an earlier postposition (cf. Finnish *päin* 'towards; from') has obvious functional constraints and concludes that it took place only in the domain of spatial relations, and after the merger of the inessive and elative and, respectively, the adessive and ablative.

This chapter shares the position of Hämäläinen and assumes the primacy of spatial relations in the diachronic change. The process itself is an illustrative example of old inflectional forms that may reproduce their morphosemantic transparency (Wurzel 1995: 81). Furthermore, the data analysis casts additional light on diachronic morphosyntactic changes such as the suffixing of postpositions and the importance of morphology that influence the development of local cases. The Veps example also elaborates on the reasons for suffixing preference in the domain of local cases.

The suffixing of postpositions is universally common and the process in Veps has parallels in numerous languages with rich local cases, and various languages have been reported to have succesfully protected their local case system against erosion (Stolz 1992: 27). Kilby (1983: 65–66) points out a process similar to Veps in Orok, a Turkic language. An original free word *päin* with a transparent nominal background ($< p\ddot{a}(\ddot{a})$ 'head', cf. Finnish *pää*, Estonian *pea*) could no longer occur as a free form in this function, and gradually became obligatory and semantically less transparent. The change to a bound morpheme limited the syntactic mobility of the given unit, which finally became phonologically integrated and morphologically adapted.

The text records show some divergence in the way the given grammatical unit is manifested. Whether $pai/p\ddot{a}i$ is written together (2) with the word

stem or not (1) probably partly reflects the uncertainty of the collectors in the transcription of the phenomenon at issue. However, it is more important that in both examples the front vowel shape $-p\ddot{a}i$ of the morpheme implies that the word has still preserved its phonological autonomy to some extent, while in (3) the retreat to back vowel position speaks for phonological adaptation and rejection of front vowels in word-final syllables. (In Southern Veps the front vowel is always preserved in the suffix $-p\ddot{a}$).

- (1) *ned metsnika-d tšura-s päi katsu-tazę.* those hunter-PL side-ELAT look-PASS
 'The hunters are looking from a distance.' (MSFOu 100: 2)
- (2) läk-ś hil'l'äštši duba-späi leave-IMPF.SG3 silently oak-ELAT
 '(S)he moved away from the oak silently.' (MSFOu 100: 165)
- (3) läkśi-ška-t'ihe tserkva-spai leave-INCH-PASS.IMPF church-ELAT
 'They began to depart from the church.' (MSFOu 100: 51)

Given that the suffixing of the postposition is almost complete in all dialects and that the morpheme is unambiguously bound in all contexts, the current work approaches this process from a predominantly morphological angle. No special effort has been made to elaborate on the stages in the development of the former postposition that led to it becoming case affix. So, the point is not in the process itself so much as in the various causalities behind it.

The loss of the former elative and ablative cases and the re-establishing of these categories raises the question of how functional properties are transferred in the evolution of form. The changes characteristic of the Veps local cases are illustrated in figure 5.1.

Figure 5.1. Diachronic change of form (cx) and function $(Fc_1 \dots Fc_6)$ in the Veps local cases.

Stage 1

 $Cx [Loc1] \approx Fc_{1A}, Fc_{2A}, Fc_{3A}, Fc_{4A}$ $Cx [Loc2] \approx Fc_{1B}, Fc_{3B}, Fc_{4B}, Fc_{5B}$ $Cx [Loc3] \approx Fc_{1C}, Fc_{3C}, Fc_{4C}$

```
Stage 2
```

```
Cx [Loc1] \approx Fc_{1A}, Fc_{2A}, Fc_{3A}, Fc_{4A}Cx [Loc2] \approx Fc_{1BC}, Fc_{3BC}, Fc_{4BC}, Fc_{5B}, Fc_{6B}Cx [Loc3] \approx \emptyset
```

```
Stage 3
```

 $Cx [Loc1] \approx Fc_{1A}, Fc_{2A}, Fc_{3A}, Fc_{4A}$ $Cx [Loc2] \approx Fc_{1B}, Fc_{3BC}, Fc_{4B}, Fc_{5B}, Fc_{6B}$ $Cx [Loc3] \approx Fc_{1C}, Fc_{4C}$

The local cases are an especially multifarious target for the discussion of language change, because in addition to expressing spatial relations they are closely involved with other semantic aspects. The morphosyntactic description and historical development of local cases provide ample evidence of the interrelations between spatial, instrumental, possessive, temporal and other expressions, and the intertwining of form and function.

The suffixing of a postposition suggests that either the general conditions, such as the tendency to import affixes from syntactic units, universal suffixing preference in cross-linguistic data (see section 3.1), and the typology of Veps are favorable to this, or earlier changes in morphology make further changes possible (Hämäläinen 1958: 86–87, 1961: 92–94), or both. The Veps case paradigm, which contains numerous innovations and subsystems such as various sets of local cases, are illustrative examples of the interdependence between morphological units.

A closer survey of the diachronic development of the local cases has largely been motivated by the same idea that Stolz (1992: 9–15) proposes for his study of local cases: the locality in a noun phrase consisting either of a noun and a case suffix or a noun and an adposition forms a subsystem within its own limits. The assumption to be discussed here is that many changes in the local case system are functionally motivated and actually serve as systemmaintenance operators. The applied data gives evidence of the priority of spatial relations with respect to the semantic extension of local cases in the course of historical change.

The difference between various morphosyntactic changes is clearly seen in the manner in which the case syncretism between the two locative (inessive and adessive) and ablative cases (elative and ablative) is disambiguated. The way the process has taken place in two Veps local case sets, the interior and the exterior local cases with correspondencies in other Finnic languages, is often not identical.

Geographically, the suffixing of the given postposition (cf. Finnish *päin*) is not limited to Veps only, since the geographically nearest and genetically closest varieties, Lude and Olonetsian share this feature (Kettunen 1960: 18, 46). The details of this process in these two languages are not discussed in detail, because it would completely turn this study into a dialectological analysis. Finnic varieties other than Veps will mainly be left out of the following discussion.

There would appear to be independent evidence for the assumption that constructions are inherited like phonemes, morphemes or other elements of language (Lass 1997: 265). It has turned out to be difficult to account for crosslinguistic divergence without first accepting the existence of idiosyncrasy. For this reason recent linguistic programmes, such as constructional grammar that attempts to pair form and function, have claimed that while construction is language-specific the cognitive basis of language is universal (Croft 2001: 93). The consequence is that if constructions are language-specific, a given language must obviously have a grammatical basis that is quite resistant to mechanical diachronic erosion. The morphosyntactic analysis of the Finnic adpositional phrase in chapter 4 supports this view in many ways. The postpositional phrases, for instance, seem to be a prevalent resistant adpositional phrase type that maintains the morphosyntactic locus in spite of a strong erosion of affixes. The change to a SVO basic word order in an early stage of Finnic has not led to a massive implementation of prepositions. Rather a specific construction type, the partitive-governing adposition, has been sensitive to change in the order of the adposition and its noun complement.

The development of the Veps local case system was based on the interaction of several favourable preconditions: local cases are affixal (morphology), they express spatial relations (semantics) and they belong to a tripartite set of local cases (systemacy). Naturally, all suffixes are inflectional but the point is that they are often innovations and independent of pre-existing categories, and reflect a universal tendency for suffixing preference. The development of various instrumental and comitative cases in Finnic, for instance, shows how heterogenous the background to these categories often is. In this sense the suffixed comitative in Estonian (*-ga: poja-ga* son-with 'with the son') and the reanalysed translative-comitative in Livonian (*-ks*; see section 6.2) are not inherited categories, although they are affixal. Yet, there are important factors that favour the maintenance of inflectional elements in these languages, namely the generally rich morphology and the preference for postpositions over prepositions. So, inherent characteristics are considered here to be represented in synchronic features that are resistant to diachronic change,

for instance, in the development of a grammatical property that reinforces a pre-existing one or is being reinforced.

The depiction of phonological change will not require any detailed attention, because earlier works (Felix Oinas 1961, Tikka 1992) have been devoted to a description of suffixed Veps postpositions in the light of phonological change. More generally speaking, it is maintained that languages do not normally take prophylactic measures to restrain the eroding effects of phonological change on a case system and they simply employ alternative means such as adpositions to replace former case suffixes (Blake 1994: 171). However, it has long been obvious that phonological methods and sound history are not adequate for revealing the various dimensions of those processes that affect a considerably wider array of grammatical phenomena. The evolution of the Veps local case system is an additional example that contradicts the earlier assumption of circular development in language type from an isolative language towards agglutinating and from an agglutinating language towards flexive etc. The balance between grammatical relations appears to be relevant for reinforcing existing categories and the compensation and eliminating of phonological reduction.

Stolz (1992) investigates in detail the typology of local case systems on the basis of cross-linguistic data. Many of his arguments are based on the evidence of the Finno-Ugric languages, and one of his main conclusions is an implicational hierarchy between local cases. The lative and ablative cases, for instance, are not likely to merge. This accords with Kilby (1983: 55) who claims that if only some locational relations are expressed, simple locations are always included. More generally speaking, the local case systems may vary a lot across languages and it is not easy to outline any universal for local case configurations. Nevertheless, many of Stolz's conclusions find support in historical changes that can be shown, and in the diachronic interdependency between grammatical subsystems, which forms the core of the present study. To put it briefly, local expressions and spatial relations belong to those fundamental elements that a language is supposed to possess (Ojutkangas 2001: 42-43, Stolz 1992: 9). Stolz (1992: 79, 83, 93, 100) actually succeeds in proving a hypothesis according to which structural evolution does not always undergo a strict mechanical reduction and its compensation when he points out that there is no single implicational pattern which causes the local case configurations of different languages.

The current work discusses both language-specific development and general assumptions about locality and spatial relations in language. On the one hand, the analysis of the Veps local case system aims at pointing out general rules that are shared by Veps. On the other hand, the purpose will be to discuss even if this means casting doubt on the validity of some generalisations, and to point out some additional aspects that influence the given inflectional subsystem.

5.2 A review of the historical roots of the Veps local cases

The number of local cases in the Finnic languages can be seen from the summary of case paradigms in table 2.2 in section 2.4. Livonian has only one productive local case set, which historically corresponds to the interior local cases of the other Finnic languages. Veps displays three complete sets, whereas the majority of the Finnic languages have two sets, namely the interior and exterior local cases. A complete set of local cases consists of three elements: a lative, locative and ablative case that distinguish between 'in/on/to', 'in/on/at' and 'out of/off/from'.

In order to avoid misunderstandings concerning terminology, such as the ablative, which is used to refer to one particular inflectional case and a determined morphosyntactic property, I shall use encoded abbreviations to distinguish between the affixes and their functions. In general, one abbreviation corresponds to one form and inflectional case, but it should be noted that a given affix may display several functions, as will be seen in the functional description of the Veps local cases in section 5.3. The encoded abbreviations of the Finnic local cases are presented in table 5.1.

Table 5.1. Encoding of interior and exterior local cases.

LocI + illative	LocI= inessive	LocI – elative
LocE+	LocE=	LocE –
allative	adessive	ablative

The interior local cases (illative, inessive and elative) will be abbreviated as LocI and the tripartite set of interior local cases that distinguish 'to', 'at' and 'from' as LocI+, LocI= and LocI-. Likewise, the exterior local cases (allative, adessive and ablative) will be encoded LocE+, LocE= and LocE-. The notions Loc+, Loc= and Loc- will be used if a feature such as the suffixing of the postposition *päin* in present-day elative and ablative forms is shared between several local case sets. The approximative set of directional local cases (approximative (propinquative), approximative-locative and egressive; for a discussion of terminology, see Tikka 1992: 47–48, Nina Zajceva 1981: 140–150) could be abbreviated LocD+, LocD= and LocD–, but this particular set will not be discussed in this study to the same extent as the other two, because it is of recent Veps innovation and the marker of a local case type originating from a suffixed postpositional phrase (*-nno- < -nlo- < -n + *lō*, cf. Finnish *talo-n luona* house at 'next to the house'). Note also that what is synchronically Loc= may historically originate from Loc= and Loc–. This is testified to especially in the development of the exterior local cases as will be seen in sections 5.3.3, 5.3.4 and 5.3.5.

Each case belonging to the Veps exterior (LocE) and in certain dialects the directional "approximative" (LocD) set has a common marker (*-l*- respectively *-n*-), while the interior set is not as coherent. The illative case (*pert-he* house-ILL) does not display the same sibilant (*-s*-) as the inessive and elative. However, historically the illative is descended from an affix (**-sen*) with the same morpheme *-s*- as the other interior local cases.

LocI	LocE	LocD		
<i>pert-he</i> 'in(to) a house'	<i>perti-le</i> 'for a house'	<i>pertin-noks</i> 'to a house'		
<i>perti-š</i> 'in a house'	<i>perti-l</i> 'on a house'	<i>pertin-no</i> 'at a house'		
<i>perti-špäi</i> 'out of a house	<i>perti-lpäi</i> 'off a house'	<i>pertin-no-späi</i> 'from a house'		

Table 5.2. The local cases in new Standard Veps.

Historically, the local case suffixes consist of two morphemes that indicate the type of local case (interior/exterior/directional) and morphosyntactic property (to/at/from) at issue. The type is indicated by the first affix that allows one to distinguish between *s*-, *l*- and *n*-sets in Veps, whereas the property is marked by the last morpheme. In the elative, ablative and egressive, for instance, it is the suffixed *-pAi* that displays the function 'from'. Naturally, this is a rough generalisation of the Veps local case morphology. However, this distinguishing between type of local case and morphosyntactic property illustrates the morphosyntactic information that the local case endings contain.

The synchronic state of the Veps local case system is not completely unambiguous, which is obvious if one recalls the recent suffixing of the postposition päin and its morphological adaptation in the elative (pätši-spei stove-ELAT 'from the stove'), ablative (kive-lpei stone-ABL 'from the stone') and egressive (perti-nno-späi 'from a house', tserkva-nnopai church-EGR 'from (outside) the church'), which is still unfinished. Similar to many other morphological innovations, the ambiguity of the suffixed päin is caused by a relatively late change from free word to affix and the transparency resulting from its unstable morphological behaviour. The three secondary 'from'-cases that contain the afore-mentioned postposition *päin* may become discontinuous when a possessive suffix is inserted between the marker of the local case type and the marker of the morphosyntactic property and they are detached from one another. In this case the dyadic origin of the case ending is reflected in the order of the constituents: tata-s-eiń-pei tuli-ń father-ELAT1-SG1-ELAT2 come-IMPF-SG1 'I came from my father's (=home)' (Marija Zajceva 1981: 188–189). That construction, which otherwise consists of a noun and a case suffix [N +cx [Loc [Abl]]] is more complicated, because the affix is split into two: [N + cx [Loc] + px + cx [Abl]].

The variation of the 'from'-cases is increased by the fact that occasionally the same suffixed adpositional element is attested in one of the lative cases and, thus, becomes a general marker of directional spatiality instead of expressing 'from' and the kind of morphosyntactic property (Hämäläinen 1958: 85, 1961: 92–93, Kettunen 1943: 366–367, Marija Zajceva 1981: 188, Nina Zajceva 1981: 150–151). Given the functions of *päin* in Finnish and its etymological background, this can be understood as the older meaning of the word. Example (4) drawn from Southern Veps illustrates this characteristic.

(4) *eht-ha-pā* jo-mā tšaju-n
evening-ILL-DIR drink-PL1 tea-GEN(-ACC)
'We shall drink tea later in the evening.' (Kettunen 1943: 366)

Generally speaking, the construction in which *päin* has been suffixed to a lative form ('to') is much less frequent, although it originates from a phonological reduction similar to the suffixed secondary ablative. The priority of constructions that display ablative spatial functions, typically marked by the elative or ablative, is supported by the fact that some postpositions display the suffixed ablative forms with the historical postposition *päin*. This is seen in postpositions that have a morphological marker for the type of spatiality, i.e. a suffix that indicates membership in the interior (*-s-*) or exterior (*-l-*) local case set: *al-päi* 'from under', *boka-späi* 'from beside', *möda-späi* '(from) past, along', *pole-späi* 'from the side of', *pä-lpai* 'from upon', *siŕe-späi* 'from beside'. Occasionally, the element *-pAi* denoting 'from' may occur in postpositions that have lost all trace of earlier inflectional elements such as tagapai '(from)behind' (cf. Estonian taga-nt id.). The suffixed element päin is much more common in those adverbs that display the meaning 'from', such as $edahanpäi \sim edahaspäi \sim edelpai \sim edūpäi$ 'from in front of', nakkapäi 'from there', sespäi 'from inside', $s\bar{s}dp\ddot{a}i$ 'from there', $sigoup\ddot{a}i \sim sigapai$ id., $t'\ddot{a}gap\ddot{a}i$ 'from here', $\ddot{u}l'ahanpai$ 'from upon' than those denoting 'to' edel'ezepai 'further', $sinap\bar{a}i$ '(to) there', tagazepai '(to) behind', $\ddot{u}l'ahakspai$ '(to) upon'.

It is common for local case suffixes to originate from two elements (Kilby 1983: 56–66, Stolz 1992: 42) as the Veps local cases do. The two Proto-Finnic local case sets, the interior and the exterior local cases, are traditionally explained as dyadic, and it is maintained that two affixal elements have merged into a locative (inessive and adessive) and ablative (elative and ablative) forms. They, too, consist of a marker of the local case set and a marker of a morphosyntactic property. The Finnic inessive, for instance, is traditionally reconstructed *s + nA, the adessive, respectively, < *l + nA, the Finnic elative *s + tA, the ablative < *l + tA (Erkki Itkonen 1961: 71–78, Korhonen 1981: 210–211).

Given that the local case system in the Finnic languages can historically be derived from a similar scheme displayed by Standard Finnish and Standard Estonian, two different opinions have been expressed on the present state of the Veps local cases. A more historical viewpoint (Larjavaara 1986, Marija Zajceva 1981, Zajceva & Mullonen 1972) suggests that the interior and exterior local case sets consist of two cases only, a lative case and a syncretic one, namely the inessive-elative, respectively, adessive-ablative. However, the empirical evidence, which is neatly summarised in the conclusions of Kettunen (1943) and Nina Zajceva (1981; applied in Kährik 1988) supports a paradigmatic distinction between the locative and ablative cases as can be observed in table 5.2.

Comparative evidence from the Finnic languages proves that at a common proto-language stage the local case system consisted of two sets, i.e. interior and exterior as illustrated in table 5.1. Livonian, which has only one productive local case set, has preserved traces of the earlier state. The relics of the exterior local case set can be seen in petrified adpositions ($ald(\tilde{o})$ 'from under', $p\bar{a}$ -l'upon', $p\bar{a}$ - $ld(\tilde{o})$ '(from) upon', $siz\bar{a}$ -l 'in(side)', $v\bar{a}i$ -l 'between') and some lexicalised adverbial expressions, such as temporal adverbs ($uondz\bar{o}$ -l 'in the morning') or lexicalised spatial expressions. The latter case is illustrated by lovalt in (5).

(5) jõtā sie jālga lovā-lt uldz
leave.IMP this foot bed-ABL out
'Leave this foot outside the bed.' (MSFOu 106: 112)

As stated, Standard Finnish and Standard Estonian display broadly speaking the same pattern as that from which the Proto-Finnic local case system can be derived. The most consistent type consists of an unbroken tripartite set. Table 5.3 shows the inflection of the local cases in Standard Finnish (Fi) and Standard Estonian (Es). (Cf. also tables 2.2 and 2.3 in section 2.4.)

Table 5.3. The local case forms in Standard Finnish (Fi) and Standard Estonian (Es).

	Interior	local cases	Exterior local cases		
	'house'	Fi/Es	'table' Fi/Es		
Loc+	ILL	talo-on / maja-sse ~ majja	ALL	pöydä-lle / laua-le	
Loc=	INESS	talo-ssa / maja-s	ADESS	pöydä-llä /laua-l	
Loc-	ELAT	talo-sta / maja-st	ABL	pöydä-ltä / laua-lt	

Descriptions of the Finnish local case system commonly refer to three sets instead of two (Lauri Hakulinen 1979: 100–102, Huumo 1997b: 75, Leino 1993: 174–177, Siro 1964: 29–32). These sets are the expected exterior and interior local cases and a set of "general local cases", which contrary to the other two sets supposedly consists of only two cases, the essive and translative. However, this view is more based on historical assumptions than present-day grammatical status (cf. Riho Grünthal 2000: 47). In synchronic grammar they frequently mark the nominal predicate (see section 6.3.3). In fact, it has not been demonstrated that the Standard Finnish essive and translative case endings are descended from the same local case set of some proto-language stage. Although plausible evidence can be found for a locative background to the essive case, the history of the translative is much more complicated. In the light of the more distantly related Finnish and other Finnic languages with the same structure can be dispensed with.

There are several languages that have one, two or more sets of local cases. With a few exceptions almost all Finno-Ugric languages and dialects have at least one complete set of local cases. The Permic languages and Hungarian have the richest case paradigms and they display two to three (some dialects even four) complete sets of local cases, or thereabouts, and additional case-like but less frequently occurring suffixes that express spatial relations.

The difference between the Finnic interior (LocI) and exterior (LocE) cases can be seen in both form and function. This will be demonstrated below in section 5.3. As a rule, the internal s-set is more concrete and spatial relations are more predominant than in the exterior local case set in most Finnic languages. They have been characterised as the dominating local expressions (Alhoniemi 1979: 90-91, Onikki-Rantajääskö 2001: 120). The functional characteristics and grammatical relations expressed by local cases also show considerable variation between individual languages. This is mainly due to the degree to which they have shifted from spatiality towards more abstract semantic roles. Alhoniemi maintains that the Finnic s-set (LocI) has apparently not undergone any essential morphosyntactic changes during its history. In addition to the evidence of the Finnic languages, this view is based on the fact that also Sámic and both Volgaic languages, Mordvin and Mari, have a more or less similar *s*-set of local cases that display predominantly spatial relations. South Estonian is an exception to this rule, because there the interior local cases have eroded more than the exterior, which have preserved their historical shape better (Keem 1997: 24-36).

A frequently held view is that the interior local cases ("*s*-cases") are probably somewhat older than the exterior ("*l*-cases") (Alhoniemi 1979: 90, Bartens 1978: 176, L. Hakulinen 1979: 103–105, Ojutkangas 2001: 70, 120). This view is based on the fact that the *l*-cases, while occurring in Finnic and Permic, are not found in the intermediate Finno-Ugric branches, i.e. Sámic, Mordvin and Mari, whereas they all have the *s*-cases Finnic has. It would thus seem that the *l*-cases are the result of a later convergent development.

Methodologically, however, we cannot exclude the possibility of an old age for the *l*-cases. Actually, with the present-day knowledge of morphosyntactic change, historical morphosyntax, extension and reanalysis we might even venture to argue that if the *l*-cases are more abstract and more grammaticalised, they may have reached a later stage of development than the s-cases and, consequently, may be older than the s-cases. The relationship between the Finno-Permic *l*-cases and a similar element (*l*) in the case system of the Ugric languages is one of the issues in historical Finno-Ugric linguistics that demands further investigation as the observations of Alhoniemi (2001) and Korhonen (1991: 172-174) show. The present state of research leads one to remember that the morphological evolution of insufficiently documentated languages such as the Finno-Ugric languages, for which there are only random documents extant from before the late Middle Ages and no literary records prior to the second millennium A.D., need not be as black-and-white as data from some modern languages suggest. It is most likely that morphological categories, grammatical systems and subsystems have been lost and re-created many times (Erkki Itkonen 1966: 296, Bartens 2000: 79, Korhonen 1996, Tauli 1956, 1966).

A more detailed discussion of the various historical perspectives of the Finno-Ugric case system would take us too far from our original theme. The next section opens up a functional perspective on the development of the Veps local case system and introduces the most important morphosyntactic properties with which the local cases are involved.

5.3 The functional domains of local cases

The prevalence of spatial relations in the local cases is emphasised in the name of the category. However, the semantic roles of the local cases are much more complicated than a one-to-one correspondence of form to function. Local cases often express other grammatical relations as well. Instrumental and possessive relations are the most frequent, although the mutual relationship between the various semantic nuances is far from unambiguous. Both spatial and other relations are synchronically common, but diachronically non-spatial relations may be taken as an indication of semantic extension. The degree to which metaphoric extensions are displayed depends on the local case system in question.

Synchronically the Finnic local cases are used in a wide range of adverbial expressions, of which temporal adverbials are probably most frequent. The local cases are also frequent in constructions that include a body-part noun such as 'hand' or 'head'. The metaphoric extensions of spatial relations are semantically complicated and they form a possible context in which transferring from one of the more basic grammatical relations to another may take place. Given that the goal of this chapter is the discussion of more fundamental changes in the local case system only little attention has been paid to the synchronic diversity of adverbial constructions with which the local cases are involved. The point is that lexical nuances are much more important for the description of various types of adverbial expressions, while there is a considerably smaller number of grammatical relations that influence the functional properties and the diachronic change of the local cases as grammatical entities.

Linguists generally share the opinion that local cases can change to become grammatical. There is also a general tendency that if a language displays inflected nominal case forms in connection with spatial relations, the case is very likely to be that expressing possession (Stolz 1992: 74, Heine 1997, 2001, Koptjevskaja-Tamm & Wälchli 2001: 675–679).

Local cases generally form an entity that is extremely prone to reanalysis and morphosyntactic change. In a recent study on the semantics of the Finnish local cases Onikki-Rantajääskö (2001) argues that as a whole the polysemy of the Finnish local cases cannot be accounted for solely by the extension of spatial relations. She proposes that the paradigmatic group of local cases displays a continuum of meanings that are located in adjacent cognitive domains. Onikki-Rantajääskö's criticism is directed especially at the "localist hypothesis", the assumption that spatial relations come before other properties expressed by local cases. The point is that local cases charaterised by metaphors, form a long semantic continuum in which the case ending defines the limits of a given expression. She maintains (op. cit. 291), on the basis of the uniformitarian principle, that it is unlikely that at some diachronic stage a given case ending expressed exclusively concrete and not abstract relations.

Onikki-Rantajääskö is certainly right, in principle, in many of her observations. Nevertheless, the assumption that spatial relations do not dominate the local cases can be critisised. There seems to be both synchronic and diachronic evidence that in fact spatial relations are the most prevailing semantic feature of the local cases (cf. Kilby 1983). The fact that the LocI most typically express spatial relations as affixes of nouns and postpositions, whereas the LocE are used to express grammatical instead of adverbial properties also speaks for the important role of spatial relations, because the LocI and LocE are functionally far from identical. If the localist hypothesis is not true, why should a diachronic change, such as the one illustrated in this chapter, affect almost exclusively spatial relations.

Example (6), Estonian/Finnish, is a typical illustration of the functional ambivalence of the local cases. The argument (*mul/minulla*) marked by the adessive is in the position of subject and semantically the experiencer of the clause.

(6) Mu-l on külm. / Minu-lla on kylmä.
I-ADESS is cold.
'I am cold.'

In Finnish (Alhoniemi 1979: 93, Huumo 1997b: 77) and Estonian (EKG II 73–74) the adessive is basically used with the meaning "on (top of) something" only if the noun denotes an object, such as a table or a chair, that supports another object. The basic rule is that otherwise an adpositional phrase consisting of a noun + postposition (Finnish) *päälle : päällä : päältä* 'upon' (to/on/from), (Estonian) *peale : pealt* id. will be used.

The following characterisation of the Veps local cases is based on a rather rough grouping of various functions. The relations to be discussed are 1) spatial, 2) temporal, 3) possessive, 4) instrumental, 5) reanalysis of the local cases and 6) other relations. These properties form a typical semantic spectrum of local categories. Note that tense is a property of the verb, although temporal expressions are listed among the functions of the local cases. The local cases and corresponding adpositions in different languages are commonly used in connection with temporal adverbs and corresponding adverbial constructions.

Here, the term temporal refers to a particular construction type characteristic of local cases.

The data on Veps was drawn from texts collected at the beginning of 20^{th} century (MSFOu 100, NEV 1–2). The analysis focuses on the relationship between the Loc= and Loc– that is strongly influenced by the merger of the two categories, reanalysis and morphosyntactic change. Loc+ forms (the illative and the allative) are not elaborated in detail, although, in principle, their functional properties should be discussed in connection with the two other forms. Note also that the current work is not a corpus-based study and the tentative statistics to be presented only serve to explain diachronic process from one further perspective.

The following two tables 5.4 and 5.5 sum up the functions of the Loc= and Loc-. There is no doubt that it would be possible to closely examine the interpretation of many individual cases. Hopefully, the division into several functional domains will succeed in pointing out the interdependence between the horizontal (synchronic grammatical relations) and vertical (inflectional form and diachronic changes) dimensions. The tables apply the encoding system for local cases that was summarised in table 5.1.

The high number in the column "other" functions in table 5.4. is caused by the fact that this group includes local case forms of body-part nouns as in *kädes* hand-INESS 'in the hand' and *päspäi* head-ELAT 'from the head'. These examples total 121 out of the 160 LocI= forms in the column "other", but only 38 out of the 258 LocI– forms. (For further examples and discussion see sections 5.3.6 and 5.4.) The column in the middle indicates the assumed historical origin of the present-day Loc= as the attribute *korktas* that agrees with the noun *kod'ižespai* in (7) only in the type of local case (LocI interior, *s*-set), but not in morphosyntactic property (Loc–).

(7) lad'-i-d sina mindai erigoit-ta itše-iž -- intend-IMPF-SG2you me separate-INF own-SG2 -- korkta-s kod'i-že-spai high-INESS home-DIM-ELAT
'You intended to cut me off from your high home.' (MSFOu 100: 312)

Thus, historically the Loc= may originate from both a former Loc= or a *Loc- as indicated by the numbers. In table 5.4, 31 out of the 336 LocI= forms are historically Loc-, whereas 121 out of the 160 Loc= forms denoting "other" grammatical relations are historically Loc-, that is the elative forms postulated on the evidence of syntactic context and other Finnic languages.

		FUNCTION					
		SPAT	TEMP	INST	POSS	OTHER	TOTAL
FORM	LocI=	336	12	2	7	160	= 517
	*Loc=/ *Loc-	305/ 31	12 / 0	0/ 2	7 / 0	39/ 121	
	LocI-	210			10	38	= 258
	TOTAL	546	12	2	17	198	= 775
		70,45%	1,55%	0,26%	2,19%	25,5%	= 100%

Table 5.4. The functions of the inessive (LocI=) and elative (LocI–) in Veps. *Loc= and *Loc– distinguish between the historical form of the present-day LocI=.

Table 5.5. The functions of the adessive (LocE=) and ablative (LocE–) in Veps. *Loc= and *Loc– distinguish between the historical form of the present-day LocE=.

		FUNCTION						
		SPAT	TEMP	INST	POSS	REAN	OTHER	TOTAL
FORM	LocE=	137	232	267	137	209	3	= 985
	*Loc=/ *Loc-	129/ 8	232/ 0	267/ 0	137 / 0		1/ 2	
		13.91%	23,55%	27,11%	13,91%	21,22%	0,30%	= 100%
F(LocE-	64	0	0	8	1	4	= 73
	TOTAL	201	232	267	145	209	4	= 1058
		19,00%	21,93%	25,24%	13,71%	19,75	0,4%	= 100%

In table 5.5 the abbreviation "rean" denotes a special type of reanalysed LocE= (see section 5.3.5) that affects the use of the LocE and deserves special attention. Note that LocI= (table 5.4.) does not share this change with LocE=, for which reason table 5.4 does not include a corresponding column.

The statistics in these two tables confirm the assumption that the LocI are more commonly used to express spatial relations than the LocE in Veps. The functional division of the exterior local cases is reflected in the diachronic development of the inflectional paradigms: although the exterior local cases clearly form a tripartite system just like the interior ones, this is valid only in the domain of spatial relations. The instrumental use of the local cases affects only the Loc= forms, whereas the opposition between the Loc+ and Loc=, respectively, Loc= and Loc-, is not relevant if the affix displays instrumental relations.

As regards the possessive functions, the tripartite system is more important. This is indicated by the fact that one may occasionally encounter constructions such as Loc–[Poss]. Nevertheless, expressing possessive relations is clearly less prevalent than expressing spatial relations. On the one hand, this is to be expected considering the assumed shift from more concrete towards more abstract functions. On the other hand, the re-establishing of the Loc–[Spat] in Veps provides concrete evidence of the importance of spatial relations for the diachronic processes of local cases. The localist hypothesis seems well motivated.

It is worth emphasising that the superficially neat classification of the functions of the local cases above is based on a relatively rough generalisation. The numbers will therefore have to be interpreted prudently, because the distinctions between various categories are often shallow. I shall continue by deciphering the various types that were summarised in tables 5.4 and 5.5.

5.3.1 Local cases and spatial relations

The paradigmatically complementary relations of the tripartite local case systems is illustratively seen in spatial expressions, such as adverbials that denote a concrete location and display alternatively Loc+, Loc= and Loc-. The principal difference between the interior and the exterior local case set is that the former indicates a location inside a given entity, whereas the latter denotes location upon a given entity, on top of something. In practice the border between these two types is often ambiguous. The three interior local cases marking spatial relations are illustrated by LocI+ in (8), LocI= in (9) and LocI- in (10).

- (8) hö män-d'he lageda-ha pöud-ho they go-PASS.IMPF flat-ILL field-ILL
 'They went to an open field...' (MSFOu 100: 8)
- (9) *hö* sanu-t'ihe mīse lageda-s poudo-s they say-PASS.IMPF that flat-INESS field-INESS 'They said that on an open field.' (MSFOu 100: 8)
- (10) *tul'-dhe vel'l'e-d metsa-spai*come-PASS.IMPF brother-PL forest-ELAT
 'The brothers came out of the forest.' (MSFOu 100: 11)

In the case of the exterior local cases a tripartite distinction is similarly made with special suffixes. The LocE+ is illustrated in (11), LocE= in (12) and LocE- in (13). (Note that the long vowel in *mägūpäi* has been caused by the assimilation of the marker (-*l*-) of the exterior local case set. The vocalisation of -*l*- depends on the phonological context and quality of the preceding vowel. The affix at issue has been preserved in the position after *i* as in *pätšilpai* 'from (upon) the stove'.)

- (11) made-i-d l'üka-iž ūl'itsa-l'e
 worm-PL-PART push-IMPF.SG3 street-ALL
 '(S)he pushed the worms into the street.' (MSFOu 100: 10)
- (12) *doroga-l l'öuz-i-n lujas sūŕe-n ŕebei-n* road-ADESS find-IMPF-SG1 rather big-GEN(-ACC) fox-GEN(-ACC) 'I found a rather big fox on the road.' (MSFOu 100: 187)
- (13) mina mäg-ūpäi ģokse-n
 I hill-ABL run-SG1
 'I am running downhill.' (MSFOu 100: 223)

As noted, expressing the Loc- in both sets is based on the affixation of -pAi. As demonstrated in tables 5.4 and 5.5 Loc- forms occur much more regularly in spatial expressions than in other semantic extensions of local cases. A consistent conclusion concerning the development of the Loc- is that this category is re-instated when a case ending is used to denote spatial relations.

There are individual cases in which the Loc– is not marked by -pAi, but is identical to Loc=, although one would expect to find a Loc–. These are included in the Loc= column in the two cited tables. These occurrences are illustrated in the next three examples. In (14) the inessive form of the attribute

hetśiš originates from the historical LocI–. If the suffix is morphologically fully adjusted to productive morphological rules, one would expect the result to be case concord between the attribute and the noun *trubaspai*. The lack of case agreement indicates a relatively weak morphological adaptation of the suffixed elative case suffix *-spai*.

(14) razbaińik ńetśi-š truba-spai l'itše-i-he
bandit this-INESS chimney-ELAT force-IMPF-REFL.SG3
pätši-l'e
stove-ALL
'The bandit forced his way onto the stove through this chimney.'
(MSFOu 100: 163)

In section 5.2 it was shown that there are inflectional asymmetries, such as the discontinuity of the two affixes of the Loc– if a possessive suffix is added, which shows that the suffix is not yet morphologically fully adapted. A similar example of the lack of case agreement between constituents of an attribute phrase is seen in the use of LocE= (*hural*) and LocE– (*t'esaralpäi*) forms in (15).

(15) hura-l t'esara-lpäi kond'i kidošta-b left-ADESS crossroad-ABL bear shout-SG3
'A bear is growling from the left-hand side of the road.' (MSFOu 100: 155)

In (16) the situation is considerably different, because the LocI= (*pertiš*) does not occur in an attribute phrase in which the head would reveal the historical form of the modifier. *pertiš pert'he* appears to be a phrasal construction with special structural characteristics.

(16) *l'ähto-ba küla-d möto, perti-špert'-he käu-taze*go-PL3 village-PART along house-INESS house-ILL go-PASS
'They are beginning to wander through the village from house to house.' (MSFOu 100: 105)

In general, the Loc=[spat] forms, such as in (14–16) unlike an expected Locare not particularly frequent. Their statistical importance is diminished by the fact that they often occur in attribute phrases. This is the most characteristic reason for a lack of case agreement between the attribute and the noun as indicated above in (14) and (15), although case agreement is normally very regular in attribute phrases. Some recently suffixed case affixes, such as the approximative (propinquative) and comitative in Northern and Central Veps may display case concord (Tikka 1992: 141, 159). An example of the case concord of the Northern Veps secondary comitative is presented in (17).

(17) *keskmäiže-nke ńeitše-nke pań-i-he magat-ta* middle-COM maid-COM put-IMPF-REFL.SG3 sleep-INF '(S)he went to sleep with the middle maid.' (MSFOu 100: 94)

Although the attributes *ńetśiš* in (14) and *hural* in (15) above do not correspond to the expected form an agreeing attribute would take, they are not completely in disagreement, either. Following the assumption (cf. section 5.2) that the local cases display two important morphosyntactic features by indicating both type of local case and morphosyntactic property, we may conclude that the given attributes actually do agree to some extent. Here, too, the dyadic origin of the Loc– case affixes is reflected in that form of the attribute that agrees in type [LocI], respectively, [LocE] of local case set, but does not agree in property [Loc–].

5.3.2 Local cases and temporal adverbials

The expressing of temporal adverbials by means of local cases and suchlike is very frequent in both Finno-Ugric and in the world's languages in general (Bartens 2000: 105, Ojutkangas 2001: 155). In the Finnic languages, this is characteristic of both the LocI and especially the LocE, although the use of the LocI in temporal adverbials must be considered quite marginal. An example of both the LocI= *ńedalis* in (18) and the LocE= *öl* in (19) illustrates this characteristic.

- (18) neižne ni sö-ške ni jo-ške ī kahte-s girl NEG eat-FREQ NEG drink-FREQ NEG two-INESS nedali-s week-INESS
 'The girl neither ate nor drank for two weeks.' (NEV 1: 90)
- (19) *tul'-i-ba üht'ū ö-l* come-IMPF-PL3 one.ADESS night-ADESS 'They came one night.' (MSFOu 100: 224)

Note that here temporality is a lexical feature of the noun (*nedalis* 'in a week', *öl* 'at night') and not a property of the case affix as suggested by some earlier descriptions of local cases in various Finnic languages.

Diachronically and from the viewpoint of the present chapter, the use of local cases in temporal adverbials is not very relevant and does not have any wider importance, although temporal adverbials are reported to form a considerable percentage of all the LocE occurrences in table 5.5.

5.3.3 Local cases and possessive relations

Compared to concrete spatial relations involved with various expressions of space and place, possessive relations are much more abstract, more grammatical and often more difficult to illustrate, because their morphosyntactic information is not as concrete as that of spatial expressions. Although in Standard Estonian and Standard Finnish extension to include possessive relations is very characteristic of the exterior local cases (EKG II 63–64, Auli Hakulinen & Fred Karlsson 1979: 96–97, Huumo 1997b: 74, 1998, Koptjevskaja-Tamm & Wälchli 2001: 675–679, Vainik 1995, Vilkuna 1989: 169–175), the interior local cases tend not to express possession in Finnic.

The use of local case endings as markers of possessive relations is not restricted in Finnic languages only, but occurs in other Finno-Ugric languages, too (Inaba 1998). This way of expressing external possession that is formally identical with the expression of spatial relations is universally frequent (Heine 1997). The diachronic implication is that possessive constructions often originate from spatial expressions. The semantic motivation for the metaphoric extension of spatial expressions is based on a cognitive process in which the possessor is conceptualised as the location of the possessed (Heine 1997, Huumo 1997b: 78). Heine claims that possession as such is not an independent and self-contained domain, but exhibits a number of systematic relationships with other domains of human conceptualisation.

It is common that if the allative (LocE+), for instance, starts to lose its local denotation, it will take functions typical of the dative (Stolz 1992: 90). This is illustratively seen in the use of the adessive in Estonian, although it occurs sometimes in spatial and temporal constructions, as well. It has been assumed that the reanalysis of the adessive has been supported by loss of the genitive case ending and that the adessive has taken over functions that were earlier expressed by the genitive (EKG II 63–64, Huumo 1995: 72–75, Klaas 1994, 1996, Zsuzsanna Oinas 1993: 537–542, Ojutkangas 1998: 74–75, 2001: 86).

The expressing of possessive relations, etc., by means of the local cases is characteristic of the Veps exterior local cases as well. Example (20) is a typical illustration of this characteristic of the LocE=.

(20) ukū da ako-u ol'-i
[old] man.ADESS and [old] woman-ADESS be-SG3 koume poiga-d
three son-PART
'An old man and an old woman had three sons.'
(MSFOu 100: 360)

Veps does not diverge considerably from the other Finnic languages in the expression of possessive relations by means of local cases, because they are much more common in the LocE than LocI. However, it is possible on occasion to run into examples in which that relation which is more characteristic of the LocE– is expressed by the LocI– as *ožandeišpäi* in (21). This example also illustrates the conceptual adjacency of possessive and spatial relations, in that the local-case-marked constituent is the source.

(21) saldat ot't' ožandę-i-špäi d'enga-d soldier take.IMPF.SG3 host-PL-ELAT money-PL
'The soldier took money from his hosts.' (MSFOu 100: 159)

The similarity between spatial and possessive constructions can also be seen in the manner in which the exterior local cases distinguish between the properties Loc+, Loc= and Loc- when they exhibit exclusively possessive relations. Instrumental relations, for instance, do not share this characteristic. In (22) the ablative exhibits the LocE-[Poss] as one would expect of a complete LocE set.

(22) *tarbis sa-da kol'mik tsar-* $\bar{i}p\bar{a}$ need get-INF three-rouble tsar-ABL 'need to get three roubles from the tsar' (NEV 1: 28)

The diachronic restoration of the local case paradigm and disambiguation of the merger of the historical Loc= and Loc- does not occur as regularly in possessive constructions as in spatial expressions. Very frequently one finds a LocE= where one would expect a LocE- as in (22). This is seen in (23) in which the Loc= (the adessive) *papil*/is used, although one would presume that the source would be marked with the Loc-. That the ablative is also expected in the given construction is indicated by the Finnish translation in example (24) (*papi-lta*).

- (23) tat häne-s-az papi-l' ot' father he-INESS-SG3 priest-ADESS take.IMPF.SG3 koume sada-d three hundred-PART 'The father took three hundred off the priest as the price for him.' (MSFOu 100: 222)
- (24) Isä ott-i häne-stä papi-lta kolme sata-a.
 father take-IMPF.SG3 he-ELAT pope-ABL three hundred-PART
 'The father took three hundred off the priest for him.'
 (MSFOu 100: 222)

Several questions arise from the diachronic change illustrated in the two latter examples. Should the form *papi-l*|be interpreted as an adessive on synchronic grounds or an ablative on historical grounds? If it is interpreted as an adessive, does it imply a reanalysis of the case ending? Is the change in form reflected in its use?

The reanalysed LocE= column in table 5.5 indicates that a historical LocE– (corresponding to the Finnish ablative) is often represented in a synchronic LocE=. A typical example is presented in (23) above which shows that LocE= in *papil'* denotes the source (from whom) of the money. The Finnish translation *papilta* in (24) discloses the structure that obviously used to display the LocE–[Poss] in Veps, as well. It is obvious that the form has changed notably, while the previous function has been preserved and transmitted by the eroding affix. However, the use of the LocE= in this position is synchronically motivated, too, as will be demonstrated below in section 5.3.5. So, there is no reason to believe that in every single case, such as (23), the LocE= originates from the LocE–. Instead of this a reanalysis affects the use of the adessive.

Synchronic LocE–[Poss] forms, such as $tsar\bar{v}p\bar{d}$ in example (20), occur much more randomly in possessive expressions and are statistically irrelevant (see table 5.5). It is noteworthy that in some studies on Finnish grammar the two Loc– cases are reported to be less frequent than Loc+ and Loc= (Göran Karlsson 1957: 94, 142–143, Onikki-Rantajääskö 2001: 200, Ojutkangas 2001: 200). However, as the reestablishment of a tripartite system distinguishing the Loc+, Loc= and Loc– indicates, the vitality of the Loc– depends more on general morphosyntactic strategies than statistical frequency.

The described divergence leads us to two conclusions. First, the semantic context considerably influences the use of the synchronic LocE–. Ultimately, it is infrequent in possessive constructions. Hence, possessive relations are probably not very important for the suffixing of the postposition and the reestablishing of a productive LocE– ($-lp\ddot{a}i$). Second, the merger of two historical LocE cases, the adessive (LocE=) and the ablative (LocE–),

obviously affects the argument structure in one way or another, which is reflected in the reanalysis of the adessive. Consequently, forms such as *papil'* (LocE=) in (23) above evoke the assumption that some other grammatical relation is more important for the form than its historical starting-point (LocE–). The hypothesis to be discussed below in section 5.3.5 is that marking the experiencer with the LocE= has led to a reanalysis that decreases the effect of the merger of the two historically distinct cases.

After uncovering historical reasons for the shift from spatial to possessive relations, Huumo (1995, 1997b) suggested that actually the Finnish and especially Estonian exterior local case sets have taken over the functions of an early Proto Finno-Ugric lative (later genetive) *-*n*. This conclusion is probably oversimplified, and the development of the adessive and a proto-language-stage lative are not compatible (cf. Leino 1998: 122). The reanalysis of the Veps LocE= is more likely to have been caused by endogenous development in Veps than by the taking over of proto-language stage functions. Huumo's (1997b: 72, 89) conclusion actually supports this view, as he states that in Estonian the *l*-cases seem to be losing their directional properties.

The above analysis of the Veps local cases and possessive relations demonstrates that morphosyntactic change and the shift of functional properties do not occur simultaneously in all circumstances. Functional properties of a historical form, such as the LocE– in Veps, are not transferred automatically. The analysis of the Veps local cases expressing external possession lends support to the assumption (Hämäläinen 1958: 86–87, 1961: 92–94) that the recovering of a tripartite local case system does not take place systematically in domains other than spatial relations.

5.3.4 Local cases and instrumental relations

Not only possessive relations, but also instrumentality is frequently reported to be a semantic extension of local cases (Heine et al. 1991: 52–53). Huumo (1997b: 83) outlines the semantic process that modifies expressions of spatial relations into instrumental ones by stating that a local case enters an anthropocentric system and begins to indicate the participant of the action. Displaying instrumental relations by means of local case affixes is attested in numerous languages and is common to the Finno-Ugric languages as are the previously mentioned extensions of spatial relations. I shall first present some examples of the instrumental use of local cases in other Finno-Ugric languages.

In general, the morphosyntax of instrumental relations and the kind of syntax shows considerable divergence. The instrumental and comitative may be expressed by the same case affix, different affixes or adpositional phrases (see chapter 6). It is common for instrumentality ('with; by') to be expressed by the Loc= in various Finno-Ugric languages (Bartens 2000: 84). In Mordvin, for instance, instrumentality is regularly expressed by the locative case (Al'amkin 2000: 66, Erzyań kel' 2000: 85, GMJa: 166–168) as *alašaso* in (25) from Erzya Mordvin.

(25) *net' čuvt-ne usk-śeź t'e-ste kolhozo-ń* these tree-PL.DEF drive-IMPF.PL3/PL3 this-ELAT kolkhoz-GEN *alaša-so* horse-INESS
'These trees were conveyed by the horses of the kolkhoz.' (GmdJaz 1980: 166)

Similarly to Mordvin, the Samoyedic languages express instrumental relations regularly with the Loc= (Tereščenko 1973: 256–258). Although it is the prevailing form applied, the use of the local cases in an instrumental function is not restricted to the Loc= only. In Mari dialects instrumental relations may be expressed by the Loc+ (Alhoniemi 1969) as is seen in (26), in which a lative form (*imńieš*) denotes instrumentality.

(26) mare-wlä imńi-eš kejä-t man-PL horse-LAT go-PL3
'The men are driving a horse.' (Alhoniemi 1969: 344)

In Veps instrumental use is typical only of the LocE=, just as in Finnish in which it is similarly a productive characteristic of the adessive (Göran Karlsson 1995) (cf. tables 5.4 and 5.5). Example (27) is a indication of the lucrative productivity of the LocE=[Inst].

(27) d'o-t-tazę tšaju-l, kofia-l, votka-l i
drink-CAUS-PASS tea-ADESS coffee-ADESS vodka-ADESS and kaike-l i śo-t-tazę leiba-l i sola-l
all-ADESS and eat-CAUS-PASS bread-ADESS and salt-ADESS
'They are giving tea, coffee, vodka and everything to drink and bread and salt to eat.' (MSFOu 100: 108)

Given the sensitivity of local cases to semantic extensions, one may occasionally run into examples of the Veps LocI= that clearly display an instrumental function. An example of the instrumental use of the LocI= *oruždeiš* is presented in (28). Yet, as table 5.4 above indicates, this kind of use of the LocI is very rare.

(28) ambu-tazę oružde-i-š
shoot-PASS gun-PL-INESS
'They are shooting with a gun.' (MSFOu 100: 119, 128)

Generally speaking, the boundaries of instrumental relations are not quite clear, as those of possessive relations are not clear either. In Veps instrumentality is a property of a limited category, namely the LocE= that unlike the LocE[Poss] displays only the LocE=. This appears to be the most important difference between the possessive and instrumental use of the LocE. The three directions of the local cases have a considerable role in possessive relations, whereas instrumentality is a restricted semantic feature of the adessive. Consequently, other morphosyntactic properties typical of local cases are not relevant in expressing instrumental relations. However, as in the case of possessive relations, the interpretation of instrumental relations expressed by the LocE= is blurred by the fact that many historical LocE- forms have merged with the LocE=. The consequence of this merger is the subject of the next section. The transferrance of earlier functional properties, and the reanalysis of the LocE= are the key questions. The assumption to be discussed is that a reanalysis is motivated from the viewpoint of endogenous change, but the possible influence of language contact must also be taken into consideration.

5.3.5 Exterior local cases and morphosyntactic reanalysis

The reanalysis of the adessive (LocE=) is most evident in cases in which the adessive is the experiencer marker as will be demonstrated below in this section. Furthermore, it is used to indicate the agent in certain constructions. Diachronically both of the earlier LocE= and LocE– forms are involved in this process. However, it is not possible to derive all individual synchronic adessive forms from a historical LocE= or LocE–. The historical distinction appears to be irrelevant for synchronic relations. Consequently, the main emphasis will be laid here on the discussion of the properties of the LocE=.

As has been noted in the two previous sections, the identification of a reanalysis of the LocE= directly affects the way instrumental and possessive relations can be distinguished from one another and other semantic extensions of LocE=. On the one hand, a reanalysis appears to have been almost forced by the erosion of the suffix. On the other, the shift from adverbial functions towards more grammatical ones corresponds to more universal tendencies and gradual abandoning of spatial relations.

When comparing with other Finnic languages, the marking of the experiencer in Veps with the LocE= corresponds to what has been reported

on the use of the adessive in Estonian and its differences with respect to Finnish (Klaas 1994, 1996, Ojutkangas 1998: 74–75, 2001: 86; for data on Estonian dialects see Evald Pajusalu 1958: 255–257). In Karelian a similar adessive-marked (or more precisely, allative-adessive) experiencer occurs in a syntactically more special context (Sarhimaa 1999: 108, 113, 284). More generally speaking, the experiencer is commonly marked by the dative case in many languages (van Belle & van Langendonck 1996–1998, van Valin 2001: 27). As Matsumura (1996a) emphasises the Estonian adessive fulfils the classification requirements of the dative to a great extent. However, also other cases such as the genitive, partitive and allative in Old Literary Finnish may share functions characteristic of the dative (Inaba 2000a, 2000b, 2001, Leino & al. 2001).

The marking of the experiencer with the adessive in Estonian is indicated in (29). A corresponding Finnish construction is presented in (30).

- (29) *Ema-l valuta-b pea*. mother-ADESS hurt-SG3 head 'Mother has a headache.' (Klaas 1994: 38)
- (30) *Äidi-llä särke-e pää-tä.* mother-ADESS hurt-SG3 head-PART 'Mother has a headache.' (Klaas 1994: 38)

The morphosyntactic information in these constructions recalls the way external possession is expressed in Veps (31) (cf. also (20) and section 5.3.3).

(31) uko-l da aka-l ol'-i
(old) man-ADESS and (old) woman-ADESS be-IMPF.SG3 koume t'üt'ar-t
three daughter-PART
'An old man and an old woman had three daughters.'
(MSFOu 100: 39)

However, there are clear constraints on the use of the adessive (LocE=) in certain conditions in some of the cited languages. The difference between the use of the adessive in Estonian and Finnish is transparent in those sentences in which Standard Finnish does not allow the use of the adessive. In (32) the Estonian adessive *laste-l* marks the experiencer, whereas in Finnish, in (33) the LocE= is not possible, because it could also mark instrumentality.

- (32) Ema pes-i õhtu-l las-te-l mother wash-IMPF.SG3 evening-ADESS child-PL-ADESS jalgu. foot.PL.PART
 'The mother washed the children's feet in the evening.' (Klaas 1994: 38)
- (33) Äiti pes-i illa-lla las-te-nsa mother wash-IMPF.SG3 evening-ADESS child-PL.GEN-SG3 jala-t. foot-PL
 'The mother washed her children's feet in the evening.' (Klaas 1994: 38)

In (32) two separate arguments marked by the adessive follow one another, the first in a temporal noun (δhtu -l), the second as a marker of the experiencer (*laste*-l). This is possible, because the Estonian adessive almost never expresses instrumental relations that are regularly marked by the recently suffixed comitative case ending (*-ga*) as in *laste-ga* children-COM 'with the children'. There are only few exceptions to this generalisation, such as *mängis viiuli-l* 'played the violin'. In Finnish the adessive form (*laps-i-lla* child-PL-ADESS) basically allows the interpretation [child + cx[LocE=[Inst]]], but the animacy of the experiencer 'children' is an obvious constraint to this interpretation. This is more concretely understood if a test is made with the word *saippualla* soap-ADESS 'with the soap' (34) added to the sentence.

(34) Äiti pes-i illa-lla saippua-lla mother wash-IMPF.SG3 evening-ADESS soap-ADESS [las-te-nsa] jala-t.
[child-PL.GEN-SG3] foot-PL
'The mother washed the children's feet with soap in the evening.'

Unlike Finnish the Estonian adessive almost never expresses the LocE=[Inst], and this constraint interacts with the triggering of the Estonian adessive as in (32).

In Veps two characteristics of the LocE intertwine in the description of the process at issue. First, as we have seen that the adessive expresses both possessive and instrumental relations. Second, the merging of a historical LocE– with an LocE= integrates some semantic properties of the Loc– with the LocE=. Considering the functions of LocE=, the synchronic viewpoint is decisive as far as current properties are concerned. The historical development demonstrates a certain diachronic drift towards the use of the Veps LocE= as a

marker of the experiencer. This is most illustratively seen in the marking of the experiencer with the adessive (35) as in the Estonian example (32) above.

(35) *bat'a-ze i mama-ze küzu-taze Maša-l* father-SG3 and mother-SG3 ask-PASS Masha-ADESS 'Masha's father and mother are asking her.' (MSFOu 100: 166)

The different diachronic background implies some notable differences in the historical explanation of the Veps LocE=[Inst]. In (35) the adessive (*Maša-l*) could, in principle, originate from a historical LocE–. Here, the compensation of phonological reduction appears to be unnecessary: the relationship to other constituents is indicated by a reanalysed LocE=, as clearly as a LocE– would be. As noted, it is not always necessary or even possible to derive a synchronic LocE= from a historical LocE–. This can be seen illustratively in (36) in which a suffixed ablative (LocE–) *ratshilpai* follows an adessive (LocE=) *hebū*. There is not sufficient evidence that *hebū* has originated historically from an LocE– in this context, in which two LocE– forms would have followed one another without being agreeing constituents of an attribute phrase.

(36) *laski-hezoi hebū ratśhi-lpai* dismount-IMPF.REFL.PL3 horse.ADESS horseback-ABL 'They got off the horse.' (MSFOu 100: 275)

The difference between the reanalysed Veps adessive and the Estonian adessive is also evident in the sense that in Veps the LocE= may occasionally mark the agent in all three dialects, Northern, Central and Southern Veps, although in general, passive forms with an overt agent they are not very common in the Finnic languages. Example (37) is drawn from Northern Veps, while (38) represents Central Veps.

- (37) hebo śö-dud kond'ija-l da händ'ikaha-l horse eat-PASS.PTCP.PST bear-ADESS and wolf-ADESS da d'äniše-l.
 and hare-ADESS
 The horse [was] eaten by the bear, wolf and hare.'
 (MSFOu 100: 152)
- (38) *śö-du om hiŕ-i-l'* eat-PASS.PTCP.PST is mouse-PL-ADESS 'eaten by mice' (MSFOu 100: 282)

In both sentences the LocE= (*kond'ijal, händ'ikahal, d'änišel* in (37), *hiŕil*¹ in (38)) marks the agent of a passive construction. The use of the LocE– as the marker of the agent has some parallels in Finnish. The ablative-marked agent was rejected in Standard Finnish because of conscious language planning as also was discouraged the use of other agent constructions (Lindén 1964). However, in Old Literary Finnish the ablative agent was a common feature, which possibly did not corrupt the grammar as fundamentally as is feared in language planning (Lauri Hakulinen in Lauri Hakulinen & Rapola 1963: 94–95). It was believed to have been caused by Swedish influence (Lauri Hakulinen 1979: 586) and would not therefore be an endogenous characteristic of the language.

In a wider perspective the marking of agent and instrument with the same grammatical element is quite common (Luraghi 2001, Palancar 2002: 164–174, 203–204, Stolz 2001a). So, language contact is a further aspect to be dealt with in the case of Veps. Although there seems to be sufficient endogenous evidence for the use of the Veps LocE= in the described function, foreign influence, i.e. Russian interference, has to be considered, as well. Here, too, it is not easy to distinguish between the various functional characteristics of the LocE, because there are examples (39) in which the syntactic context of the LocE= is ambiguous and the structure corresponds to external possession.

(39) Ol'i tsaŕi-l sauba-tud t'ürm-ha be-IMPF.SG3 tsar-ADESS bolt-PASS.PTCP.PST prison-ILL zmei ulan. snake Ulan
'The snake Ulan had been imprisoned by the tsar.' (MSFOu 100: 175)

The Finnish translation (*oli keisarilla* was czar-ADESS 'the czar had') for (39) in the text collection assumes that the construction in which the LocE= occurs should be defined as external possession. However, the passive participle form *saubatud* speaks for another interpretation, because it is in the role of the predicate and not an attribute of a noun or something else. Here, the LocE= undeniably marks the agent (*tsaŕil*). The use of the LocE= as the agent marker has already been observed by Kettunen (1943: 147–148, 194–195), but the issue has not been elaborated on since then. Kettunen pointed out that an agent may sometimes be marked by an elative, too, although in his opinion the historical ablative is the prevalent marker. The use of the elative (LocI–) as the marker of the agent is illustrated in (40). However, this appears to be quite infrequent and untypical of the LocI.

(40) *leśk om mužika-spei jät-tut*widow is husband-ELAT leave-PASS.PTCP.PST
'The widow has been left by her husband.' (Kettunen 1943: 195)

Because passive forms with an overt agent are not very typical of Finnic languages, one might assume that the use of the LocE= in constructions like (37) and (38) above has been caused by the ubiquitous Russian influence on Veps. What makes this assumption especially tempting, is the fact, that Russian uses the instrumental case to mark the agent as in (41).

(41) *Vetr-om sorva-lo kryš-u*. wind-INST tear-PRET roof-ACC 'The roof was torn away by the wind.'

It would be logical to conclude that the Russian instrumental suffix is the functional source for the Veps agent-marking LocE=[Inst] in (37), (38) and (39) above. As a matter of fact, it is not possible to exclude the possibility of Russian influence in this special case, as Mullonen (1967: 41–42) maintains. Accordingly, Markianova (1981: 30–31) suggests that in certain circumstances even the use of the re-established Loc– forms is due to Russian influence, but this claim is incorrect in the light of the ascribed language-internal processes.

North-western Russian dialects display another construction (42) that is also similar to the Veps examples above, and the contrastive examples of the use of the Estonian adessive that Pihlak (1993: 26) presented for the Russian sentences resembles Veps even more (43).

- (42) *U nego svoja izba postav-lena.* at him own.F cottage build-PASS.PTCP.PST.F 'He has a self-made house.' (Pihlak 1993: 26)
- (43) *Ta-l on oma tare ehitatud.* (s)he-ADESS is own cottage build-PASS.PTCP.PST 'He has a house of his own.' (Pihlak 1993: 26)

The functional correspondence to the Veps adessive is obvious. Nevertheless, the use of the Veps adessive [LocE=] (note, including historical Loc–) should rather be dealt with in a larger framework set out from the morphosyntax of the Veps adessive. The reanalysis of the adessive is evident and it has obviously taken place as a part of an extensive language-internal systemic change or at least have been influenced and supported by it. Although the Russian instrumental and the way to express external possession are a parallel to Veps as an agent marker, it must be noted that local cases such as the locative and

the ablative frequently express agent in cross-linguistic data (Palancar 2002: 155–164, 205–208). Consequently, it is not likely that Russian would be the sole catalyst of all the subsequent changes including phonological attrition of case suffixes. The possibility of an endogenous change must be left open for further investigation, also. This view is also supported by the fact that the Loc– is more or less regularly used to mark the agent in some other Finnic languages, such as the elative in Livonian as in example (44) and in Estonian as indicated by example (45).

- (44) sāl um võ-nd ikš kurē-st apsās-tõd there is be-PTCP.PST one devil-ELAT possess-PASS.PTCP.PST neitst maid 'There was a maid who was possessed by the devil.' (MSFOu 106: 101)
- (45) *Puu-d ol-i-d tormi-st mur-tud.* tree-PL be-IMPF-PL3 storm-ELAT break-PASS.PTCP.PST 'The trees were damaged in the storm.' (Klaas 1996: 48)

Standard Estonian uses the elative for a given purpose as in (44), but South Estonian dialects mark the same relation with the ablative (Kettunen 1924: 64). In the case of Livonian, Russian influence is quite out of the question. In the case of Estonian a direct comparison with the neighboring Indo-European languages, especially German, must be considered. However, there is another alternative in Estonian that is syntactically closer to the German way of marking the agent with the preposition *von* (*von mir gemacht*| 'made by me'), namely the postposition *poolt* (*minu poolt tehtud*| 'made by me') (EKG II 65–66, 138). So, the occurrence of the elative-marked agent has to be based on a further consideration of grammatical interrelations, which would take us too far from the original subject.

Generally speaking, the fact that the LocE is used to express a wide range of semantic roles makes the picture quite complicated. However, this divergence takes a more logical shape in the light of the diachronic changes described. The illustrated examples have aimed at showing the manner in which the Veps LocE= has changed and evolved typologically.

5.3.6 Other semantic roles of the Veps local cases

In table 5.4 a considerable number of LocI are reported which express "other" than one of the major grammatical relations characteristic of the local cases

that have been described above. The column "other" mainly represents two construction types. The first is compatible with the use of the local case endings in temporal adverbials, since it represents a lexically conditioned use of the local cases. The lexical category at issue consists of body-part nouns denoting entities such as 'hand', 'head' and 'side'. The difference with respect to temporal adverbials is that the LocI[~ body-part] may alternate between Loc+, Loc= and Loc- just as in the case of spatial relations and, thus, is not restricted to solely one property of the LocI. However, the picture is diachronically more complicated here, because an assumed historical LocIhas merged for the most part with the LocI= (121 occurrences in the data). A secondary LocI- occurs much more seldom, but too often to be an exception or the result of slips in coding errors (38 occurrences in the data). The body-part nouns have special importance in the diachronic development, because they frequently become adpositions, which has happened in some Finnic languages, too (Ojutkangas 2000, 2001; see table 4.2 and section 4.5.1.6). For this reason, body-part nouns are presented in the column of "other" functions in table 5.5. However, basically the task of local cases attached to body-part nouns often does not differ much from those that simply indicate a concrete spatial relation. Examples will be listed below.

The use of the inessive (LocI=), historical elative (LocI= < LocI–) and synchronic elative (LocI–) in connection with body-part nouns is illustrated in the next three examples. The first (46) illustrates the LocI= (*toižes kädęs*), the second (47) represents the merger of a former LocI– with LocI= (*kädęs*), whilst the third (48) presents an example of a secondary LocI– (*päspäi*).

- (46) toiže-s kädę-s pida-b -- leiba-n
 other-INESS hand-INESS hold-SG3 -- bread-GEN(-ACC)
 `[(S)he] is holding bread in the other hand.'
 (MSFOu 100: 115–116)
- (47) pervej drušk otta-b žeńiho-n i matchmaker take-SG3 bridegroom-GEN and *ńevesta-n kädę-s* bride-GEN hand-INESS
 'The matchmaker is taking the bridegroom and the bride by the hand.' (MSFOu 100: 115–116)
- (48) *netse d'evotska-ine segla-n pä-späi heit'.* this girl-DIM riddle-GEN(-ACC) head-ELAT throw.IMPF.SG3 'This girl emptied her head of the riddle.' (MSFOu 100: 248)

The way LocI= is used in (46) *toiže-s kädę-s* 'in the other hand' is actually completely compatible with those constructions expressing a concrete spatial relation. Similarly, other concrete body-parts, such as 'back' (*selga-s* back-INESS 'at the back') (49) or 'neck' (*ńiška-s* neck-INESS 'at the neck') (50) often use LocI= to indicate a concrete location. Yet, in texts 'hand' and 'head' occur more frequently than others such as 'back' and 'neck'.

- (49) *kašal' selga-s, dubin üht'e-s kädę-s* knapsack back-INESS staff one-INESS hand-INESS 'a knapsack on the back, a staff in one hand' (MSFOu 100: 257)
- (50) netse murźei homaitš hänū ńiška-s this bride – notice.IMPF.SG3 (s)he.ADESS neck-INESS rana-n wound-GEN(-ACC)
 'The bride noticed a wound in his neck.' (MSFOu 100: 226)

As regards the diachronic development of the local cases, the body-part nouns do not display secondary Loc– forms as is the case with more basic spatial relations. Example (47) illustrates the change that occurs in the way that the body-part noun *käde-s* 'in hand' is related to other arguments, if the secondary elative (LocI–) is not used. The local case-marked constituent is actually in the position of an object, which decreases the importance of the earlier morphosyntactic information marked by LocI–. However, in (51) displaying a LocI= *sel'ga-s* and (52) displaying a LocI– *sel'g-i-špai* the alternation is probably partly caused by the fact that the morphosyntactic change is still in transition and LocI– forms that synchronically correspond to LocI= have not completely lost their earlier morphosyntactic properties, yet.

- (51) ota-n sel'ga-s remni-n
 take-SG1 back-INESS strap-GEN(-ACC)
 'I am taking the strap from the back.' (MSFOu 100: 273)
- (52) sel'g-i-špai remńi-d ando-i-tai
 back-PL-ELAT strap-PL give-IMPF-PL2
 'You gave the strap off your back.' (MSFOu 100 278)

Adverbial constructions that equate the value ('x is worth y') or capacity ('x made of y') of two nominal constituents form another important way to use local cases, or more precisely, the inessive (LocI=), that has been presented in the column of "other" functions in table 5.4. The LocI= which is descended from the historical merger of LocI= and LocI-, and that is prevalent in the

synchronic LocI=[other] forms in table 5.4 (121 out of 160) is often used in constructions that equate two nominal constituents, in addition to being attached to body-part nouns as in (46-52).

In (53) the LocI= form (*tsolkovia-s*) is a equated with the object (*gänišan*) "the hare is worth a ruble". (Cf. also (23) above.) In other words, the LocI= marked form *tsolkovia-s* is semantically comparable ("is worth") with the object *gänišan*. The Southern Veps example (54) illustrates the type "is made of" ('becomes') as exemplified with *pakitšeja-spā*. The latter type (54) is semantically closer to the basic spatial relations than the previous one (53).

(53)	netse-n	п	nina	ģäniša-	п	riko-n	kivū
	this-GEN	I(-ACC) I		hare-GE	N(-ACC)	kill-SG1	stone.ADESS
	i	mö-n	tsc	olkovia-s			
	and	sell-SG1	[si	lver] rub	le-INESS	5	
	'I shall l	kill that h	are v	vith a sto	ne and s	sell it for	a silver ruble.'
	(MSFO	u 100: 254	4)				
$(\boldsymbol{\boldsymbol{\Gamma}} \boldsymbol{\boldsymbol{A}})$,	11		_ /	11,	1.,~ .	

(54) nügüt teģ-he mugōńe bohat pakitšeja-spä now do-REFL.SG3 such rich beggar-ELAT 'Now the beggar became such a rich [man].' (NEV 1: 56)

If the development of the local cases is considered as a whole, it is obvious that the use of these in various functions can plausibly be accounted for diachronically as extensions of spatial relations. As some examples, such as (48), (52) and (54) show, the suffixed and secondary LocI– has begun to spread analogically especially in Southern Veps, but it is quite irregular in other than spatial expressions as is to be expected of a newly grammaticalised entity. The synchronic LocI– in these three examples is better understood as an analogical extension of the LocI–[Spat] than a diachronic complementing of the merger of the LocI= and LocI– in these particular constructions.

Many of the questions emerging from the data have been discussed in section 5.3. What is presented above in this section sums up the influence of two effective reductive changes that have strongly affected the evolution of the typology of spatial relations and especially the local case system in Finnic. First, the phonological reduction has led to syncretism between forms that belong to the same domain (spatial relations) and inflectional subsystem (local cases). Second, the attested attrition triggers a syntactic reanalysis of the eroded form, a typical shift towards more abstract meanings and expressing semantically those relations that are more grammatical. These two processes are illustratively seen in the development of the Veps local case system. Third, I shall seek to outline the evolution of the Veps local case system briefly from a more theoretical perspective. The following section focuses on the diachronic interdependence between the Loc= and Loc-, their merger and the recovering of the distinction between the two categories that was established in the preceding analysis.

5.4 The merger of case suffixes and compensation

Each local case has its individual characteristics, but the systemic nature of this category is seen in the re-establishing of the tripartite system in both the interior and exterior local cases. Though frequent in languages that display local cases, the merger of two cases seems to corrupt the systematicness of the local cases in some way. The semantic grounds for re-establishing the opposition are obvious and lend considerable support to the assumption of the primacy of spatial relations with respect to others.

It is still necessary to discuss the importance of syncretism and the identity between two forms, i.e., the historical merger of the Loc= and Loc-. The merger of the Veps inessive and elative, respectively, adessive and ablative, was caused by apocope and the resulting syncretism obviously increased morphosyntactic cumulating on the merged form, although syncretism between various local cases is universally common. In Veps, however, the loss of the Loc- was compensated by a secondary Loc- case affix.

The question that then arises is what it is that ultimately triggers the compensation for the loss. In languages with SVO and SOV basic word order, which are the most relevant to Veps, suffixes are statistically frequent and much more common than are other affix types. The suffixing of a former postposition also corresponds to the assumption that morphological units have a syntactic background. The third motivation reported for suffixing preference is psycholinguistic, i.e. the naturalness of the constituent order. The development of the Loc– in Veps suggests that systematicness plays a significant role in the diachronic process. The change is morphologically motivated, because it reinforces the distinction between morphosyntactic properties typical of spatial relations characteristic of local cases. From a morphological perspective the establishing of a secondary Loc– is compensation for a lost category rather than a therapeutic operation that transfers certain pieces of morphosyntactic information to other grammatical units.

Basically, the syncretism between two cases corrupts the harmony between form and function, because the ideal morphological pattern in which one function corresponds to one form is broken. Although the assumption of a language with a morphological system based on an ideal situation is unrealistic (Heath 1991, Winfred Lehmann 1991: 3), it is obvious that syncretism evokes confusion in a language system by accumulating too much morphosyntactic information on one form (Carstairs 1987: 124). If syncretism between adjacent categories, such as two local case suffixes, is likely to occur, it will probably affect those grammatical relations typically marked by the given affixes. Consequently, syncretism may become a catalyst or is at least a contributor to subsequent change. It has been suggested that the ultimate result of syncretism is that grammatical categories no longer become morphologically marked (Bussman 1996: 470). However, this is not always the case as clearly indicated by the changes in the Veps local case system: the property Loc– ceased to be marked for a while, because no distinction was made between the Loc= and Loc–. At the same time, the local case type (LocI resp. LocE) marker was never lost.

Given the tendency to avoid superfluous morphosyntactic cumulating on primary suffixes, case syncretism is not very widespread in the Finnic languages. Nor is inflectional homonymy in general, i.e., the complete similarity of two forms that may influence many inflectional categories. As an exception inflectional homonymy is very common in Estonian, in which an intensive reduction of the most frequent case affixes led to the merger of many inflectional forms. There are 14 different overlap patterns where inflectional homonymy eliminates the distinction between two Estonian case forms (Viitso 1990: 460-461). This kind of inflectional homonymy is typically unsystematic (alternatively called accidental or random inflectional homonymy). However, the eroding of individual case suffixes, which above all influences the nominative, genitive, partitive and illative, has not led to consistent syncretism between these forms in the case paradigm of Estonian either, because the configuration of inflectional homonymy depends, to a great extent, on the declension type. A closer survey of Standard Estonian data reveals that a language can cope with large-scale inflectional handicaps, such as the merger between two and, in the most extreme case, three object marking cases (the nominative, genitive-accusative and partitive) by relying on compensating pre-existing syntactic means such as case agreement and case government that often eliminate the consequences of the merger of cases (Riho Grünthal 2001, Viks 1984). Compared to most other languages, Estonian is, nevertheless, an exception. A language is not very likely to accept such a widespread inflectional homonymy without special restrictions (Carstairs 1987, Johnston 1997), because the merger of forms would ultimately lead to complete grammatical confusion. In the most extreme case, a given language would considerably weaken its morphological means of relational marking.

The synchronic Veps local case paradigms are not influenced by syncretism and forms are neatly kept apart from one another. However, inflectional homonymy closely touches upon the historical development of the Veps local cases as illustrated in table 5.2 at the beginning of this chapter (cf. also table 2.3 in section 2.4). The role of syncretism is especially interesting,

because it compels us to discuss both the reasons why it is not allowed and the constraints that make it possible.

This identity of forms appears to work differently in synchronic systems than in diachronic change. This is demonstrated by two facts. First, syncretism and inflectional homonymy are widely attested in different languages and as such belong to grammar and morphology. But second, one may assume for good reason that syncretism is not likely to arise just everywhere one would expect it, although it would seem to be the logical result of subsequent change. This could be assumed because of the historical development of the Estonian case system. As noted, in certain noun types phonological reduction has led to the merger of the nominative, genitive-accusative and partitive. Ultimately, the illative should have merged with all three others, but this has been prevented by the spread of analogical illative affixes (Riho Grünthal 2002: 28-29, Kettunen 1962 (1929): 92-93, 217). Paunonen (2003: 217-221) shows that the threat of syncretism has clearly influenced the diachronic development of noun inflection in South-west Finnish dialects and is compatible with Estonian. Like Estonian, these dialects even display some flexive forms that, finally, have contributed in avoiding syncretism.

Generally speaking, it seems necessary to distinguish diachronically between a *realisational* and a *non-realisational* type of syncretism. The former is represented in the synchronic identity intertwined in two or more case forms (for examples and discussion, see section 4.6.2.1). The latter, the syncretism that one would expect on the basis of phonological development, is rejected for some reason. Non-realisational syncretism is one of those invisible modules in diachronic change that affect morphosyntactic change.

The appearance of syncretism is unpredictable, because it typically results from phonological erosion. Realisational syncretism and synchronic inflectional homonymy always influence the making of distinctions between various units and reduce the functionality of affixal marking. This process extends to grammatical relations marked by these units as well as the semantic interpretation of clause arguments.

Infletional homonymy and the relationship between two identical case endings and the polysemy of one affix will be discussed in chapter 6, too, in connection with the Southern Veps prolative-comitative and Livonian translative-comitative. The development of these affixes illustrates the difficulties in distinguishing between syncretism and reanalysis, that is, the semantic extension of case affixes. The next section returns to aspects involved in the evolution of the Veps local case system. The key question, here, is whether and when case syncretism provokes subsequent morphosyntactic changes.

5.4.1 Syncretism between local cases

If inflectional homonymy occurs in a language, then a hypothesis must be established showing how the language can develop non-morphological means in order to express those morphosyntactic properties that are mostly affected by the identity of forms (Carstairs 1987: 124). Veps provides evidence concerning how the effect of syncretism can be disambiguated by morphological means. The recovery of pre-existing categories supports its inflectional structure and decreases the effect and speed of reductive changes, although it externally resembles the mechanic morphologisation of a syntactic unit with no evident interdependence linked to other changes.

As languages do not always follow the most logical and systematic course of development, it is common for a tripartite local case set to be incomplete and a language to display only two local cases (Stolz 1992: 77–104). Korhonen (1996 (1975): 145–152) discusses the mutual hierarchy of the Finno-Ugric local cases in terms of markedness and maintains that the lative is unmarked compared to other local cases. However, as a rule, there is no general concept that would universally explain what local case is prior to the other local cases. The clearest typological implication is that a language tends to avoid syncretism between the lative and the ablative cases (Stolz 1992: 89), i.e. the merger of the Loc+ and Loc–, the two edges of an ideal tripartite system, while the locative cases are more stable. If anything, the locative should therefore be classified as the core of local cases. As Kilby (1983: 55) puts it: if only a few locational relations are expressed in a case system, they will always include simple location.

It is maintained that the fewer the morphosyntactic properties, such as case, number, gender, person, etc., are included in the morphological affixes, the more unlikely systematic homonymy becomes. The more cumulative the inflectional forms are, the more likely systematic homonymy will be to occur (Carstairs 1987, Haugen 1982: 88, Plank 1991a, 1991b, Johnston 1997). Carstairs (Carstairs 1987, Carstairs-McCarthy 1992: 204-205) concludes that a) cumulative homonymies are much commoner than non-cumulative ones, b) in non-cumulative homonymies, the realisation of the homonymous properties nearly always looks like that which is usual for just one of these properties in other contexts, and c) in non-cumulative homonymies, at least one of the contextual, or dominant, properties is less relevant than the homonymous properties. This may be verified easily by empirical morphological data. Languages with morphosyntactically cumulative forms such as object conjugation in Mordvin and Tundra Nenets display systematically inflectional homonymy (Keresztes 1999, Tapani Salminen 1997). The Erzya Mordvin present tense form *pala-tadiz* of the verb *palams* 'kiss', for instance, may get six different interpretations depending on the context (subject/object): kissPL1/SG2 'we kiss you (one)', kiss-PL3/SG2 'they kiss you (one)', kiss-SG1/PL2 'I kiss you (many)', kiss-SG3/PL2 '(s)he kisses you (many)', kiss-PL1/PL2 'we kiss you (many)' and kiss-PL3/PL2 'they kiss you (many)' (Keresztets 1999: 18).

The merger of the former Loc= and Loc- in Veps was reviewed in section 5.3, as well as the semantic characteristics involved in the rise of syncretism and accidental homonymy. This merger took place most consistently where the local cases expressed other than spatial relations.

Since apocope is a relatively common phenomenon in various Finnic dialects, individual examples of case syncretism have been reported from many parts of this language area (cf. table 2.2 in section 2), and Sámic (Kettunen 1960: 17–18, Korhonen 1981: 222–223, Sammallahti 1998: 66–69, Tikka 1988: 82–83). The configuration of local case patterns may alternate in adjacent varieties. Karelian proper and Olonetsian, for instance, do not distinguish between the LocE+ and LocE=. The first uses a historical LocE= to denote both Loc+ and Loc=, whereas the latter displays a historical LocE+ for the same purpose (Kettunen 1960: 17–18). In the vein of this case syncretism, Olonetsian displays a similar secondary Loc– as do Veps and Lude (Kettunen 1960: 18).

In North Sámi and the more eastern Sámic languages the Loc= and Loc- have merged, whereas the Loc+ is distinguished from them. The more western/southern Sámic varieties display a complete tripartite system (Bartens 1972, Erkki Itkonen 1966: 263, Korhonen 1981: 221–224, Sammallahti 1998: 66–67). In North Sámi the merger of the Loc= and Loc- is evident in postpositions, too, although they may display different suffixes that were originally unaffected by the development that brought about the syncretism in the local cases, for instance, (*n*)ala 'on(to)', (*n*)alde 'on, off', vuollái '(to) under', vuolde 'under, from under' (cf. table 4.1 in chapter 4). North Sámi adpositions have thus adopted the configuration characteristic of local cases, although they need not display the same affixes.

Considering local case marking strategies in Finnic and more remote related languages, the local cases in the Finno-Permic languages have much in common (Alhoniemi 1985, 2001, Bartens 1999, 2000, Rédei 1996). It is probably Mari that deviates most, because the inessive (the only Loc= in Mari) is historically derived from a form that corresponds to the Finno-Volgaic elative (*-*stA*). (The proposal that the Permic elative descends (cf. Udmurt *gurti-śt-im* village-ELAT-SG1 'from my village') from the same proto-form as the Finnic elative has been rejected on phonological grounds (Bartens 2000: 85).) Attempts to explain the Mari inessive simply as a descendant of a Loc= are not plausible. As Rédei (1996: 258) and Alhoniemi (2001: 98) suggest, it is more likely that the two local cases have merged.

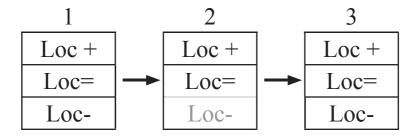
The reconstructed development in the Mari local case system corresponds to what has been reported from other languages and actually corresponds to the merger of the Loc= and Loc- in North Sámi and the more eastern Sámic languages. Unlike Sámic, Mari has undergone additional changes to fill the gap in the tripartite local case set. Finally, the original Loc- was reanalysed as a Loc= and further study led towards a secondary distinguishing of the Loc- by syntactic means (Alhoniemi 2001). This development in Mari corresponds exactly to the morphosyntactic change in the Veps local case system, although the morphological adaptation and adjustment of the morphologised item is not as clear in all its details as Veps.

In Veps the merger of two cases is visible in some present-day forms, too, as demonstrated by various examples in section 5.3. Non-spatial relations are of special importance in this respect. Other Finno-Ugric languages and cross-linguistic evidence on local case systems show that a bipartite local case system would have been entirely possible in Veps. Yet, it has re-established the distinction between the Loc+, Loc= and Loc- as summarised in tables 5.4 and 5.5 above. Obviously, the development of the Veps local case system provides an example of the elimination of case syncretism that has preserved a configuration very characteristic of local cases. The next section sums up the processes illustrated and provides evidence concerning the localist hypothesis and the primacy of spatial relations.

5.4.2. Functional constraints in recovering the local case system

The development illustrated so far appears to result from close cooperation between form and function. Various modules that affect the morphosyntax and the morphosyntactic representation of grammatical information are involved in this. The course of development of the LocI and LocE in Veps is summed up in figure 5.2, which focuses on diachronic change, not the actual state of language.

Figure 5.2. The development of the LocI and LocE in Veps.



An important systemic change that took place during stage two concerns the merger of the Loc= and Loc-, which simultaneously ended the tripartite local case system and brought about inflectional homonymy between the two adjacent categories. Although the formal distinction is reestablished in stage 3, the actual morphosyntactic state does not completely correspond to stage 1. The syntactic reanalysis of the Veps LocE=, for instance, as explained in section 5.3.5 followed stage 1, but preceded stage 3. Consequently, the recreation of the formal opposition between the Loc= and Loc- is not completely compatible with stage 1.

As has been repeatedly emphasised, the evident conclusion is that the Loc– has been reestablished, when it denotes spatial relations. This corresponds to the view that morphological rules are attached to preexisting categories in language (Anderson 1992: 362), and shows how the morphosemantic transparency of a given suffix increases in a diachronic change that re-establishes a temporarily lost inflectional category (Wurzel 1995: 77–87). In the process illustrated the exact morphosyntactic information of a pre-existing category is the Loc–[Spat]. Relations other than spatial displayed by the former Loc– merged with the Loc= and participated in a reanalysis of LocE=. This diachronic process is presented in the schematisation of the development of the LocE in table 5.5.

		FUNCTION				
FORM	1. LocE+	spat	Ø	poss	Ø	
	2a. LocE=	spat	instr	poss	reanal	
	2b. (LocE–)	Ø	Ø	Ø		
	3. LocE–	spat	Ø	Ø/poss	Ø	

Table 5.6. The development of form and function in the Veps exterior local cases (LocE).

The first LocE– row (2b) indicates the historical LocE– that merged with LocE=. The lower LocE– (3) shows the syncronic state, in which the reestablishing of the LocE– has taken place but only in the vertical column of spatial relations. The percentage of non-spatial relations expressed by the Loc–, such as LocI–[Poss] and LocE–[Poss] is so marginal with respect to the LocI–[Spat] that they are undeniably hierarchically secondary to the latter. Diachronically, the use of the Loc- in other than spatial relations is based on the semantic extension of the Loc-[Spat].

This assumption is supported by the use of secondary Loc- forms in other forms that express spatial relations, such as newly suffixed cases like the egressive e.g. *d'edaze-nnupai* in (55) and postpositions e.g. *alpäi* in (56) and *tagapäi* in (57) below. The third Veps set of local cases, the approximative set (LocD) illustrated in (48) displays mainly spatial relations as well, but is functionally more limited compared with the two other local case sets.

- (55) i siga-pai häńe-n vel'l' ol-i tul-nu and there-DIR (s)he-GEN brother be-IMPF.SG3 come-PTCP.PST mugažno voin-ha d'eda-ze-nnupai also war-ILL uncle-SG3-EGR
 'And her/his brother had similarly come to the war from there, her/his uncle's [place].' (MSFOu 100: 8)
- (56) *hīrut i tul'-i pätši-n al-päi...* mouse also come-IMPF.SG3 stove-GEN under-DIR 'The mouse came out from under the stove.' (MSFOu 100: 75)
- (57) ot't' l'ubj-i sunduga-n taga-päi i take.IMPF.SG3 rise-IMPF.SG3 trunk-GEN behind-DIR and l'äk-s lava-l'e
 go-IMPF.SG3 floor-ALL
 '[Masha] stood up behind the trunk and went to the floor.'
 (MSFOu 100: 165)

In *sigapai* in (55) and *tagapäi* in (57) *-pAi* marks the Loc– as expected, while there is no marker of type for the local case. The third postposition *alpäi* in (56) actually corresponds to the ablative form in case paradigms (cf. tables 2.3 and 4.1).

It has been proposed that rule-governed morphological productivity may better account for the morphological processes than analogy (Bauer 2001: 97). On the basis of the diachronic evidence of the Veps local case system, it seems that analogy accounts for the functional diffusion better than generative rule-based explanations. The suffixed Loc– marker occurs regularly in spatial constructions and more randomly in semantic extensions. The irregularity and gradual diffusion of the Loc– affix support an analogical explanation of the process. Meillet (1958 [1912]: 130–133) distinguished between analogical forms and analogical innovation. This distinction seems adequate for the described process, as well, because the innovation based on the suffixing of a secondary Loc– has spread analogically to various expressions of spatiality.

In comparison to the LocE, the interior local cases (LocI) are more consistent in a way, because they display spatial relations much more exclusively as the statistics indicate. Possible non-spatial relations expressed by the LocI are metaphoric extensions here, too, while in the case of the LocE the changes interact with more systematic grammatical variation.

The following conclusions can be drawn on the diachronic development of the Veps local cases and especially that of the Loc–:

(a) The Loc- is marked in all three local case sets by the same suffix -*pAi* (Southern Veps - $p\bar{a}$).

(b) The marker of the Loc– displays synchronic morphological rules, but the adaptation is not yet quite complete.

(c) The divergence in the form of the Loc- is seen in syntactic structures, such as attribute phrases and reflects the young age of the suffixing.

(d) The same marker of the Loc- is used in various constructions, including inflectional suffixes, postpositions and adverbs.

(e) The compensating for the loss of the former suffix Loc- has semantic constraints (+spatial).

(f) The reestablishing of the inflectional suffix Loc– did not imply a parallel reestablishing of all functional properties. So, the suffixing of the secondary Loc– did not generate a take-over of functions, but rather reestablished the core properties of the Loc–.

(g) The phonological reduction of the former LocE– and the merger between the LocE= and LocE– evoked a reanalysis of LocE=.

Givón (1991: 335) distinguishes between the communicative, sociocultural, cognitive and neuro-biological background to markedness and formal complexity in grammar. He argues that a language structure must be functionally motivated. The re-establishing of the Loc–[Spat] in Veps is an illustrative example of a functionally motivated structure in a diachronic process.

The development of the Veps local case system suggests an interdependence based on the general evolutionary strategy of language: a preservative change that may eliminate or compensate for the effect of a reductive change. The way in which the tripartite opposition between local cases is re-established emphasises the significance of language-specific features, and the importance of this morphological category for the Finnic languages.

6. Language contact and morphosyntactic change

The two previous empirical chapters have mainly concentrated on examples of language change that illustrate endogenous development. This chapter will consider the influence of language contact on morphosyntactic change and the reanalysis of case suffixes. Two studies will seek to cast more light on the interaction between neighbouring languages and the structural premises of foreign interference. The development of the prolative-comitative (PROLCOM) case in Southern Veps shows illustratively how the suffixing and the morphologisation of a former postposition preceded a contact-induced reanalysis of the prolative case. The second issue, the previously suggested translative-comitative (TRANSLCOM) case syncretism in Livonian can be accounted for as a result of contact-induced morphosyntactic change and reanalysis.

6.1 Historical impact of language contacts on Finnic

The impact of language contacts on the development of the Finnic languages both as a group and as individual languages has traditionally been regarded as remarkable (Tauli 1955). Recent studies of Finnic languages have emphasised the need to analyse the intertwining of endogenous and contact-induced development, "native and borrowed" (Laakso 2001b, Sarhimaa 2000). As Wälchli (2000: 211) phrases it, "If one looks more closely, there is nearly always a delicate intertwining of language contact, a continuation of inherited tendencies and new independent developments." The necessity of paying more attention on the intertwining of different forces in language change is well motivated for various reasons that are rooted in long prehistoric contacts and that have resulted in the recent gradual assimilation of minor Finnic languages under the pressure of socially dominating neighbouring languages. The more or less constant flow of early Indo-European loan-words began in Proto-Finno-Ugric and has continued through various stages of Finnic and other Finno-Ugric languages until now.

Until very recently research had mainly concentrated on tracing those loan-words that originate from various Indo-European sources, beginning with the earliest proto-language stages, and the closest present day neighbouring languages, i.e. Latvian, Baltic German, Russian and Swedish. Late emigrant Finnic groups in other parts of the world have had contacts with some more distant languages, such as English and Norwegian, that are not spoken in the immediate vicinity of the Finnic core area.

The oldest commonly known observations of foreign influence on Finnic date back to at least the works of H. G. Porthan at the end of the 18th century. A more systematic tradition in this field was not created until the second half of the 19th century when August Ahlqvist and especially Vilhelm Thomsen published their pioneering works. The identification and layered nature of contacts at the proto-language stage are in evidence in works that were published after Thomsen which laid the foundations for the traditional approach to loan-word research in the Finno-Ugric languages (for literature sources, see Joki 1973). The orientation of Finnic loan-word research and its progress during the past three decades owes a debt especially to the works by Jorma Koivulehto (1999a, 1999b), Lembit Vaba (1990, 1997), and the research group working on the dictionary of Germanic loan-words in Finnic (LÄGLOS).

Knowledge of recent and language-specific contacts between Finnic and neighbouring Indo-Europeans has advanced during the past decades as well. There is ample detailed information available on the Indo-European influence on the vocabulary of individual Finnic languages. However, Finnish is the sole Finnic language that has a systematically edited etymological dictionary (SKES, SSA). The intensive influence of contacts is vividly illustrated by the development of Estonian and its dialects, since these have adopted new vocabulary from a whole array of different sources: Russian to the east (Mägiste 1962, Koponen 1998, Must 2000), Latvian to the south (Vaba 1977, 1997), Swedish to the west (Ariste 1933, Raimo Raag 1982), Finnish to the north (Must 1987, Söderman 1996), and the local German dialects (Hinderling 1981, Hasselblatt 1990). Suhonen (1973) gives a detailed overview of Latvian loanwords in Livonian. Latvian influence is clearly seen in Livonian phonology, whereas morphology and syntax are considerably less close to Latvian (Ariste 1954: 293-300, Matthews 1956: 313-314). The strong Russian influence on Karelian, Olonetsian, Lude and Veps is most strongly evidenced by their vocabulary. (Note, that in the largest published Veps vocabulary (Mullonen & Zajceva 1972) Russian words have been left out of the data.)

Mutual interference between the Finnic languages has historically been especially noticeable in those languages and dialects spoken in Ingermanland. However, intra-Finnic contacts have also played an important role in the development of eastern Finnic varieties, that is, dialects of Karelian, Olonetsian, Lude and Northern Veps (Terho Itkonen 1971). Likewise, various aspects of intra-Finnic contacts can be discerned in the development of South Estonian (Karl Pajusalu 1996), and in the many dialects of various other Finnic languages. Morphosyntactic Indo-European interference in Finnic has been the subject of very little research, although passing remarks have been made and several scholars have assumed that such interference has taken place. In practice though, only a little attention has been paid to this. Sarhimaa's (1999, 2000) studies on Russian syntactic influence in Karelian are seminal in their field, and also elaborate illustratively the significance of social factors in a language contact situation.

Conclusively, co-existence with genetically different Indo-European languages has been a part of the development of the Finnic languages since prehistoric times. This chapter seeks to contribute to research on contact-induced morphosyntactic change in Finnic through a discussion of the premises that have to be fulfilled before interference from a neighboring language is possible. Language contact is in both ascribed processes the decisive factor explaining the divergence of constructions in comparisons of the Finnic languages.

6.2 Southern Veps prolative-comitative

In Southern Veps the interaction between endogenous change and language contact has led to a semantic extension of a secondary prolative case suffix *-mu*. Southern Veps diverges considerably from other Veps dialects and other Finnic languages by displaying a suffixed postposition in prolative relations (denoting path and meaning 'along, across, via', etc.), and the same suffix is used in a comitative (sociative 'with') function. Although Veps typically expresses instrumental relations with the adessive (cf. table 5.5 and section 5.3.4), the prolative-comitative is related to instrumentality as well; many languages do not distinguish morphologically between these two functions. One such language is Russian, and the Russian instrumental is here assumed to have had a decisive significance for the functions of the Southern Veps prolative-comitative. In the following discussion the prolative-comitative suffix *-mu* will be encoded PROLCOM.

From a synchronic viewpoint the PROLCOM has been morphologically adapted to the inflectional case paradigm and adjusted to morphophonological alternation where it occurs. So, *lambha-mu* sheep-PROLCOM (the nominative is *lambaz*) exemplifies the inflection of this particular word type (cf. *lambhā-ž-i-l'e* sheep-DIM-PL-ALL 'to the sheep' NEV 1: 76). The morphosyntactic structure of the previous postpositional phrase is no longer seen. Words ending in a vowel in the nominative with less morphophonological alternation such as *beŕoga* : *beŕoga-mu* coast-PROLCOM, *d'erōna* : *d'erōna-mu* village-PROLCOM show a more mechanical agglutinating of the suffix at the stem.

In text data both of the semantic types of the PROLCOM occur regularly. The examples below are drawn from the text records of Kettunen (NEV 1).

Example (1) is typical of most occurrences (69 out of 111 in the test data) of the comitative function, whereas the prolative function (2) is less frequent but still common (42 out of 111).

- (1) naku-s mužikō-d' om koirī-mu there-INESS man.PL-PART is dog.PL-PROLCOM da oružiō-mu and gun.PL-PROLCOM 'Over there, there are men with dogs and guns.' (NEV 1: 49)
- (2) *astu-bad beŕoga-mu se* tread-PL3 coast-PROLCOM it 'They are treading along the shore.' (NEV 1: 32)

The two examples illustratively show why it is that the few observations dealing with PROLCOM have distinguished between two different cases, that is, the prolative and the comitative (cf. Felix Oinas 1961: 78–107). The prolative construction (as in *berogamu* in (2)) is genetically related to some adpositional phrases in Northern and Central Veps (see below). In (1) the constituents (*koirīmu da oružiōmu*) marked with the PROLCOM display a typical comitative function, while those prolative constructions as in (2) marked with the PROLCOM (*berogamu*) represent a subtype of spatial relations that is typical of local cases. The morphosyntactic information and semantic role of the two types of PROLCOM in the preceding examples differ so fundamentally that occasionally the PROLCOM may occur as a marker of two entirely different constituents in one and the same sentence. This is illustrated in example (3).

 (3) lambha-mu hän mösten veda-se d'erōna-mu sheep-PROLCOM he/she again drag-REFL.SG3 village-PROLCOM 'He/she is idling through the village again with the sheep' (NEV 1: 76)

Like some other recently suffixed cases (cf. section 5.3.1) the case agreement of the PROLCOM differs in an attribute phrase to that with only a primary case ending. This is seen in a lack of case agreement between the modifier (*netida*) and the noun (*proššend'a-mu*) in (4).

(4) *neti-da proššend'a-mu män tsari-lost* this-PART appeal-PROLCOM go.IMPF.SG3 tsar-APPR 'With this appeal (s)he went to the tsar.' (NEV 1: 30) In this particular case the modifier ($\hat{n}eti$ -da) exhibits the partitive, that was governed by the postposition that later became the suffixed PROLCOM. However, the data applied here is not sufficient to draw conclusions on the syntactic details of the PROLCOM. The functional ambivalence of the PROLCOM blurs its syntactic use even more, because occasionally it is possible to find examples where two constituents seem to agree in case and number as in (5), but actually express different grammatical relations.

(5) beśedā läväntagūžī-mu party.ADESS cowhouse[backpart].PL-PROLCOM prihō-mu jokse-ndo-b boy-PL-PROLCOM run-FREQ-SG3
'During the party (s)he will be running behind the cowshed with the boys.' (NEV 2: 4)

The point is that as in (3) the two constituents marked by the PROLCOM are functionally incompatible, and the first ($l\ddot{a}v\ddot{a}ntag\bar{u}\check{z}\bar{i}-mu$) displays a prolative, whereas the latter (*prihō-mu*) expresses a comitative relation. Consequently, despite the adjacency and identity of the inflectional forms of the two constituents, they do not agree in case with one another.

The suffixed prolative -mu, -me, $-m\ddot{o}$ is found to some extent in the Central Veps area (Tikka 1992: 160–169), but its syntactic use differs from Southern Veps. In Central Veps the same suffix is used only in prolative constructions and it does not display comitative relations. In Northern Veps the postposition $m\ddot{o}to$ 'along, around, via' is in use instead of suffixed inflectional elements (6).

(6) *i l'ähto-ba küla-d möto*and leave-PL3 village-PART along
'And they are going through the village.' (MSFOu 100: 105)

In Northern Veps the postposition *möto* occurs exclusively in the prolative meaning denoting path. The few exceptions in which the same element does occur with a somewhat modified meaning as in (7) show the semantic connection and conceptual proximity between spatial and comitative (instrumental) expressions.

(7) Kut vaise pašta-d l'äma-d plotu-d muga mil'ei, if only fry-SG2 warm-PL pie-PL so we.ALL, Maša-d möto ougota Masha-PART along send.SG2.IMP 'If you bake warm pies for me, send [me] them with Masha!' (MSFOu 100: 153)

The usual and expected suffixed comitative *polotī-d'ke* occurs in Northern Veps in the same text (8) almost immediately after *möto* has been used to denote comitative relations, which suggests a very basic difference between the comitative and prolative function in Veps. Furthermore, example (8) illustrates the fact that Northern and Central Veps distinguish between two forms and functions (exemplified by *polotī-d'ke* and *dorogad möto*), while Southern Veps has one form (PROLCOM) for two functions.

(8) [ak] śel'gi-t' Maša-d polotī-d'ke
[old woman] send-IMPF.SG3 Masha-PART pie.PL-COM doroga-d möto.
road-PART along
'[The old woman] sent Masha along the road with the pies.
(MSFOu 100: 153)

Although Southern Veps has not preserved the postposition *möto*, the example above represents the morphosyntactic pattern and partitive-governing postpositional phrase that (*dorogad möto*) presumably preceded the suffixing of the PROLCOM.

6.2.1 Prolative in Finnic and Veps

Studies reviewing the newly suffixed case endings in Veps uniformly confirm that the Central and Southern Veps prolative suffix *-mu(d)*, *-me* originates from the same postposition that has been maintained in Northern Veps *möto* and occasionally in Central Veps (Kettunen 1943: 359–362, Felix Oinas 1961: 78– 107, Tikka 1992: 160–169). Because these studies strictly keep the prolative and comitative functions apart, the latter is not mentioned in the same place in the cited literature. A dialectal analysis of the prolative in Veps by Tikka (1992: 160–169) shows that suffixing of the postposition probably began in Central Veps as late as the 19th century. This postposition is a descendant of an old stem (Proto-Finnic * $m\bar{o}$ - < **me*-) with cognates in Finnic, Sámic, Mordvin, Mari, Komi, Mansi and Hungarian (UEW 276–277, SSA 2: 190). As far as the case system of the other Finnic languages is concerned, an inflectional prolative is not as inseparable a part of noun inflection as are the diachronically more stable sets of interior and exterior local cases. In Finnish, for instance, there is an unproductive suffixal prolative *-tse (meritse* 'by sea') which occurs only in some semantically limited groups of lexemes (Lauri Hakulinen 1979: 108, Suoniemi-Taipale 1994) and has considerable inflectional restrictions. For this reason, some scholars have preferred to describe the prolative in terms of a derivational rather than inflectional feature (NK 113). Path and the kind of functions that are typical of the prolative cases are most commonly expressed by adpositions in Finnic, very frequently by prepositions rather than postpositions (cf. section 4.5.2). The examples below are drawn from Finnish (9), Estonian (10–11) and Livonian (12).

- (9) Hän matka-si pitkin mer-i-ä.
 (s)he travel-IMPF-SG3 along sea-PL-PART
 '(S)he travelled over the seas.
- (10) *Jänes jooksis mööda tee-d edasi.* Hare run-IMPF-SG3 along road-PART further. 'The hare ran further along the road.'
- (11) *Tõtta-si-me piki kõnnitee-d.* rush-IMPF-PL1 along pavement-PART 'We hurried along the pavement.'
- (12) se piņ um ailõn pits riekkõ that dog is run-PTCP.PST – along road.PART 'The dog ran along the road.' (MSFOu 106: 117)

In Northern Veps (6)–(8) the PostpP corresponds to a PrepP in other cited Finnic languages. It must be noted that although the constituent order is different, the Northern Veps PostpP is partitive-governing like the PrepP in other Finnic examples and not genitive-governing as would be expected (for the morphosyntactic structure of Finnic adpositional phrases, cf. section 4.5).

More generally speaking, languages with a rich case inflection often have local cases and a prolative case. The terminology varies a lot in grammatical descriptions and the terms prosecutive, pergressive and perlative, among others, have been used in grammatical descriptions of various languages (Stolz 1992: 93–96). As the development of the Southern Veps PROLCOM indicates, there is no obvious reason why an inflected prolative should not occur in the morphology of the Finnic languages as well, although analytic constructions like (9)–(12) are more common. But it is also true that no universal implication

insists on the existence of an inflectional prolative, and in comparison to other local cases, and the Finno-Ugric languages often form special subsystems, the prolative is more independent than others. As regards the more remote Finno-Ugric languages, a suffixal prolative exists in Mordvin (Erzya *virga* 'along the forest'; Al'amkin 2000 48–61, Bartens 1999: 97–98, EK 2000: 76–81, 95–100) and the Permic languages (Udmurt *bakćaeti* 'along the field'; Kel'makov & Hännikäinen 1999: 143–144), and also in Samoyedic (Salminen 1997: 118–123). In comparison to Southern Veps PROLCOM the most significant difference in the syntactic use of the prolative is that Mordvin and the Permic languages use it only as a "basic prolative" denoting path and relations of that kind.

Given the evidence from other Finnic and Finno-Ugric languages the ambiguity of the PROLCOM appears be peculiar to Southern Veps. Felix Oinas (1961: 101) concluded that the suffix -mu(d) must have descended from at least two different sources. According to Oinas, two different derivations of one stem ($*m\bar{o}$ -) would later have remerged in Southern Veps. However, he did not elaborate in detail on his assumption. So, it has remained a hypothesis, and is not adequately justified in the light of the present analysis.

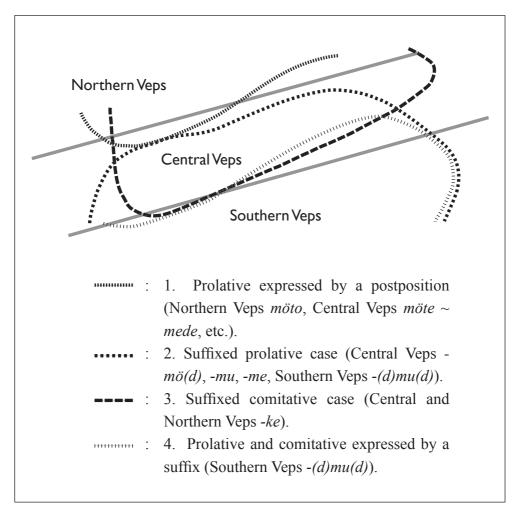
The structrural development and postpositional origin of this suffix can occasionally be seen through the Southern Veps data, as well, although analytic forms do not occur any longer. In (13) the morphosyntactic structure of the earlier partitive-governing PostpP has not yet been completely lost.

(13) sid aig aja-b bajar t'e-dmud
then time drive-SG3 lord road-PROLCOM
'Meanwhile the lord is driving along the road' (NEV 1: 44)

The suffixed PROLCOM *t'e-d-mud* includes the former partitive ending *-d*and shows the earlier case government of the adposition (cf. Northern Veps *doroga-d möto* road-PART along). In Central Veps the forms with traces of the former partitive ending *-d*- are much more frequent (Tikka 1992: 160–169). In Southern Veps the morphologically more integrated variant *-mu* (*lambhamu* 'with the sheep', *beŕogamu* 'along the shore', *d'erōnamu* 'through the village') withouht any remnants of the earlier morphosyntactic structure [[N + PART] + Postp] is prevalent. The loss of the former partitive is a transparent result of gradual phonological attrition and was obviously supported by the lack of a functional need to use it any more.

As noted above, the Southern Veps PROLCOM expresses both prolative and comitative relations, whereas Northern and Central Veps have another suffixed comitative case (*-ke*). There are several isoglosses illustrating how these relations are manifested in Veps dialects. First, Northern Veps displays a postposition to denote path, whereas Central Veps mainly and Southern Veps exclusively have a newly suffixed secondary case for the same purpose. Northern and Central Veps express comitative relations with another suffixed postposition, whereas Southern Veps expresses it with the same suffix that is used to denote path. These isoglosses are illustrated in figure 6.1, based on a dialectal analysis by Tikka (1992: 160–169).

Figure 6.1. Dialectal isoglosses for prolative and comitative in Veps.



This figure demonstrates the complete difference in these constructions between Northern and Southern Veps. Central Veps shares some characteristics of both other dialects. The distribution of the suffixed comitative covers both Northern and Central Veps. The latter one displays the suffixed prolative to some extent. Although the distribution of the suffixed prolative extends almost to the whole territory of Central Veps, it expresses only path.

6.2.2 From prolative towards comitative and instrumental functions

In the most comprehensive study available on Veps syntax, Kettunen concludes that there is nothing strange in the way the original prolative function developed into comitative functions. He proposes that the morphosyntax of the Northern Veps postposition in prolative constructions and its suffixed cognates in Central and Southern Veps have probably been influenced by the functions of the Russian preposition *po* (Kettunen 1943: 362, 545). Neither of these assumptions has been elaborated on in more detail in later works that have dealt with the same question (Oinas 1961, Tikka 1992).

Because the intertwining of endogenous change and language contact is the basic hypothesis of the current study, it is necessary to pay additional attention on the connection between prolative and comitative functions. Given that Russian does not distinguish between the comitative and the instrumental, the discussion here is extended to instrumental relations.

The interrelations between spatial and instrumental functions in the Veps local case system were elucidated in section 5.3.4. It was stated that local cases, most notably the adessive, commonly display instrumental relations. As a rule those Finnic varieties, such as Finnish, Karelian, Lude and Veps that commonly express instrumentality by means of the adessive display some other strategy for comitative relations. Other varieties, such as Estonian, Livonian and Vote, that have a productive and frequent comitative suffix apply the same element to instrumental relations as well. In the wider cross-linguistic scope the syncretism between comitative and instrumental categories is not as frequent universally as is sometimes assumed (Stolz 2001b). In the data analysed by Stolz and others, less than 25% of the sample languages display instrumental-comitative syncretism.

The two strategies, distinguishing between instrumental and comitative or integrating these, occur in northern European languages. In Udmurt, for instance, the same instrumental suffix (*traktor-en*) marks both the instrument (14) and the sociative (*director-en-iz*) (15) that is typical of the comitative case, cf. the Southern Veps PROLCOM in (1) above.

(14) *traktor-en uža-ni* tractor-INST work-INF 'to work with a tractor' (15) F.S. tolon MTS-len direktor-en-iz ta śarjś
F.S. yesterday MTS-GEN director-INST-SG3 this about veraśk-i-z
talk-PRET-SG3
'F.S. talked about it yesterday with the director of the MTS'

The way instrumental relations are manifested is different in Komi (Zyryan), the most closely related language to Udmurt. Contrary to Udmurt, Komi makes an inflectional distinction between instrumental and comitative (sociative) functions, although occasionally the instrumental case in Komi may be used to denote the comitative (sociative) function as in Udmurt. (Bartens 2000: 98–102, Kel'makov & Hännikäinen 1999: 150–153.)

The different syntactic behaviour of the Udmurt instrumental in comitative constructions is illustratively demonstrated in the number agreement between the predicate (*vamištiz*) and the subjects (*Takjan kenak Pet'aj-en*) coordinated by the instrumental case (16).

(16) noš Takjan kenak Pet'a-jen busj-je vamišt-i-zj but Takjan aunt Pet'a-INST field-ILL walk-PRET-PL3
'But aunt Takjan and Pet'a were walking to the field.' (Bartens 2000: 99–100)

The nominative subject (*Takjan*) is in the singular but the predicate (*vamištizi*) is in the plural, and the number agreement is triggered by the coordinative comitative (in inflectional paradigms represented by the instrumental). In Estonian the comitative may trigger similar number agreement between the predicate and subject-like constituents, but allows a lack of number agreement, as well (Mihkla et al. 1974: 124). (Bartens (2000: 98-102) claims that in some cases the Udmurt instrumental does not display any comitative (sociative) function and is, consequently, used merely as a syntactic conjunctive affix. In the earlier version of his Syntax Givón (1984-90: 495) actually characterises the comitative as a conjunction morpheme, but he does not mention the syntactic difference between comitative and instrumental expressions and coordinating and subordinating strategy (cf. Stassen 2000, who distinguishes between a coordinating and a comitative strategy).) Mordvin and Mari express comitative relations with a postposition which may trigger similar number agreement between the predicate (plural) and subject as the case suffix triggers in example (16) (Erkki Itkonen 1966: 315).

In Veps there is a clear distinction between the comitative (Northern and Central Veps -ke, Southern Veps -mu), and instrumental relations (expressed by the adessive, cf. section 5.3). Although the comitative suffix is not the same, all Veps dialects distinguish morphologically between the comitative

and instrumental, which is expressed by the adessive. The fact that the two inflectional categories can co-occur in the same sentence (17) underlines their mutual difference.

(17) hän ozā-s silma-mu da silma-n
(s)he hit-IMPF.SG3 eye-PROLCOM and eye-GEN(-ACC)
hänō puhkā-ž, kunutā se
(s)he.ADESS prick-IMPF.SG3 whip.ADESS it
'(S)he hit the eye and punctured her/his eye with the whip'
(NEV 1: 33)

Comitative relations (*silma-mu*) have a special suffix, while the adessive (*-*lla*) is used to mark both the experiencer ($h\ddot{a}n\bar{o}$) and the instrument (*kunutā*).

Kettunen's (1943: 359–362) assumption that the comitative use of the PROLCOM is endogenous and simply an expected result seems to find some support in the semantic variation of the use of a (etymologically and functionally) corresponding postposition *myöten* in Finnish. Besides a more prototypical prolative function (18) the same element is seldom used to denote comitative relations (19). However, the latter type is practically never attested in modern Standard Finnish.

- (18) *Kulje-n joke-a myöten*. walk-SG1 river-PART along 'I am walking along the river bank.'
- (19) *ole-n laitta-nut häne-lle Jussi-a myöten terveis-i-ä* be-SG1 put-PTCP.PST (s)he-ALL Jussi-PART along greeting-PL-PART 'I have sent her/him greetings through Jussi.' (NS II 593)

In modern Standard Finnish traces of the comitative/instrumental use of *myöten* 'along, across' are found mainly in connection with pronouns in some adverbial constructions, as in (20).

(20)	asia	ol-i	si-tä	myöten	selvä
	thing	be-IMPF.SG3	it-PART	along	clear
	that m	(SKP 2:	263)		

The conclusion that an endogenous extension of the prolative to the comitative is possible seems to make efforts to find other solutions unnecessary. However, if it is assumed that various semantic features of the PROLCOM were caused by a more or less mechanical endogenous semantic extension, one has to explain why this change has occurred in Southern Veps, where attrition has reached the furthest stage, and not in other dialects where morphological adaptation is still taking place.

At the beginning of this chapter a hypothesis was introduced according to which the functional idiosyncrasies of the Southern Veps PROLCOM have been caused by language contact, which is also the assumed reason why other Veps dialects do not share this characteristic. Suffixing and an almost complete morphological adaptation of the given postposition appear to be crucial in this process. Instead of the influence of a single postposition (*po*) as assumed by Kettunen, the morphosyntax of the PROLCOM has presumably been affected by the morphosyntax of the Russian instrumental case.

Since Russian does not distinguish between comitative and instrumental, this comparison is bicuspid at first glance. However, given that the Russian instrumental is also a way of expressing comitative relations, the connection between the Russian instrumental and the PROLCOM becomes more logical. Recall that the suffixed comitative that exists in Northern and Central Veps does not occur in Southern Veps. So, the need to express comitative relations has presumably influenced and corroborated a reanalysis of the suffixed postposition.

6.2.3 Preliminary conclusions on the development of the prolative-comitative

So far, the following conclusions can be made about the character and development of the PROLCOM: 1. The Southern Veps PROLCOM *-mu* originates from a partitive-governing local adposition *möto* that has been preserved in Northern Veps. 2. This suffix exhibits two clearly distinct semantic roles that are characteristic of Southern Veps only, while the corresponding suffix in Central Veps occurs solely in the prolative meaning. 3. The shift of a local case function (path) towards a comitative/instrumental one may be caused by an endogenous metaphoric extension. 4. The occurrence of a given suffix in a comitative function in one dialect raises the question of whether the semantic reanalysis has been caused by language contact. 5. Russian is the most likely source of foreign influence. 6. Veps distinguishes consistently between comitative and instrumental relations by expressing the former with a secondary suffix and the latter with the adessive.

Not one of these observations alone explains the morphosyntactic change, although they do cast some light on the preconditions under which change was possible and finally took place. Conclusion 3, which is otherwise logical and corresponds to the general concepts of morphosyntactic change should

be scrutinised, because the prolative and comitative functions have clear isoglosses in the Veps dialects. In principle, this is not an insurmountable obstacle, because there are numerous examples of areal isoglosses that separate dialects from one another in the world's languages. However, given the recent suffixing of the PROLCOM it is necessary to consider the possible impact of language contact, because that would shed additional light on areal differences. Kettunen (1943: 432, 545), Felix Oinas (1956: 232–234) and Tikka (1992: 50) all noted the probability or possibility of Russian influence on Veps comitative constructions, although none of them elaborated a hypothesis in more detail. Oinas, a specialist in Finnic-Russian cultural and language contacts, listed obvious co-occurrences of some sporadic sentences rather than pointing out general morphosyntactic equalities between Southern Veps and Russian (Felix Oinas 1956: 232–234). In his study of suffixed postpositions the target was set on phonological development (Felix Oinas 1961: 78-107). Unable to find an adequate solution to explain the functional dispersion of the PROLCOM, he assumed the merger of two adpositional affixes deriving from the Late Proto-Finnic $m\bar{o}$ without paying sufficient attention to possible semantic shifts in grammatical elements.

As stated, the hypothesis concerning the Russian impact on Southern Veps PROLCOM morphosyntax is based on the functional and morphosyntactic correspondences between the PROLCOM and the Russian instrumental suffix. This assumption is rather similar to Suoniemi-Taipale's (1994: 225–227) assumption concerning the unproductive Finnic prolative suffix *-tse*. She curtly notes some functional similarities between the unproductive Northern and Central Veps inflectional prolative suffix (the Veps *-či* with more or less unproductive cognates in other Finnic languages) and the Russian instrumental, but does not analyse this parallelism in the light of linguistic data. By the prolative she only means the unproductive prolative suffix *-či*. The primary aim of her study is dialectological, and in general, typological aspects such as morphosyntactic characteristics are not elaborated on. Moreover, she does not give any consideration to the target of the current work, the Southern Veps PROLCOM.

6.2.4 The instrumental in Russian

Compared to the Southern Veps PROLCOM that has two clear semantic edges, the Russian instrumental has a wider spectrum of interrelated functions. As an inflectional category it is much older than the suffixed Veps case and participates in various morphological processes. For instance, the inflection of the Russian instrumental varies according to the gender at issue, whereas the Southern Veps PROLCOM form is stable. This reflects one of the most fundamental differences between Russian and Veps noun inflection, the lack of grammatical gender in Veps. The way in which feminine, masculine and neuter forms are manifested in Russian varies widely.

The prevailing functions of the Russian instrumental are, marking the instrument as in *karandašom* (21), expressing comitative relations in connection with the preposition s(o) as in *so vsemi svoimi protivnikami* (22), and denoting the agent as in *studentami* (23).

- (21) *ona piš-et karandaš-om* she write-SG3 pencil-INST 'She is writing with a pencil.'
- (22) Švecija vskore zaključi-la mir so vse-mi
 Sweden soon close-PST.SG3 peace with all-INST.PL svo-imi protivnik-ami
 own-INST.PL opponent-INST.PL
 'Soon Sweden was to make a peace treaty with all its enemies.'
- (23) Zdanie vypolnja-et-sja student-ami ežednevno. building fill-SG3-REFL student-PL-INST everyday 'The building is full of students every day.'

In Russian dialects, both northern and southern, comitative relations as in (22) are much more commonly expressed by the case suffix only than in the literary language, in which the preposition s(o) is frequent (Russkaja dialektologija 234–235, 248–249).

One of the less prevalent functions of the instrumental in Russian is to denote path. Although less frequent compared with the more portraying functions, Russian grammars consistently emphasise that the instrumental can be used alternatively with the prepositional phrase *po* 'along' (+ dative) to denote an action taking place via something, e.g. *polem* in place of *po polju* in (24), a more or less rectilinear passing by, through, across or over a given object

(KRG 164, RG 1982: 482, SRJa 196). In other words, besides the dominating functions, it may display the same meaning 'across, along, via' that is often expressed by prepositions in the Finnic languages and that is characteristic of the Southern Veps PROLCOM and the Northern Veps postposition *möto*.

(24) Zajac vy-skoči-l iz les-a i hare ASP-jump-PRET from forest-GEN and pobeža-l pol-em (= po pol'-u) flee-PRET field-INST (= along field-DAT)
'The hare jumped out of the forest and fled across the field.'

Although the prepositional phrase in brackets is reported to be more typical than the use of the instrumental for prolative functions, it is clear that Russian has such a morphosyntactic pattern. The cited Russian examples, especially (22) and (24), demonstrate the similarity between the Southern Veps PROLCOM (cf. (1)–(5) above) and the Russian instrumental. Example (24) exhibits the crucial morphosyntactic property (prolative) of the Russian instrumental that connects it to the Veps PROLCOM. Instead of borrowing a morphological element, Southern Veps has borrowed a function, or rather a restricted morphosyntactic property from the Russian instrumental: a way to express comitative relations by means of the same element used in instrumental and comitative constructions.

As in the case of lexical borrowing, not all features are transferred. Rather, the language under foreign influence borrows a restricted semantic feature belonging to a certain inflectional category. It is noteworthy that the preposition so (22), which actually marks comitative relations in Standard Russian, is not borrowed. (Note that I have used Standard Russian data because of a lack of data from adjacent Russian dialects.) Consequently, the alleged Russian influence on the Southern Veps PROLCOM presupposes that the Russian preposition so and the instrumental case suffix together express comitative relations, and the morphosyntactic locus is shared between these two units. Similarly, it has been assumed that the morphosyntactic locus is located on more than one constituent in Russian adjective-noun combinations (Corbett 1993: 22). I would thus argue that the properties of the case category evoked a reanalysis and that the borrowing of the preposition would have been functionally superfluous. Moreover the development of the Livonian translative-comitative suggests that borrowing a preposition would have initiated essential changes in the entire morphosyntactic pattern (cf. section 6.3).

The Russian instrumental has a long pre-history and a well-researched background. So, it is not even theoretically possible to assume that Veps or some other Finnic variety would have influenced Russian. The instrumental is common to all Slavic languages and it even existed in their earliest protolanguage stages. This category is a direct descendant of the old Proto-Indo-European instrumental inflecting for three genders and originally in three numbers (Beekes 1995: 173–194, Kurylowicz 1964: 196–197). In Old Russian and Slavic texts the instrumental occurs almost exclusively in instrumental (including comitative) functions. Early written data show that the instrumental and such kind of relations were expressed earlier merely by inflectional means, whereas it is only later that prepositional phrases gained greater foothold (Stanisheva 1958: 42–44). The difference between the instrumental and the prolative use of the Slavic instrumental is based, not on inflection, but on the semantics of the context and the predicate (Bulygina 1958: 246). Although modern Slavic languages display a variety of prepositions to denote instrumental or to distinguish between instrumental and comitative functions (Bulygina 1958, Tihomirova 1958: 360–362), the inflectional (prolative-)instrumental(-comitative) is wide-spread in the Slavic languages.

The Slavic instrumental has a historical cognate in the Baltic languages. Lithuanian has preserved the old Indo-European inflectional instrumental, whereas in Standard Latvian the category has no longer any overt affixal marker and instrumental relations are expressed by means of the preposition *an* 'with' (Eckert et al. 1994: 115ff., 367–369). However, in Latvian, too, the preposition *an* governs the instrumental case, which shows that diachronic processes and the actual synchronic state are also complicated in Latvian.

Many Slavic languages have extended the instrumental to express spatial relations and path (TPSJa; for Polish see Tihomirova 1958: 327–333). It is maintained that the direction of semantic change in this case is opposite (instrumental > local) to what (local > instrumental) is generally assumed for the local cases (cf. section 5.3.4). In this particular case, the prolative seems to differ considerably from the other local cases.

Finally, the functional ambiguity of the Russian instrumental is an old and inherent characteristic. The relationship between Russian and Southern Veps and the direction of foreign syntactic interference is obvious in the evidence from other Slavic languages. Finnic influence on Russian is out of the question, whereas Russian influence on Southern Veps would explain both the semantic characteristics of the Southern Veps PROLCOM and its difference with respect to other Veps dialects.

The diachronic development of the Southern Veps PROLCOM provides a concrete example of the mechanics of how reductive morphosyntactic changes such as the suffixing of a former postposition connect with the evolutional forces of language. This outlined explanation proposes that language-specific changes gradually proceeded to a stage in which contact-induced reanalysis was possible. Both endogenous erosion and contact-induced reanalysis are necessary for explaining exhaustively the development of the given inflectional category and its morphosyntactic properties. The diachronic chain consists of the suffixing of the former postposition, its morphological adaptation and a functionally motivated projection to a corresponding inflectional element in Russian, which finally led to the reanalysis of the suffix at issue.

The gradual development of the various changes shows the diachronic dependence between subsequent stages. Before presenting the theoretical conclusions, I shall deal in the next section with another morphosyntactic change that is comparable with the Southern Veps prolative-comitative in its preconditions and theoretical premises, namely the development of the translative-comitative in Livonian.

6.3 Contact-induced reanalysis in Livonian

The functional ambiguity of the Livonian translative-comitative (TRANSLCOM) suffix *-ks* resembles that of the Southern Veps PROLCOM in many ways. One inflectional morpheme displays two clearly different functions, a characteristic which is unknown in other Finnic varieties. Some scholars have even distinguished between two cases on functional grounds and assumed divergent historical sources. The restriction of the given feature to a limited area provokes the question of whether foreign interference has affected Livonian.

The present study assumes that because the TRANSLCOM is synchronically one form, an assumption of syncretism is not correct and morphosyntactic idiosyncrasy has been caused by a contact-induced reanalysis of one suffix rather than being the result of a merger of two distinct cases. In addition to the morphosyntactic properties of the suffix itself, the diachronic analysis of the TRANSLCOM has to account for the morphosyntax of the preposition *pa* of Latvian origin, most notably its case government that differs considerably from the Finnic adposition system. (See section 4.3 for details on the lexical borrowing of adpositions into Finnic.) The hypothesis to be discussed in more detail below is that the synchronic morphosyntactic properties of the Livonian TRANSLCOM can be explained most plausibly on the basis of the Latvian prepositional phrase that corresponds to Livonian [*pa* + [N + TRANSLCOM]].

In what follows the focus will be on showing that the ultimate source of the functional splitting of the Livonian TRANSLCOM is the Latvian instrumental, and that a special contact-induced constructional analogy triggered a reanalysis of the Livonian case suffix. The primary goal is not as much a syntactic description of the Livonian TRANSLCOM as a discussion of its typological and diachronic development. The description will start by demonstrating the differences between Livonian and other Finnic (respectively Finno-Ugric) languages. The main types of -ks TRANSLCOM use are illustrated in the following examples. This particular case is used as a subject complement (a predicative adverbial), which may occur with the Latvian-originating preposition pa as in $pa \ risting \delta ks$ (25) or without it as in $pov\bar{a}r\delta ks$ (26).

- (25) se izā um tie-nd tānda pa rištīngõ-ks it father is make-PTCP.PST him/her to man-TRANSLCOM tegīž back
 'the father has made him a human being again' (MSFOu 106: 117)
- (26) *sinā lī-d sāl povārõ-ks* you become-SG2 there cook-TRANSLCOM 'you will become the cook there' (MSFOu 106: 106)

In addition to the predicative adverbial, the TRANSLCOM displays various instrumental roles, including both the instrumental proper as in *suolõks* (27) and the comitative as in $\bar{a}rgad\delta ks$ (28).

- (27) *tam pielōtõ-n suolõ-ks sie revolmar* (s)he.is load-PTCP.PST salt-TRANSLCOM *this* revolver '(s)he loaded the revolver with salt' (MSFOu 106: 95)
- (28) *ikš kōra paņț tulā-b ārgadō-ks* one herd herdsman come-SG3 ox-PL-TRANSLCOM 'a herdsman is coming with oxes' (MSFOu 106: 99)

Example (29) shows a special syntactic coordinating use of the TRANSLCOM (*kikkõks*) characteristic of the comitative case and attested in several languages, also in northern Europe that have been erroneously claimed to lack comitative conjunction. Cross-linguistically both comitative adpositions and case suffixes, i.e. elements that express accompaniment, are used as syntactic coordinators (Haspelmath, forthcoming).

(29) *kanā kikkõ-ks adtõ lā-nõd võrd pāl* hen cock-COM be.PL3 go-PTCP.PST roost upon 'the hen and the cock went on the roost' (MSFOu 106: 83)

The structural and functional edges of TRANSLCOM constructions are predicative sentences that use the preposition pa (25) and comitative constructions (28)–(29) that have an entirely different function and no preposition. As (26) indicates the preposition pa may also be omitted in non-

comitative constructions in certain conditions, which corresponds to the use of the translative in other Finnic languages. The semantic information of the TRANSLCOM is the same in (25) and (26), although the latter does not have the preposition *pa*. The difference is that in the former the preposition manifests the same property by double marking it, while the latter is affected by verb semantics. A closer survey of the syntax of the TRANSLCOM demonstrates that in those constructions in which the suffix *-ks* is attached to the predicative adverbial (translative relations; i.e. "becoming/turning into something"), the preposition *pa* may be omitted, if the verb expresses a change in the state of a given entity. In practice, verbs such as *iedõ* 'stay; become', *nuttõ* 'call', $s\bar{o}d\tilde{o}$ 'get; become', $v\tilde{o}tt\tilde{o}$ 'take', are very frequent in those sentences in which the TRANSLCOM marks the predicative adverbial and the preposition *pa* is omitted.

The conceptual space of the TRANSLCOM is illustrated in figure 6.2.

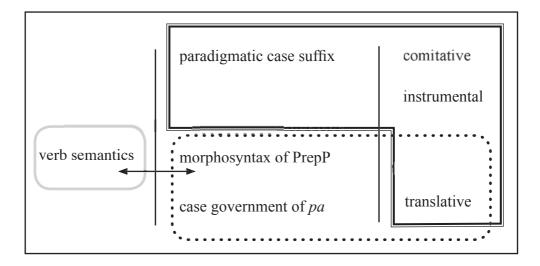


Figure 6.2. The conceptual space of the Livonian TRANSLCOM.

Section 4.3 emphasised that the Livonian verb phrase and noun phrase treat the same lexical items in an entirely different way. The same Latvian-originating elements that are widely used as verb prefixes have gained hardly any foothold in the noun phrase. The preposition *pa* 'to, about, like' (Kettunen 1938: 269 labels it with the meanings 'zu, etwas, als') is one of the few borrowed ones that occur in the Livonian noun phrase. The case government of the PrepP is as surprising as adpositional borrowings, because no other Finnic language

displays translative-governing adpositions. It is noteworthy that Livonian occasionally displays another translative-governing preposition of Latvian origin $l\bar{l}dz(\tilde{o})$ 'up to, until', although with much less regularity and frequency compared to *pa*.

(30) se muļki -- abbnd pa-nd tämm-iz klutš vail it fool -- beard put-PTCP.PST oak-ADJR.GEN block between *līdzõ kiņņi-dõ-ks* until chin-PL-TRANSLCOM 'the foolish one [has] put his beard up to his chin on an oak block' (MSFOu 106: 91)

The relation expressed by $l\bar{\iota}dz\tilde{o}$ in (30) is more commonly expressed by the postposition $s\bar{o}n(i)$, $s\bar{o}n\tilde{o}$ id. rather than $l\bar{\iota}dz(\tilde{o})$. However, constructions like (30) are of special importance for a diachronic analysis of the TRANSLCOM, because they provide additional evidence of its assumed development and support the hypothesis that the morphosyntactic change has been caused by the intertwining of morphosyntactic patterns in language contact.

6.3.1 Previous conceptions of the history of the Livonian translative-comitative

It has been traditionally maintained that Livonian used to distinguish between the translative and comitative cases, which later merged. This view was based on an assumption that the comitative originates from the same postposition as the Estonian comitative suffix (*-ga*), which has preserved its status as a free word in the Estonian adverb *kaasa* 'with' and, as a postposition in Finnish *kanssa* id. (Kettunen 1938: XLII–XLIII, Kettunen 1947: 60–61, Laanest 1982: 167, 173, Viitso 1998: 111). However, Kettunen (op.cit.), for instance, clearly distinguished the synchronic state and diachronic development by postulating one common form for the TRANSLCOM in the inflectional paradigm. The allomorphic TRANSLCOM forms are identical as well, and do not support the assertion that the suffix would have descended from two distinct historical sources: $p\bar{u}ks \sim p\bar{u}kk\bar{o}ks$ wood-TRANSLCOM, $p\bar{a}ks \sim p\bar{a}kk\bar{o}ks$ head-TRANSLCOM, *sug* : *suguks* ~ *sukkoks* family-TRANSLCOM etc.

In Estonian the development of the suffixed comitative can be plausibly reconstructed by means of those written sources in which the two elements of the NP are still kept apart. This can be seen in records from the 16th century, such as Koell (1535) *sen Issan kaes* it-GEN father-GEN with 'with the Father' (EKVT 66). Livonian does not have corresponding historical records which would lend support to this hypothesis. Kettunen, an outstanding specialist in

Finnic, who carried out extensive field work on Livonian and other Finnic languages, suggested that the suffixing would have taken place through gradual phonological reduction, presumably following the path: $*kansa \gg *k\bar{a}s > *-kas > *-kas > *-kas > -ks$. This hypothesis has been cited in some other works as well (Kahr 1976: 117, Felix Oinas 1961: 14).

This assumption can be criticised for several reasons. The traditional view is even not very plausible from a sound historical viewpoint, that is, the methodological framework into which it was first fitted. Although Livonian is the most eroded Finnic language in many ways and the attrition of word-final elements has been intensive, the assumption that the original stressed firstsyllable *a* would have been dropped is simply very unlikely to be true. First, in nouns such as $j\bar{a}lga$ 'foot' with a long first syllable, the word-final -a has been preserved. Second, the change from a free word to a bound morpheme does not improve the hypothesis, because the assumed intermediate form -kas is preserved in other context. This is identical with the historical ending of a certain noun type, cf. Livonian kāngaz 'cloth, stuff', rikkaz 'rich'. These words have maintained the same sequence *-kas that according to Kettunen was lost in the development determined by sound history. Moreover, inflectional elements do not necessarily undergo the same phonological changes as grammatically less significant elements. Hence, one might assume that a case morpheme would rather have been more resistant to erosion than affected by stronger attrition. Third, a possible syncretism and merger with the translative suffix would presumably have constituted a possible constraint for sound historical development, if this assumption were correct.

Consequently, if indeed the TRANSLCOM reflected inflectional homonymy and case syncretism, further explanation would still be necessary. In the light of morphological theory and inflectional homonymy it is unlikely that the TRANSLCOM would represent case syncretism, especially since the cumulative exponence, the number of distinctive morphosyntactic properties, is low. Systematic inflectional homonymy and the merger of different morphosyntactic properties, such as case, number or person, etc., in one affix, is unlikely to occur if the affix exhibits only one category such as case as does the Livonian TRANSLCOM (Carstairs 1987, Johnston 1997, Plank 1991). So, in principle, this kind of cumulation of morphosyntactic information on one affix is a burden to the morphological system.

The previously assumed case syncretism may be compared to the widespread inflectional homonymy in Estonian, in which the genitive-accusative and the partitive, two object-marking cases that occasionally merge, eventually become (ortographically) identical even with the short illative in some inflectional types (*kool-i* school.GEN(-ACC-PART-ILL), *rong-i* train.GEN(-ACC-PART-ILL). The identicalness of the illative, an adverbial case, and the object marking cases, is grammatically less fatal, because the syntactic

status and morphosyntactic information contained in the illative and the object-marking cases is different and depends on the transitivity of the verb. Furthermore, there are other important syntactic means crucial to distinguishing between the two homonymous object marking cases, the genitive-accusative and the partitive (for details see Riho Grünthal 2001).

The pertinent role of the preposition pa suggests that there is a functional explanation for the semantic idiosyncrasies of the TRANSLCOM. As stated above, the distinction between the predicative adverbial (i.e., the translative) and the comitative (including instrumental) use of the TRANSLCOM is emphasised by an additional syntactic element, the preposition pa as in (25) above, or verb semantics as in (26). These two points show that the semantic aspect has strongly influenced the development of the TRANSLCOM and the process itself is predominantly syntactic rather than phonological.

In sum, there is not sufficient evidence concerning endogenous diachronic change to explain the synchronic morphosyntactic properties of the Livonian TRANSLCOM. Given its semantic ambiguity and its unexpected syntactic use in certain prepositional phrases, one may hypothesise that language contact is the primary motivation for the functional idiosyncracies of the suffix at issue. The next section will elaborate in more detail on the intertwining of form and function in the morphosyntax of the TRANSLCOM.

6.3.2 The functional distribution of the translative-comitative

The functional splitting of the TRANSLCOM is reflected in its alternating syntactic use: the PrepP [pa + [N + TRANSLCOM]] never expresses comitative (instrumental) relations, but exhibits exclusively a predicative adverbial. However, the intertwining of the two constructions is seen in the predicative adverbial TRANSLCOM that is not governed by a preposition as illustrated in (26) above.

The case government of the preposition pa is almost always the TRANSLCOM, although one may occasionally find examples such as (31) in which pa is followed by the nominative $s\bar{u}r$.

(31) *peŕinais tidarõ-n jālga um pa sūŕ* housewife.GEN daughter-DAT foot is about big 'the foot of the housewife's daughter is too big' (Mägiste 1964: 64)

However, this particular case is not compatible with the predicative adverbial use of the TRANSLCOM, which does not make any distinction between nouns and adjectives. Both nouns and adjectives occur as predicative adverbials that display the morphosyntactic pattern [pa + TRANSLCOM]. The apparent

difference in the morphosyntactic pattern results from the fact that the meaning of (31) does not correspond to the predicative adverbial use of the TRANSLCOM and pa is not used as a preposition but as the modifier of an adjective. Consequently, this example cannot be directly compared with the case government of the preposition pa.

It is noteworthy that in some examples, albeit very few, may the two types of TRANSLCOM, couching different grammatical relations, co-occur as with *suolõks* [TRANSLCOM[INST]] and $t\bar{a}d\delta ks$ [TRANSLCOM[PRED.ADV]] in (32). Generally speaking though, this is quite an exception to the rule.

(32) tam pielōţõ-n suolõ-ks tādõ-ks
(s)he load-PTCP.PST salt-TRANSLCOM full-TRANSLCOM sie revolmar
this revolver
'she/he has loaded the revolver full of salt' (MSFOu 106: 95)

A tentative statistical test was carried out in order to shed additional light on the functional divergence of the TRANSLCOM. The data was drawn from the MSFOu 106 and Mägiste (1964). The third published collection of Livonian speech texts (Suhonen 1975) differs notably from the two earlier text collections. The data from the MSFOu 106 and the Mägiste data were collected considerably earlier and represent the speech of a more numerous sample, whereas the latter are based solely on the speech of one informant. It is most notable that pa never occurs in the transliterated speech of Suhonen's informant. Accordingly, it could be taken as a sign of a morphosyntactic change in Livonian occurring in the interval between the recordings. However, a more likely reason for the complete lack of *pa* in Suhonen (1975) is the idiosyncrasy of the informant and his conscious, sociolinguistically determined choices (cf. Hint 1987). The informant consistently avoids the preposition pa, because he is well aware of the ubiquitous influence of Latvian on Livonian. Moreover, being informed of the grammar of Estonian, he obviously used translative constructions that were more desirable and original for the informant without exposing the Latvian-originating preposition pa. The assertion that the rejection of pa is an idiosyncratic feature can also be supported by the fact that it occurs in the speech of his contemporaries. The question of Estonian influence on Livonian has not been elaborated in detail, although it is known that the connections between Livonian villages and the Estonian island Saaremaa used to be very close. At the end of the 1930s Kettunen (1940: 102) wrote that the older generation of Livonians was used to hearing Estonian and even spoke it as children.

The data (drawn from the MSFOu 106 and Mägiste (1964)) was organised in such a way (table 6.1) as to demonstrate the syntactic ambivalence

of the TRANSLCOM in predicative adverbial constructions, and the semantic ambiguity of the TRANSLCOM.

Table 6.1. The functional and syntactic distribution of the Livonian TRANSLCOM.

FUNCTION	COMITATIVE (& INSTRUMENTAL)	TRANSLATIVE (PRED.ADV)		
FORM	$\emptyset + N + -ks$	\emptyset + N + -ks	pa + N + -ks	
TOTAL	129 (≈ 56%)	50 (≈ 22%)	51 (≈ 22%)	
	Total (comitative & translative columns) = $230 (100\%)$			

The division into comitative (instrumental) and translative (predicative adverbial) classes is consistent. The column on the left indicates the comitative or the instrumental use of the TRANSLCOM. The column on the extreme right indicates the construction in which the TRANSLCOM follows the preposition *pa* in predicative adverbials. The middle column represents the construction in which the Livonian *-ks* is used for the translative in other Finnic languages.

These statistics do not provide much additional information on the details of the diachronic development of the TRANSLCOM. The percentage of comitative (instrumental) constructions is slightly higher, but the difference probably simply reflects the frequency of the given semantic roles. Moreover the data are not adequate for quantitative conclusions. It is noteworthy that the shift from suffixal to adpositional marking does not exclude other possibilities either, and the alleged original morphosyntactic pattern has been preserved. In the applied data the percentage for the two translative constructions ([\emptyset + [N + TRANSLCOM]], respectively, [pa + [N + TRANSLCOM]]) is approximately the same. Compared to the comitative (instrumental) use of the TRANSLCOM, both translative constructions are more marked and emphasise the morphosyntactic information either with a preposition or verb semantics. This, however, must not be taken as evidence for the primacy of comitative relations. The comparative evidence of other Finnic languages and in particular Mordvin must be taken into consideration.

The TRANSLCOM never marks one of the nominal main clause constituents (subject and object) regardless of which functional characteristic is considered. In languages with a versatile inflectional case system, such as are the Finnic languages the syntactic position of adverbial constituents is relatively free. This is also typical of the TRANSLCOM, although the Livonian noun morphology is more eroded than that of other Finnic languages (cf. table 2.3, chapter 2).

6.3.3 The Finnic-Mordvin translative

In comparison to the translative of the other Finnic languages the Livonian TRANSLCOM is somewhat different. Presumably, these differences were caused by Livonian innovations, and those properties shared with other related languages are historically more original. The most striking distinctions are found in the expression of comitative (instrumental) relations using the same suffix that marks the predicative adverbial, and that occurs regularly in a PrepP.

The translative (predicative adverbial) use of the TRANSLCOM as the subject complement was introduced in (25) and (26) above. This corresponds to the use of the translative in other Finnic languages as indicated by the examples drawn from Finnish (33) and Estonian (34). Like Finnic, the Mordvin translative displays the same grammatical relations, as in (35) and (36) (drawn from Erzya Mordvin), and displays a suffix that is historically related to the Livonian TRANSLCOM *-ks*.

- (33) *Kissa muuttu-i hiire-ksi.* cat change-IMPF.SG3 mouse-TRANSL 'The cat turned into a mouse.'
- (34) *Ta ol-i se-l aja-l õpetaja-ks*. (s)he be-IMPF.SG3 it-ADESS time-ADESS teacher-TRANSL '(S)he was a teacher then.'
- (35) Son robot-i vračo-ks.
 (s)he work-SG3 doctor-TRANSL
 '(S)he works as a doctor.'
- (36) *Ekše-ś vel'a-vt-ś kel'me-ks.* weather-DEF change-REFL.PASS-IMPF.SG3 cold-TRANSL 'The weather became cold'

No other Finnic language, nor Mordvin, expresses comitative (instrumental) relations with the same suffix that denotes translative (predicative adverbial) relations. There is either another suffix for the comitative (Estonian -ga) or the same relation is marked by a postposition (Estonian kaasa, Finnish kanssa 'with', Erzya marto, Moksha marta). The use as a subject complement is a very characteristic feature of the translative, but as Matsumura's (1996b) Estonian sample indicates, it occurs repeatedly in some other positions such as object complement and sentence adverbial.

Riese (1992, 1993) demonstrates that actually the majority of the Finno-Ugric languages display translative suffixes, which, however, are secondary. The rise of the translative case is closely connected with the functions of lative cases. In evidence from comparative data the most plausible explanation appears to be that the Finnic-Mordvin translative *-*ksi* descends from earlier lative suffixes (*-*k*l and *-*s*) as well.

Alongside the translative, there is another case that is frequently used in predicative sentences in the Finnic languages, namely, the essive (see e.g. Kont 1955) as in Finnish (37).

(37) *Äiti-ni työ-skentele-e sairaalan lääkärinä.* mother-SG1 work-FREQ-SG3 hospital-GEN doctor-ESS 'My mother works in a hospital as a doctor.'

Some scholars maintain that those Finnic varieties such as Standard Estonian and Standard Finnish that display both an essive and a translative, actually distinguish between two types of predicative, namely a dynamic and a static predicative adverbial, because they form two separate cases (Kont 1955, Pai 2001). This distinction is seen in the Finnish examples (33) and (37). However, in Standard Estonian the division between two forms and functions is not as clear, and it appears that both the translative and the essive can be used as a dynamic and a stative predicative adverbial in the Finno-Ugric languages in the given classification. In some instances in Estonian they may replace one another and also behave as alternatives as in (38) (Pai 2001: 232):

(38) Othello-ks / Othello-na on täna X. Othello-TRANSL / Othello-ESS is today X 'X will be playing Othello tonight.' Consequently, classification based on a morphological distinction is often not valid in Estonian, although both forms have their special morphosyntactic and semantic characteristics. There is a logical historical explanation for the confusion between the two forms and their use in Estonian, in that Finnish has influenced the relatively late reintroduction of the essive in Standard Estonian. The essive used to have a very marginal role in spoken varieties of Estonian and its rediscovery was the result of conscious language planning at the beginning of the 20th century. The re-establishing of a category that had been practically lost was based on its existence in the North-East coastal dialects of Estonia, and the model of the Finnish language that had often great influence during the most intensive years of Estonian language planning (Pai 2001: 235, Raimo Raag 1999: 128–130, 270, 276, Rätsep 1979: 71). As regards the translative, it had not shifted autonomously to less performative and more stative functions in Standard Estonian by the time the essive was launched. This increased diversity in the same functional domain as is illustrated in (38).

In practice, the translative is much more frequently used than the essive in Standard Estonian, and it covers a wide range of functions that express both a state of affairs and a change in it. Compared to the Livonian TRANSLCOM it is most notable that despite the illustrated ambiguity in expressing the predicative adverbial in Estonian, neither of the two suffixes has extended to include comitative relations. The referential relation typically depends on the semantics of the predicate (Pai 2001). It is also worth noting that the prototypical non-verbal predicate in Estonian is, however, a noun or an adjective in the nominative (Erelt & Metslang, forthcoming).

The Sámic languages provide another illustrative comparative example of the relationship between the two predicative cases in the Finnic languages, the essive and the translative. In the Sámic languages, the same essive that historically corresponds to the Finnic marks the predicative adverbial. Alongside this, an interesting point is that the suffix occurs only in the singular, while the plural displays another suffix (Bartens 1972: 155, Korhonen 1981: 227–228, Lehtiranta 1992: 112). Examples (39) and (40) are drawn from North Sámi.

- (39) ...gii doaimma-i Anár márkani-s oahpahe-addji-n who act-IMPF.SG3 Inari parish-LOC teach-NMLR-ESS '...who worked as a teacher in the parish of Inari'
- (40) ...go le-dje-n šadda-n ollesolmmáji-n when be-IMPF-SG1 become-PRTC.PAST grown-up-ESS '...when I had grown-up'

The North Sámi essive then (*oahpaheaddji-n* in (39) and *ollesolmmáji-n* (40)) expresses the same relations as the Finnic-Mordvin translative (33)-(36). Like Sámic (the essive historically originates from a local case), several other Finno-Ugric (Uralic) languages use the lative or locative case to mark the predicative adverbial (Bartens 2000: 100, 104, Riese 1992, 1993). The parallel between the two predicative forms and the lack of a distinction between a stative and a dynamic predicative adverbial in Sámic corresponds to Livonian, in which there is no essive. Considering the development of the TRANSLCOM, it is interesting to note that the Russian instrumental often corresponds to the Finnish translative and essive, i.e. those cases that are used to denote the predicative adverbial (Tommola 1986: 201–203).

Other Finno-Ugric languages do not provide evidence that the morphosyntactic properties of the translative and comitative are closely connected. The point is that the Livonian TRANSLCOM was originally a subject complement and marked different predicative adverbial types that are commonly expressed by a special case in Sámic and Finnic languages, and Mordvin. The functional characteristics of the TRANSLCOM and its regular use in prepositional constructions are typical only of Livonian. The PrepP [pa + [N+TRANSLCOM]] that covers roughly 20–25% of the occurrences of the given suffix is that which deviates most from the syntax of the Finnic languages. The next two sections will elaborate on the form and functions of pa in Latvian, which is the supposed key to the use of the TRANSLCOM in the PrepP.

6.3.4 pa and par in Standard Latvian

Given the gradual ethnic and linguistic assimilation of the Livonians into Latvians, language contact is one of the major premises for any analysis of diachronic processes in Livonian. The intensive Latvian influence on Livonian vocabulary and phonology testifies to language contact that has presumably had great importance for other changes that have occurred in Livonian. Thus, it is quite logical to assume that the influence of the neighbouring language and bilingualism have had a considerable impact on Livonian syntax.

The simplest explanation for double marking the predicative adverbial with [pa + TRANSLCOM] in Livonian is a mechanical morphosyntactic takeover from Latvian. As will be demonstrated below, this hypothesis on Latvian influence is based on the assumption that a reanalysis of the TRANSLCOM emerged from analogy with a corresponding prepositional phrase in Latvian. However, the corresponding construction is manifested in a considerably different way in Standard Latvian and the final answer can be established only on the basis of Latvian dialects. Here, Standard Latvian is used to provide comparative evidence from a more profoundly analysed variety than the dialects.

There is one detail concerning Standard Latvian that must be eliminated before any attempt to draw conclusions about the Latvian influence on the Livonian TRANSLCOM can be made. Namely, the problem can not be solved on the basis of the identical preposition *pa* in Standard Latvian, because its meaning does not correspond to that of the Livonian *pa* 'to, about, like'. The primary function of the Standard Latvian *pa* 'along, around, at, by' is to denote path as in *braukt pa ceļu* 'drive along the street' (LLVV 6: 77). It expresses prolative relations (cf. section 6.2), and in limited cases temporal and other extensions of spatial relations. The data in the largest Latvian vocabularies do not indicate any occurrences in which it could be used similarly to the Finnic-Mordvin translative (ME III: 1–3, LLVV 6: 77–79).

Moreover, the case government of the Latvian preposition is different and alternates between the accusative (*pa mežu* 'by the forest') and the dative (*pa spēkam* 'according to one's strength') in the singular. Neither of these can be compared to the Livonian TRANSLCOM. The question is why the Livonian TRANSLCOM replaces the Latvian dative, when Livonian has a frequently used dative as well. The accusative in turn displays entirely different morphosyntactic properties as the case of the object. However, note that those features that are relevant in a transitive clause are not as crucial in an adpositional phrase.

There is another preposition *pan* in Standard Latvian that is illustrated in (41) and corresponds functionally to the Livonian *pa*. This PrepP marks the predicative adverbial in a similar way to the TRANSLCOM, and alternatively in a PrepP, as in (25) above (*um tiend* $- pa \ risting\delta ks$ to man-TRANSLCOM 'has made [him] a man').

(41) *māsa jau ir man par saimnieci* sister already is I-DAT to houskeeper-ACC 'The sister is already my houskeeper.' (ME III: 85)

I thus assume an intertwining of Latvian and Livonian morphosyntax in the given prepositional phrase type and argue that in this predicative sentence the morphosyntax and semantic information in the Standard Latvian *par saimnieci* corresponds to those in the Livonian *pa rištīngõks*. Although the phonological difference is clear and at first sight the morphosyntactic structure does not match between the Livonian and Standard Latvian prepositional phrases, the Latvian preposition and its case government is the clue to understanding the diachronic background of the Livonian TRANSLCOM.

As a morphological case the Latvian accusative does not bring us any closer to a solution. Nor does and the case government of *par*. However, in

the prepositional phrase those properties that otherwise are primary for the case of object (the accusative) or a case such as the dative that commonly marks constituents next to core arguments in argument hierarchy, become less relevant. Thus, the most salient object marking characteristics of the accusative are realised in a transitive clause, not in a PrepP. Consequently, the non-object marking properties of an accusative(-instrumental) emerge in the PrepP.

The alleged contact-induced development of the TRANSLCOM was continued with a further hypothesis purporting that its ambiguity derives from the construction [pa + [N + TRANSLCOM]] and that Latvian constructions corresponding to Standard Latvian $[pa\eta+[N+ACC]]$ explain its morphosyntax. The formal difference between Standard Latvian prepositions *pa* and *pan* is irrelevant in the light of the Latvian dialects in which they have merged, as will be shown in section 6.3.5. In fact, the difference between Standard Latvian *pa* and *pan* became fixed only in the 20th century. In earlier literary texts and the language of the Dainas, *pa* and *par* often express the same thing. Furthermore, Latvian dialects commonly express the same relations with either *pa* or *par* and do not make a distinction between them (Nītiņa 1978: 113–125).

Standard Latvian *pan* has a great variety of meanings that are categorised into 13 types in Mühlenbach's and Endzelīn's Latvian-German dictionary (ME II: 84–86) and into 16 types in the dictionary of Standard Latvian (LLVV 6: 279–281). In addition to its use as a preposition it displays several adverbial functions. One of the most typical functions of *pan* is quite different from those of the Livonian *pa*, that is, its typical use as a comparative particle (42).

(42)	brāli-s	ir	vec-āk-s	par	mās-u
	brother-NOM	is	old-CMPR-NOM	than	sister-ACC
	'The brother i	s ol	lder than the sist	er.' (L	LVV 6: 279)

Furthermore, Standard Latvian $pa\eta$ is typically used as a predicative preposition as seen in (41) above and is here compared to the Livonian TRANSLCOM. The Standard Latvian Dictionary emphasises the importance of $pa\eta$ in predicative constructions as in (41) and argues that the primary function of $pa\eta$ is "to refer to a profession or state", that is, to mark the predicative adverbial.

The view represented in the first large Latvian dictionary by Mühlenbach and Endzelīn published in the 1930s (ME III: 85) is more historical and asserts that *pan* expresses the "predicative instrumental" (cf. also Gāters 1993: 179–181). Less attention is paid to other functions. This definition is interesting in view of the hypothesis of the current work, because it focuses on the concept of instrumentality. The way in which *pan* is described in the ME lends considerable support to this hypothesis concerning the development of the Livonian TRANSLCOM. Although the instrumental does not have an overt independent affixal marker in the synchronic Latvian grammar and its existence has to be defined by other means, grammatical descriptions consistently claim that the instrumental belongs to the Latvian case system. Comparative Baltic, Balto-Slavic and Indo-European studies show that historically the instrumental has belonged to the morphology of earlier stages of Latvian. As a rule instrumental relations are indicated by the preposition *an* in Standard Latvian, although the instrumental as an inflectional category is identical to the accusative in the singular and dative in the plural, regardless of the declension type and gender. However, in Latvian folklore texts and in the language of the Dainas instrumentality is mainly expressed without the preposition *ar*, whereas in comitative (sociative) constructions *an* is used much more often. Nevertheless, the adnominal use of the instrumental case (comitative-sociative function) is based only on the inflectional form without a preposition (Gāters 1993: 162–177).

The morphological status of the Latvian instrumental is of vital importance to the current work. Although the Latvian instrumental is morphologically non-autonomous, it has been traditionally added to the case inventory on semantic grounds and because of the morphosyntactic properties that determine the given case. The syntactic context is decisive for the morphological interpretation of the instrumental as shown in (43), in which the instrumental is the case of a predicative adverbial, not the accusative.

(43) $G\bar{a}$ -ju kalp-u, go-IMPF.SG1 farm labourer-ACC(-INST) $g\bar{a}$ -ju $v\bar{a}rg$ -u. go-IMPF.SG1slave-ACC(-INST) 'I worked as a farm labourer, I worked as a slave.' (Gāters 1993: 180)

This principle of internal autonomy of cases (Mel'čuk 1986: 66–67), which is also reflected in the allomorphism of singular and plural forms, connects the Latvian instrumental to the Livonian TRANSLCOM. The functional characteristics of the Latvian instrumental are more decisive for its influence on Livonian than its paradigmatic status. The hypothesis concerning the Latvian influence on the Livonian TRANSLCOM can now be extended by assuming that it has been affected by those morphosyntactic properties of the Latvian (accusative-)instrumental that are relevant to prepositional phrases.

6.3.5 Merger of pa and par in Latvian dialects

Although Latvian has largely preserved those old Indo-European word final consonants that survived in Proto-Baltic, a strong phonological erosion of word-internal and word-final elements, such as the loss of word-final r, is common in Latvian dialects. The loss of word-final n (also d, n and z) is systematic in monosyllabic words like ku 'where' (< kur) and pa 'to, as' (< par) (Gāters 1977: 54, ME III: 86, Rudzīte 1964: 189–193, 1993: 300–302).

Those dialects in North Kurzeme that were most adjacent to the historical Livonian-speaking areas, are called the *Tamian* or *Livonian dialects* in Latvian dialectology (German *tahmisch*; Gāters 1977, Rudzīte 1964, Zeps 1962), cf. (Latvian) *runāt tāmiski* 'speak Tamian' [the Latvian dialects of North-West Churonia]. Short vowels in non-initial syllables are commonly dropped in these dialects. It has even been maintained that the apocope of word-final vowels in the Latvian dialects at issue originates from a Livonian substrate. As regards the opposite direction, that is, Latvian influence on Livonian, Livonian nouns of Latvian origin often correspond exactly to the phonological form of the Latvian dialect around Dundaga (Suhonen 1973: 56, 62). The two prepositions *pa* and *par* have merged in this dialect and are represented as *pa*. The loss of *n* occurs in some other words as well (Bezzenberger 1885: 53–58, Draviņš & Rūķe 1955: 114, Draviņš & Rūķe 1958: 77–79). The use of Latvian (dial.) *pa* in a similar predicative construction as Standard Latvian *par* in (41) above is shown in (44).

(44) *pa maspuĩs dziva-t* to farm labourer.ACC(-INST) work-INF 'work as a farm labourer' (Draviņš & Rūķe 1958: 78)

The German translation in the original source is 'als (ein jüngerer, für die leichteren Arbeiten bestimmter) Knecht arbeiten'. The noun *maspuĩs* is basically similar to the nominative form, but it lacks the masculine nominative suffix *-s*. (See the end of section 6.3.4. for the discussion of the Latvian instrumental.)

The merger of pa and par_1 in those Latvian dialects that were spoken adjacently to Livonian explains the pa form in Livonian. As regards its morphosyntax, the morphosyntactic characteristics of the instrumental in Latvian dialects are basically the same as in Standard Latvian. This is the case in the Tamian dialects as well. So, in the singular the instrumental form is identical with the accusative, and in the plural with the dative (Draviņš & Rūķe 1956: 48–72, Rudzīte 1964: 204–222).

As noted above (see (30)), the case government of $l\bar{l}dz(\tilde{o})$ 'until' [$l\bar{l}dz$ | + [N + TRANSLCOM]] that has been reported as another preposition of Latvian

origin in Livonian, corresponds to that of *pa*: $l\bar{\iota}dz\tilde{o}$ *kiņņidõks* until chin-TRANSLCOM 'up to the chin'. Although $l\bar{\iota}dz(\tilde{o})$ occurs very seldom in Livonian texts and there is a Livonian postposition ($s\bar{o}n(\tilde{o}(z))$, $s\bar{o}ni(z)$ 'until') that as a rule displays the same function, the emergence of the TRANSLCOM in the case government of two prepositions of Latvian origin is symptomatic of the role of language contact in these particular constructions: the Latvian-originating prepositions *pa* and $l\bar{\iota}dz(\tilde{o})$ trigger the TRANSLCOM in the Livonian PrepP.

In Latvian the case government of $l\bar{l}dz$ is more ambiguous than that of pa(r). It is commonly reported to require the dative but, similarly to pa (Standard Latvian par), it may govern the accusative(-instrumental) and occasionally even the genitive, as well. The variation in the accusative and the dative can be seen in (45).

(45) a. *līdz ši-m laik-am*a. until this-DAT time-DAT
b. *līdz šuo laik-u*b. until this.ACC time-ACC
'until this time' (ME 478)

Phonological erosion in Latvian dialects has influenced the grammatical categories and case government of adpositions as well. Rudzīte argues that as a result the accusative-instrumental has gained much more space than the case government of prepositions (Rudzīte 1964: 250–251). Assuming that the adjacent Latvian dialects have displayed an accusative(-instrumental)-governing $l\bar{l}dz$, Livonian would appear to have transferred the relevant morphosyntactic properties of the preposition simultaneously with the lexical borrowing here, as in the case of *pa*.

6.3.6 Development of the translative-comitative

Given that the morphosyntax of the Finnic translative does not explain why the prepositions of Latvian origin $l\bar{\iota}dz(\tilde{o})$ and *pa* govern the TRANSLCOM in Livonian, the most plausible reason must be an analogy to the corresponding Latvian construction. The evident conclusion is that the case government of *pa* in the Livonian PrepP reflects that of the corresponding Latvian PrepP, and that the morphosyntactic properties of the TRANSLCOM reflect those of the Latvian accusative-instrumental that are realised in the PrepP. In addition to being the object case, it is also the case that participates in the marking of the predicative adverbial and instrumental (comitative) relations.

The preceding analysis suggested that the synchronic morphosyntactic properties of the Livonian TRANSLCOM developed in quite similar conditions

to those of the Southern Veps PROLCOM. The properties of an inflectional case affix were extended by a contact-induced reanalysis, which in turn was based on the similarity between the morphosyntactic patterns. The semantic change would not have been possible, if the construction had not been morphologically the same (inflectional case) in both of the languages that contributed to the change.

The semantics of a limited set of verbs such as 'become' and 'call' denoting a change in the state of a given entity, is, besides the preposition *pa*, the only restriction to eliminate the functional ambiguity of the TRANSLCOM. The way in which the Livonian and Latvian constructions correspond to one another is illustrated in Figure 6.3.

Figure 6.3. The morphosyntactic properties of the preposition *pa* and TRANSLCOM in Livonian and their correspondences in Latvian.

$$\begin{cases}
\text{Livonian} \\
\text{PrepP} = pa|+[\text{TRANSLCOM}] \\
\text{Case} = 1. \text{TRANSL [PRED.ADV]} \\
2. \text{COM(INST)}
\end{cases} = \begin{cases}
\text{Latvian} \\
\text{PrepP} = pa + [(\text{ACC-})\text{INST}] \\
\text{Case} = \text{INST [COM, PRED.ADV]}
\end{cases}$$

The implication to be made from a comparison of Livonian and Latvian is that the prepositional phrase [pa + [N + TRANSLCOM]] is actually the context in which the Livonian TRANSLCOM was reanalysed and acquired properties characteristic of the Latvian (accusative-)instrumental. The morphosyntactic properties of the TRANSLCOM are not the result of metaphoric extension, but of a contact-induced analogical change. The object-marking characteristics of the Latvian (accusative-)instrumental were not transferred in the contact situation, because they were not relevant in the given construction. The property that is most salient in the Latvian PrepP, that is, instrumentality, was borrowed from the array of various functional characteristics. This was obviously based on the fact that instrumentality is related to many phenomena that influence the marking of nominal constituents, while the accusative is much more limited as the case of object. As in the case of the PROLCOM, and characteristic of lexical borrowing, not all features are transferred but only a limited one. The claim that object-marking properties are not relevant to an adpositional phrase is supported by the morphosyntactic structure of Finnic adpositional phrases. In section 4.5 it was concluded that two morphosyntactic patterns dominate the structure of Finnic adpositional phrases: the postpositions are predominantly genitive(-accusative)-governing, while prepositions are partitive-governing. Both cases are object-marking in transitive clauses, as is the Latvian accusative(-instrumental). However, in a postpositional phrase the Finnic genitive(-accusative) is compatible with a genitive attribute and possessive constructions, while the partitive cases are important in the Finno-Ugric languages. Nor are the object-marking properties of the cases relevant to the Finnic PostpP and PrepP, either. This parallel makes it easier to understand why it is that a whole range of functions from the Latvian accusative(-instrumental) were not borrowed, but only a limited non-transitive part of them.

This description of the Livonian TRANSLCOM has reached the same stage as the analysis of the Southern Veps PROLCOM in section 6.2. The last section of this chapter outlines the general mechanics of the intertwining of endogenous processes and contact-induced change, with special reference to the preconditions of Russian influence on the Southern Veps PROLCOM and Latvian influence on the Livonian TRANSLCOM.

6.4 Interaction between endogenous and contact-induced change

The development of the Southern Veps PROLCOM illustratively shows a gradual phonological and structural reduction that led to a semantic extension through reanalysis. This happened when the former postposition became completely adapted to the morphological system and the affixal traces of the morphosyntactic structure of the earlier PostpP were lost. The synchronic morphosyntactic properties of the Livonian TRANSLCOM were accounted for as a reanalysis of a case suffix. In both cases language contact was considered to be the decisive push towards change. However, this change was only possible because the element under the influence of language contact was inflectional and displayed certain functions.

The different stages of evolution are obvious in both cases. It must be emphasised that the changes started from a simple mechanical process and were followed by a chain of subsequent reductive shifts. The functional aspect is crucial to understanding the intertwining of the morphosyntax with that of the neighbouring language. Correspondence between the constructions is represented at the morphological level before contact-induced change can actualise. In addition to a special morphosyntactic pattern Livonian borrowed a lexical element, whereas in Southern Veps no structural units were transferred from Russian.

The order of the constituents of the adpositional phrase was not borrowed into Livonian from Latvian, because all Finnic languages display prepositions to some extent. The preposition *pa* is a lexical borrowing, on the one hand, but on the other hand, it is a part of a larger process wherein phrasal properties are imported from a foreign language. What has resulted from the introduction of the Finnic translative into a prepositional phrase is indeed a considerable morphosyntactic change, because the translative never occurs in adpositional phrases in the Finnic languages.

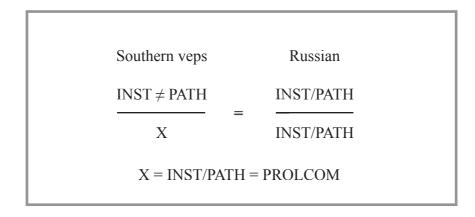
6.4.1 Analogy in reanalysis

The contact-based morphosyntactic change in the two analysed cases did not take place through a mechanical borrowing of constructions, but by means of an analogical extension, which is evidenced in the role of inherent features. In both illustrated cases the suffix under foreign interference displayed certain functions that were the basis for a reanalysis. The parallels with Russian and Latvian are quite transparent and demonstrate how the analogy works. The ascribed diachronic processes support the view that reanalysis as linguistic change is based on analogy (Esa Itkonen 1998: 15–21).

Morphologically, a reanalysis of the Southern Veps PROLCOM and Livonian TRANSLCOM is actually uneconomical, because new semantic features have accumulated onto the suffixes. In a language contact situation this does not appear to be a burden as much as a reorganisation of functions. In these conditions the grammatical relations of a given construction are restructured.

The reanalysis of the Southern Veps PROLCOM is more straightforward, because in this case foreign interference affects only the functions of the suffix and the semantic change is not accompanied by structural change. In other words, the analogy of the Russian instrumental does not affect the morphosyntactic structure as much as the semantics. Figure 6.4 sums up the intertwining of the morphosyntactic properties of the Russian instrumental (abbreviated INST/PATH) and the PROLCOM, as described in section 6.2.3.

Figure 6.4. The Russian instrumental as an analogy catalyst for the reanalysis of the Southern Veps PROLCOM.



This kind of foreign interference on morphosyntax illustrated is called *constructional analogy*, here. Evidence from Southern Veps and Livonian shows that there is concrete interdependence between the reanalysed suffix, its historical predecessors and the contact-inducing language, and that constructional properties are absorbed from two sources. The manner in which the morphosyntax of two different languages have intertwined in the development of the PROLCOM and TRANSLCOM demonstrates illustratively that one construction may inherit the properties of another construction (Goldberg 1995: 67–99, Onikki-Rantajääskö 2001: 185), and that this is possible in language contact as well.

Compared to the Southern Veps PROLCOM the reanalysis of the Livonian TRANSLCOM is more complicated, because both the structure of the PrepP and the morphosyntactic properties of the suffix participate in the systemic transition. The most salient properties of the Livonian TRANSLCOM are (1) the indication of a predicative adverbial (+PRED.ADV), (2) its indispensability in expressing various comitative and instrumental (+INST) relations (3) that it is the case governed by the preposition pa (+PrepP), and (4) that it is an inflectional category (+INFL). The former two are functional (semantic) properties, while the latter two are structural (morphological and syntactic) characteristics.

Note that reference to the prepositional phrase as such is not an adequate explanation for the semantics of the TRANSLCOM, because the reanalysis is clearly based on its morphological characteristics. Figure 6.5 presents a summary of the constructional analogy of Latvian and its influence on the

development of the TRANSLCOM. The relevant morphosyntactic properties and their representation is abbreviated MSR.

Figure 6.5. The Latvian (accusative-)instrumental as an analogy catalyst for the reanalysis of the Livonian TRANSLCOM. (PADV = predicative adverbial as a subject complement)

Livonian	Latvian			
$MSR : PADV \neq MSR : INST$	MSR : PADV/INST			
X	MSR : PADV/INST			
X = MSR : PADV/INST = TRANSLCOM				

Although reanalysis often means a more or less complete rejection of earlier semantic characteristics, this is not the case here. The morphosyntactic properties of the Livonian TRANSLCOM were extended on the basis of analogy to Latvian, although inherent characteristics were preserved and extended in the process, too. In brief, the analogy-based reanalysis of the TRANSLCOM has been as follows. The morphosyntactic representation of the predicative adverbial was originally different from that for instrumental and comitative relations. However, because these two relations were expressed by means of a single inflectional category in Latvian and the difference was made up by syntactic means, Livonian began to display the same ambiguous morphosyntactic pattern. Consequently, the context in which the reanalysis of the case affix took place was the PrepP [pa + [N + cx]] that finally became structurally identical in Livonian and Latvian. Figure 6.6 illustrates this process.

Livonian	Latvian			
PADV ≠ INST	[<i>pa</i> [+ PADV]] : [<i>pa</i> + [[INST]]			
= X	[<i>pa</i> [+ PADV]] : [<i>pa</i> + [[INST]]			
X = [pa [+ PADV]] : [pa + [[INST]] = [pa + [TRANSLCOM]]				

Figure 6.6. Reanalysis of the TRANSLCOM in the prepositional phrase.

The intertwining of the morphosyntax of the two languages demonstrates which elements constitute the illustrated large-scale constructional change. The syntactic order of the constituents, case government of prepositions and morphosyntactic properties of case suffixes provide concrete information on the constraints that make the borrowing of adpositions from one language into another rare and often completely prevent it. Despite geographical adjacency and intensive mutual contacts the morphosyntactic foundations of Livonian and Latvian are essentially different. However, it is possible and even likely that if morphosyntactic intertwining takes place between closely related languages, the structure of adpositional phrases, for instance, will not be as resistant as when typologically more different languages meet. As frequently emphasised in this work, the basic pattern of, for instance, the Finnic adpositional phrases is very similar, but differs from the Indo-European languages. Further consideration of this topic will be left to future research.

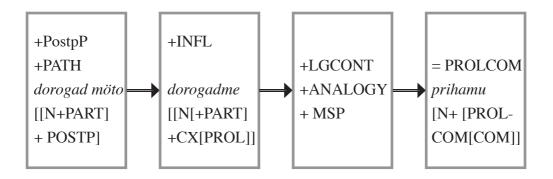
The last section sheds light on the gradualness of the change and sets forth the general preconditions for the changes.

6.4.2 The gradualness of the development of the Southern Veps prolative-comitative and the Livonian translative-comitative

One of the biggest differences between the development of the Southern Veps PROLCOM and Livonian TRANSLCOM is that the form of the former has

undergone a process of considerable change, while the latter has not. Four crucial stages can be demonstrated in the process in which the form of the PROLCOM eroded gradually and became affixal before semantic changes took place. Firstly, the postposition as a free word expressed path. Secondly, phonological reduction caused the suffixation of the postposition and was followed by morphological adoption. Thirdly, the reanalysis was based on analogy, but was only possible because the previous changes had first taken place. Fourthly, the final stage represents the synchronic grammatical status of the Southern Veps PROLCOM, which is characterised by two different functions, namely, the expression of path and comitative relations, using the same suffix. This development is summarised in figure 6.7.

Figure 6.7. The diachronic stages in the development of the Southern Veps PROLCOM. (MSP = morphosyntactic pattern)

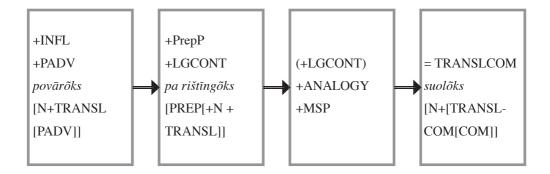


This illustration emphasises the interdependence between form and function in the process. The key functional property (path) of the postposition was transferred to the suffixed case. The morphological adaptation led to the abandonment of the functionally unnecessary partitive suffix (-d). Finally, the reanalysis was only possible because the unit was a part of the inflectional morphology and displayed certain grammatical relations.

Likewise, certain typological preconditions enabled the development of the Livonian TRANSLCOM, although the form of the case did not change. The way in which the change proceeded is not completely identical with the development of the PROLCOM. The changes that will take place are unpredictable at the initial stage, but become realised when language contact enters into the process. Here, too, the intertwining of the Livonian and Latvian morphosyntax was only possible because the unit was inflectional and displayed a certain morphosyntactic property. This property, in turn, enabled the adoption of a preposition *pa* of Latvian origin and the borrowing of a morphosyntactic pattern that is not used in the other Finnic languages.

The development of the TRANSLCOM is summarised in figure 6.8.

Figure 6.8. The diachronic stages in the development of the Livonian TRANSLCOM.



Although gradualness is not as transparent a feature as it is in Southern Veps PROLCOM, a hierarchy of various stages is obvious. The realisation of a contact-induced reanalysis of the TRANSLCOM and the constructional analogy of Latvian were based on certain preconditions.

6.5 Conclusions

It has been maintained that entirely new structures can be introduced into a language only through reanalysis and borrowing (Campbell & Harris 1995: 52, 150). The above analysed changes in the Finnic languages have been imposed by both language contact and reanalysis. Neither of these two diachronic processes alone determines or explains what the actual changes have been. It is questionable whether the result should be characterised as an entirely new structure. The morphosyntactic properties (including functional distribution) of the Southern Veps PROLCOM and Livonian TRANSLCOM undeniably include innovations, but this does not make the entire constructions at issue exclusively innovations. The most striking structural innovation in the two changes has been the morphosyntactic pattern of the Livonian PrepP that introduces entirely new case government. Diachronically the rise of this particular construction has been influenced by both reanalysis and borrowing.

Given the salient role of inherited elements in language and the importance of morphology for the development of the PROLCOM and TRANSLCOM, language-specific characteristics play a crucial role in the process. Adaptation to new functions increases the frequency and grammatical importance of the given suffixes. The development of the PROLCOM demonstrates illustratively that although the grammatical unit at issue has been affected by a gradual reduction, its semantic properties have become extended, leading to increased morphosyntactic cumulation. The consequence is that in this particular case the morphological characteristics and suffixing preference of Veps are being supported. It is noteworthy that change in form and function are not at all uniform: while form has become reduced step by step, functional capacity has increased. Ultimately, diachronic change is not just simple reduction of grammatical elements.

Taking this into account one may conclude that the illustrated kind of morphosyntactic change and evolution in grammar is, after all, more or less unpredictable. If anything, it may be possible to outline the preconditions for a given change and sketch out the sort of changes that are not likely to take place, such as prefixing of cases. Those changes that will ultimately occur in language result from complex diachronic processes and synchronic relations.

7. Summary

This work focuses on the Finnic case system and adpositional phrases, and elaborates different diachronic processes that influence these two grammatical systems. The morphosyntactic interaction between case system and adpositions in synchronic grammar is discussed from the viewpoint of language change and typological divergence. The empirical sections illustrate the different consequences of an eroding case system and the effect of a complete loss of an inflectional case affix.

Evidence from the Finnic languages supports a view that morphosyntactic change is not unidirectional. Nor is morphological change uniform. Based on the evidence of individual diachronic processes in the Finnic case and adposition system I argue that there are two general principles in diachronic change, viz. a preservative and an innovative (which is often reductive) change. Both of them play a significant role in diachronic processes and have a strong effect on the way grammatical relations are synchronically manifested in language.

The way morphosyntactic structure changes and those factors that affect an actual process reflect a constant interaction between form and function. In the processes illustrated the importance of form increases in a predominantly morphological change, while function is crucial for syntax and semantic extensions. The development of the Veps local case system suggests that besides the suffixing of earlier syntactic units such as postpositions, morphological systemacy contributes essentially to suffixing preference, which is seen in the dominance of suffixes in cross-linguistic typological data in earlier typological works.

Morphosyntactic change is analysed both in the light of endogenous and contact-induced change. While endogenous change is often gradual and corresponds to reported paths in language change, the illustrated examples of contact-induced morphosyntactic change are more complex and reflect the intertwining of whole constructions instead of individual features. Although the Finnic languages have historically been strongly influenced by the neighbouring Indo-European languages, it appears that their inherent morphosyntactic characteristics are quite resistant to language contact.

Two seriously endangered Finnic languages, Livonian and Veps, provide the substance for the empirical part of this analysis. Special attention is paid to the Livonian postpositional phrase, the Veps local case system and, in two case studies on the intertwining of autonomous and contact-induced changes, namely, the development of the Southern Veps prolative-comitative (PROLCOM) and Livonian translative-comitative (TRANSLCOM). The results shed more light on the question of how sensitive or resistant language may be to various eroding processes and contact-induced change at a severely endangered stage.

The following conclusions are drawn on the morphosyntax of the Finnic case and adposition system and the diachronic development of individual constructions:

The most typical morphosyntactic representation of the Finnic postpositional phrase is [[N + GEN] + [Postp [+ cx]]].

The most typical morphosyntactic representation of the Finnic prepositional phrase is [Prep + [N + PART]]. Functionally, a PrepP most commonly expresses path or circumspatial relations, or displays an instrumental function (an affirmative or a negative instrumental).

In Livonian, phonological attrition and the loss of the genitive suffix *-n* has affected the morphosyntactic representation of the PostpP in a remarkable way. The original construction [[N + GEN] + [Postp [+ cx]]] is commonly represented now as $[N + [\emptyset +] [Postp [+ cx]]]$, because the loss of the genitive suffix has resulted in the merger of the nominative and genitive(-accusative) in many noun types. Occasionally the Livonian PostpP may have a dative-marked noun: [[N + DAT] + [Postp [+ cx]]].

From a morphological viewpoint the Finnic languages display both integrating and segregating postpositional phrases. In Estonian, the order of elements in a morphologically integrating postpositional phrase and an inflected noun is the same to a large extent. However, this more reflects the simplification of a complicated morphological system than predicts a subsequent reduction of postpositions into suffixes.

The development of the Veps local case system is functionally conditioned and emphasises the significance of spatial relations for a local case system. The Veps local cases consist of two morphological elements: the marker of the local case type (LocI ~ LocE ~ LocD) and the marker of the morphosyntactic property (Loc+ ~ Loc- ~ Loc=) such as goal, location and source.

The loss of former ablative cases (Loc–), i.e. the elative and ablative, and merger with locative cases (Loc=) was compensated by a suffixed postposition in spatial expressions. As a rule, this diachronic compensation did not take place in other functional domains.

Phonological reduction in the Veps exterior local cases and the merger between the adessive (LocE=) and ablative (LocE-) was followed by a reanalysis of the adessive. As a result it shifted to semantically more abstract relations.

The functional ambiguity of the Southern Veps PROLCOM -(d)mu was caused by the reanalysis of the prolative case ending. This reanalysis and

extension into comitative relations was based on language contact, or more precisely, Russian influence. A reanalysis was possible, because the suffixed prolative case fulfilled certain preconditions and both its form (suffixal case) and function (path) corresponded morphosyntactically to those grammatical relations displayed by the Russian instrumental.

The functional ambiguity of the Livonian TRANSLCOM *-ks* was caused by a reanalysis of a former translative case affix. The reanalysis of the TRANSLCOM was based on language contact just as in the case of the Southern Veps PROLCOM. The morphosyntactic properties of the Latvian instrumental case were the source of an analogical extension of the Livonian TRANSLCOM.

The morphosyntax of the Livonian prepositional phrase [pa + [N + -ks]], typical in certain predicative constructions displaying a preposition of Latvian origin, was crucial for the diachronic development of the TRANSLCOM.

A reanalysis of the Southern Veps PROLCOM and Livonian TRANSLCOM was based on (constructional) analogy. In both cases contact-induced change was based on morphosyntactic similarities between the inflectional case of Southern Veps and Russian, and, respectively, Livonian and Latvian.

References

- Aikhenvald & Dixon 2001a = Alexandra Y. Aikhenvald and R. M. W. Dixon (eds.), *Areal Diffusion and Genetic Inheritance. Problems in Comparative Linguistics*. Oxford University Press, Oxford.
- Aikhenvald, Alexandra Y. & Dixon, R. M. W. 2001b: Indroduction. In: Aikhenvald & Dixon 2001a. 1–26.
- Aitchison, Jean 1991: Language change. Progress or decay? Cambridge University Press, Cambridge.
- Alhoniemi, Alho 1969: Välineen ilmaisemisesta tulosijan avulla tšeremissin kielessä. *Virittäjä* 73. 343–350.
- Alhoniemi, Alho 1979: Suomen *l-* ja *s-*sijojen oppositiosta. Sanomia. Juhlakirja Eeva Kangasmaa-Minnin 60-vuotispäiväksi 14.4.1979. Publications of the Department of Finnish and General Linguistics of the University of Turku 9. Turku. 89–105.
- Alhoniemi, Alho 1985: Marin kielioppi. Suomalais-Ugrilainen Seura, Helsinki.
- Alhoniemi, Alho 1988: Postpositiorakenteiden synkroniaa ja diakroniaa. – Sananjalka 30. Turku. 27–44.
- Alhoniemi, Alho 2001: Über die alten und neuen Lokalkasussuffixe im Tscheremissischen. *FUF*|56. 95–115.
- Al'amkin, N. S. 2000 = Н. С. Алямкин: *Мокшень каль. Морфология*. Красный Октябрь, Саранск.
- Alvre, Paul 1967: On the Baltic-Fennic Dative (with special reference to the Liv language). *Sovetskoe Finno-ugrovedenie* 3. Tallinn. 171–181.
- Alvre, Paul 1971: Terminatiivseist konstruktsioonidest terminatiivini. Keel ja Kirjandus 14. Tallinn. 345–357, 535–541.
- Anderson, Stephen R. 1992: *A-morphous morphology*. Cambridge studies in linguistics 62. Cambridge University Press. Cambridge.
- Anttila, Raimo 1977: Analogy. Mouton, the Hague.
- Anttila, Raimo 1989: *Historical and Comparative Linguistics*. Second Revised Edition. John Benjamins, Amsterdam Philadelphia.
- Ariste, Paul 1933: *Eesti-rootsi laensõnad eesti keeles*. Acta et Commentationes Universitatis Tartuensis B XXIX.3. Tartu

- Ariste, Paul 1954: К вопросу о развитии ливского языка. *Труды института языкознания АН СССР* IV. Москва. 254–307.
- Ariste, 1968: *Grammar of Votic language*. Indiana University publications. Uralic and Altaic series 68. Bloomington.
- Auns, Muntis 1994: Vēsture, arheoloģija un antropoloģija. *Lībieši*. Sast. K. Boiko. Zinātne, Rīga. 7–15.
- Bartens, Raija 1972: Inarinlapin, merilapin ja luulajanlapin kaasussyntaksi. MSFOu 148.
- Bartens, Raija 1974: Inarinlapin, merilapin ja luulajanlapin post- ja prepositiorakenteiden käytöstä. *JSFOu* 73. 156–167.
- Bartens, Raija 1978: Synteettiset ja analyyttiset rakenteet lapin paikanilmauksissa. MSFOu 166. Helsinki.
- Bartens, Raija 1999: Mordvalaiskielten rakenne ja kehitys. MSFOu 232. Helsinki.
- Bartens, Raija 2000: Permiläiskielten rakenne ja kehitys. MSFOu 239. Helsinki.
- Bauer, Laurie 1994: Structural analogy: an examination of some recent claims. - Studies in Language 18. 1–22.
- Bauer, Laurie 2001: *Morphological productivity*. Cambridge University Press, Cambridge.
- de Beaugrande, Robert 1997: On history and historicity in modern linguistics.
 Formalism versus functionalism revisited. *Functions of Language* 4, 2: 169–213. John Benjamins, Amsterdam Philadelphia.
- Beekes, Robert 1995: *Comparative Indo-European Linguistics*. John Benjamins, Amsterdam Philadelphia.
- Belle, William van & Langendonck, Willy van 1996–1998 = The dative I–II. Edited by William van Belle and Willy van Langendonck. Joh Benjamins, Amsterdam – Philadelphia.
- Bezzenberger, Adalbert 1885: *Lettische Dialekt-Studien*. Vandenhoeck & Ruprecht, Göttingen.
- Blake, Barry J. 1994: Case. Cambridge University Press, Cambridge New York Melbourne.
- Boiko, Kersti 2000: Līvõ kēļ, Piški optobrōntoz. Lībiešu valoda, Mazā mācību grāmata. Rīga.
- Boretzky, Norbert 1995: Natürlichkeitstheorie und sprachliche Interferenz. – In: Boretzky & al. 1995. 45–65

- Boretzky & al. 1995 = N. Boretzky, W. Dressler, J. Orešnik, K. Teržan & W. Wurzel (Hrsg.), *Natürlichkeitstheorie und Sprachwandel*. Beiträge zum internationalen Symposium über "Natürlichkeitstheorie und Sprachwandel an der Universität Maribor vom 13.5.–15.5.1993. Universitätsverlag Dr. N. Brockmeyer.
- Bulygina 1958 = А. М. Булыгина: *творительный места беспредложный*. - TPSJa. 246-265.
- Bussmann, Hadumod 1996: *Routledge Dictionary of Language and Linguistics*. Translated and edited by Gregory Trauth and Kerstin Kazzazi. London – New York.
- Bybee, Joan L. 1988: The Diachronic Dimension in Explanation. John A. Hawkins (ed.), *Explaining Language Universals*. Basil Blackwell, Oxford. 350–379.
- Bybee, Joan L., Pagliuca, W. & Perkins, R. D. 1990. On the asymmetries in the affixation of grammatical material. – *Studies in typology and diachrony. Papers presented to Joseph H. Greenberg on his 75th birthday*. Ed. by William Croft, Keith Denning and Suzanne Kemmer. Typological studies in language 20. John Benjamins, Amsterdam – Philadelphia. 1–39.
- Campbell, Lyle & Harris, Alice C. 1995: *Historical syntax in cross-linguistic perspective*. Cambridge studies in linguistics 74. Cambridge University Press, Cambridge.
- Carpelan, Christian 1999 = Käännekohtia Suomen esihistoriassa aikavälillä 5100...1000 eKr. In: Fogelberg 1999. 249–280.
- Carpelan, Christian 2000 = Essay on archaeology and languages in the western end of the Uralic zone. *Congressus Nonus Internationalis Fenno-Ugristarum 7.–13.8.2000 Tartu. Pars I. Orationes plenariae & Orationes publicae.* Redegerunt Anu Nurk, Triinu Palo, & Tõnu Seilenthal. Tartu. 7–38.
- Carpelan, Christian 2001: Zur zeitgenössischen archäologischen Forschung in Finnland. *FUF* 56. 254–354.
- Carpelan, Christian & Parpola, Asko 2001: Emergence, contacts and dispersal of Proto-Indo-European, Proto-Uralic and Proto-Aryan in archaeological perspective. – Christian Carpelan, Asko Parpola & Petteri Koskikallio (eds.), *Early Contacts between Uralic and Indo-European: Linguistic and Archaeological Considerations*. MSFOu 242. 55–144.
- Carstairs, Andrew 1987: *Allomorphy in inflexion*. Croom Helm Linguistics series. London New York Sydney.

- Carstairs-McCarthy, Andrew 1992: Current Morphology. Routledge, London – New York.
- Corbett, Greville G. 1993: The head of Russian numeral expressions. In: Corbett & al. 1993. 11–35.
- Corbett & al. 1993 = *Heads in grammatical theory*. Ed. by Greville G. Corbett, Norman M. Fraser and Scott McGlashan. Cambridge University Press.
- Cowgill, Warren 1966: Search for Universals in Indo-European Diachronic Morphology. – Joseph H. Greenberg (ed.), Universals of Language.
 M. I. T. Press, Cambridge (Mass.) – London. 113–141.
- Croft, William 1990: Typology and universals. Cambridge University Press, Cambridge.
- Croft, William 1995: Autonomy and Functionalist Linguistics. *Language* 71. 490–532.
- Croft, William 2001: Radical Construction Grammar. Syntactic Theory in Typological Perspective. Oxford University Press. Oxford.
- Cutler, Anne Hawkins, John A. Gilligan, Gary 1985: 'The suffixing preference: A processing explanation.' *Linguistics* 23. 723-758.
- Dahl & Koptjevskaja-Tamm 2001a = Östen Dahl & Maria Koptjevskaja-Tamm (eds.), *Circum-Baltic Languages. Typology and contact. Volume 1: Past and Present.* John Benjamins, Amsterdam – Philadelphia.
- Dahl & Koptjevskaja-Tamm 2001b = Östen Dahl & Maria Koptjevskaja-Tamm (eds.), Circum- Baltic Languages. Typology and contact. Volume 2: Grammar and Typology. John Benjamins, Amsterdam – Philadelphia.
- Delsing, Lars-Olof 2000: From OV to VO in Swedish. Diachronic Syntax. Models and Mechanisms. Ed. by Susan Pintzuk, George Tsoulas & Anthony Warner. Oxford University Press, Oxford – New York. 255–274.
- Draviņš, Kārlis & Rūķe, Velta 1955: Laute und Nominalformen der Mundart von Stenden 1. Einleitung, Akzent und Intonation, Lautlehre. Slaviska och baltiska studier 2. Slaviska institutionen vid Lunds universitet, Lund.
- Draviņš, Kārlis & Rūķe, Velta 1956: Laute und Nominalformen der Mundart von Stenden 2. Wortbildung, Deklination und Komparation. Slaviska och baltiska studier 3. Slaviska institutionen vid Lunds universitet, Lund.

- Draviņš, Kārlis & Rūķe, Velta 1958: Verbalformen und undeklinierbare Redeteile der Mundart von Stenden. Verben, Adverbien, Präpositionen und Präfixe, Partikeln, Konjunktionen. Slaviska och baltiska studier 4. Slaviska institutionen vid Lunds universitet, Lund.
- Dryer, Matthew S. 1998: Aspects of word order in the languages of Europe.
 Anna Siewierska (ed.), Constituent Order in the Languages of Europe. Mouton de Gruyter, Berlin New York. 283–319.
- Eckert, Rainer, Elvira-Julia Bukevičiūtė and Friedhelm Hinze 1994: *Die baltischen Sprachen*. Langenscheidt, Leipzig Berlin München.
- Ehala, Martin 1994: Russian Influence and the Change in Progress in Estonian Adpositional System. – *Linguistica Uralica* 30. 177–193.
- Ehala, Martin 1997: Eesti morfoloogia olemus. Keel ja Kirjandus 40. 370– 383.
- Ehala, Martin 1998: Eesti keele arenguteid: korporatiivsus vs. avatus. *Keel ja Kirjandus* 41. 733–738.
- Ehala, Martin 1999: no-genitiivi võimalikkusest keeletüpoloogia taustal.
 Helgi Vihma (toim.), Artikleid ja arhivaale II. Johannes Aaviku Selts, Tallinn. 30–34.
- EKG = Mati Erelt, Reet Kasik, Helle Metslang, Henno Rajandi, Kristiina Ross, Henn Saari, Kaja Tael ja Silvi Vare: *Eesti keele grammatika I–II*. Tallinn 1993–1995.
- EKSS = *Eesti kirjakeele seletussõnaraamat I*–. Eesti Keele Instituut, Tallinn 1988–.
- EKVT = Epp Ehasalu, Külli Habicht, Valve-Liivi Kingissepp ja Jaak Peebo: *Eesti keele vanimad tekstid ja sõnastik*. Tartu Ülikooli Kirjastus, Tartu 1997.
- Erelt, Mati & Metslang, Helle 1997: Oma või võõras? ("Muutuv keel") Keel ja Kirjandus 40. 657–668.
- Erelt, Mati & Metslang, Helle forthcoming: Case marking of the predicative in Estonian.
- Erzyan' kel' = Эрзянь кель. Морфология. Цыганкин, Д. В. (отв. ред.). Красный Октябрь, Capaнск, 2000.Faarlund 2001a = Jan Terje Faarlund (ed.), *Grammatical Relations in Change*. John Benjamins, Amsterdam – Philadelphia.
- Faarlund, Jan Terje 2001b: Introduction. In: Faarlund 2001a. 1–13.
- Fogelberg, Paul 1999 = Paul Fogelberg (toim.), *Pohjan poluilla. Suomalaisten juuret nykytutkimuksen mukaan.* Bidrag till kännedom av Finlands natur och folk 153. Societas Scientiarum Fennica. Helsinki.

FUF = *Finnisch-Ugrische Forschungen*, Helsinki.

- Gallén, Jarl 1984 = Jarl Gallén (toim.), *Suomen väestön esihistorialliset juuret*. Bidrag till kännedom av Finlands natur och folk 131. Societas Scientiarum Fennica, Helsinki.
- Gāters, Alfrēds 1977: *Die lettische Sprache und ihre Dialekte*. Trends in Linguistics. State-of-the-Art Reports 9. Mouton, The Hague–Paris–New York.
- Gāters, Alfrēds 1993: *Lettische Syntax. Die Dainas.* Hrsg. von Hildegard Radtke. Peter Lang, Frankfurt am Main.
- Gheno, Danilo 1975: Az erza-mordvin névutók áttekintése I. *Nyelvtudományi Közlemények* 77. 45–57.
- Gheno, Danilo 1976: Az erza-mordvin névutók áttekintése II–III. Nyelvtudományi Közlemények 78.38–70.
- Givón, Talmy 1971: Historical syntax and synchronic morphology: an archaeologist's fieldtrip. *Proceedings of the Chicago Linguistic Society* 7. 394–415.
- Givón, Talmy 1984–1990: *Syntax: a functional-typological introduction I–II.* John Benjamins, Amsterdam Philadelphia.
- Givón, Talmy 1991: Markedness in Grammar: Distributional, Communicative and Cognitive Correlates of Syntactic Structure. – *Studies in Language* 15. 335–370.
- Givón, Talmy 1995: Functionalism and Grammar. John Benjamins, Amsterdam Philadelphia.
- GMJa = *Грамматика мордовских языков*. Мордовский Государственный Университет, Саранск 1980.
- Goldberg, Adele 1995: Constructions. A Construction Grammar approach to argument structure. The University of Chicago Press, Chicago.
- Greenberg, Joseph 1963: Some Universals of Grammar with Particular Reference to the Order of meaningful Elements. – Joseph Greenberg (ed.). *Universals of language*. MIT Press, Cambridge (Mass.). 58– 90.
- Grünthal, Riho 2000: Typological characteristics of the Finnic languages: a reappraisal. In: Laakso 2000a. 31–63.
- Grünthal, Riho 2001: Homonymy and systemacy in Estonian inflection.
 Reet Kasik (toim.) *Keele kannul. Pühendusteos Mati Erelti 60. sünnipäevaks.* Publications of the Department of Estonian of the University of Tartu 17. Tartu. 42–61.

- Grünthal, Riho 2002: Vormihomonüümia ja muutuv keel. Reet Kasik (toim.), Lähivertailuja 12. Soome-eesti kontrastiivseminar 30.5.–1.6.2001 Kääriku. Publications of the Department of Estonian of the University of Tartu 19. Tartu. 21–34.
- Grünthal & Laakso 1998 = Riho Grünthal and Johanna Laakso (toim.), Oekeeta asijoo. Commentationes Fenno-Ugricae in honorem Seppo Suhonen sexagenarii. MSFOu 228. Helsinki.
- Grünthal, Willem 1941: Itämerensuomalaisten kielten yksikön nominatiivi objektin edustajana aktiivin yhteydessä. SKST 218. Helsinki.
- Haase, Martin 2001: Lokalkasus und Adpositionen. Martin Haspelmath, Ekkehard König, Wulff Oesterreicher and Wolfgang Raible (eds.), Language Typology and Language Universals. Volume 1. Walter de Gruyter, Berlin – New York. 736–740.
- Hakulinen, Auli & Karlsson Fred 1979: Nykysuomen lauseoppia. SKST 350. Helsinki.
- Hakulinen, Lauri 1979: *Suomen kielen rakenne ja kehitys*. Neljäs, korjattu ja lisätty painos. Otava, Helsinki.
- Hakulinen, Lauri & Rapola, Martti 1963: Kielitietoa. Tietolipas 8. SKS, Helsinki.
- Hall, Christopher J. 1988: Explaining the suffixing preference. John A. Hawkins (ed.), *Explaining Language Universals*. Blackwell, Oxford. 322–349.
- Halling, Tiina 1993: Liivi keele kaassõnadest ja nende rektsioonist. Ago Künnap (ed.), *Minor Uralic languages and their contacts*. University of Tartu, Tartu. 32–42.
- Halling-Kukk, Tiina 1996: The identity of the Livonians and recent events affecting them. Kyösti Julku (ed.), *Historia Fenno-Ugrica* I:
 1. *Congressus primus historiae fenno-ugricae*. Societas Historiae Fenno-Ugricae, Oulu. 305–313.
- Halling, Tiina 1998: Instrumentaali liivin sijajärjestelmässä. In: Grünthal & Laakso 1998. 127–139.
- Halling, Tiina 1999: About Livonian preposition *il*. Ago Künnap (ed.), Indo-European–Uralic–Siberian linguistic and cultural contacts. *Fennougristica* 22. 65–76.
- Haspelmath, Martin 1998: Does grammaticalization need reanalysis? *Studies in Language* 22:2. 315–351.

- Haspelmath, Martin 2001: Non-canonical marking of core arguments in European languages. – Alexandra Y. Aikhenvald, R. M. W. Dixon and Masayuki Onishi (eds.), *Non-canonical marking of subjects* and objects. Typological studies in language 46. John Benjamins, Amsterdam – Philadelphia. 55–83.
- Haspelmath, Martin forthcoming: Coordination. Timothy Shopen (ed.), *Language typology and linguistic description*. 2nd ed. Cambridge University Press.
- Hasselblatt, Cornelius 1990: *Das estnische Partikeladverb als Lehnübersetzung aus dem deutschen*. Veröffentlichungen der Societas Uralo-Altaica 31. Harrassowitz, Wiesbaden.
- Hasselblatt, Cornelius 1999: Der estnische Illativ als morphosyntaktisches Problem. – Eugen Helimski (hrsg.). *Diachronie in der synchronen Sprachbeschreibung*. Mitteilungen der Societas Uralo-Altaica 21. Hamburg. 35–38.
- Hasselblatt, Cornelius 2000: Eesti keele ainsuse sisseütlev on lühike. *Keel ja Kirjandus* 43. 796–803.
- Haugen, Einar 1982: Scandinavian Language Structures. A comparative historical survey. Historische Sprachstrukturen 5, Niemeyer, Tübingen.
- Haukioja, Timo 1998: Rektio ja rajattuus: huomioita suomen adpositioiden rektioista. Anneli Pajunen (toim.), *Kieliopillistumisesta, analogiasta ja typologiasta*. Suomi 185. SKS, Helsinki. 217–229.
- Haukioja, Timo 2000: Adpositioista ja relationaalisista substantiiveista.
 Anneli Pajunen (toim.), Näkökulmia kielitypologiaan. Suomi 186.
 SKS, Helsinki. 88–108.
- Hawkins, John A. 1988: Explaining Language Universals. John A. Hawkins (ed.), *Explaining Language Universals*. Blackwell, Oxford. 3–28.
- Hawkins, John A. & Cutler, Anne 1988: Psycholinguistic factors in morphological asymmetry. – J. A. Hawkins (ed.), *Explaining Language Universals*. Blackwell, Oxford. 280-317.
- Hawkins, John A. & Gilligan, Gary 1988: Prefixing and suffixing universals in relation to basic word order. *Lingua* 74. 219-259.
- Heath, Jeffrey 1991: Pragmatic disguise in pronominal-affix paradigms. In Plank 1991a. 75–89.
- Heath, Jeffrey 1998: Hermit crabs: Formal renewal of morphology by phonologically mediated affix substitution. *Language* 4/1998. 728–759.

- Heine, Bernd 1992: Grammaticalization chains. *Studies in Language* 16. 335–368.
- Heine, Bernd 1997: *Possession. Cognitive sources, forces and grammaticalization.* Cambridge University Press, Cambridge New York Melbourne.
- Heine, Bernd 2001: Ways of explaining possession. Irène Baron, Michael Herslund and Finn Sørensen (eds.), *Dimensions of Possession*. John Benjamins, Amsterdam – Philadelphia. 311–328.
- Heine, Bernd, Ulrike Claudi & Friederike Hünnemeyer 1991: Grammaticalization: A conceptual framework. Chicago. The University of Chicago Press.
- Heinsoo, Heinike 1995: Tšeeli veeb vaikka Viipurii. Vatjalaisista ja uhanalaisuudesta. In: Jokipii 1995. 147–160.
- Heinsoo, Heinike 1996: Vatjalaisuuden kehityksestä tämän vuosisadan aikana ja nykytilanteessa. – Kyösti Julku (ed.), *Historia Fenno-Ugrica* I:
 1. *Congressus primus historiae fenno-ugricae*. Societas Historiae Fenno-Ugricae, Oulu. 335–343.
- Himmelmann, Nikolaus P. 1998: Regularity in irregularity: Article use in adpositional phrases. *Linguistic Typology* 2. 315–353.
- Hinderling, Robert 1981: Die deutsch-estnischen Lehnwortbeziehungen im Rahmen einer europäischen Lehnwortgeographie. Harrassowitz, Wiesbaden.
- Hint, Mati 1987: Pētõr Damberg 9. III. 1909–25. IV. 1987. *Keel ja Kirjandus* 30. 507–508.
- HLK = *Henriku Liivimaa kroonika*. Tõlkinud Richard Kleis. Toimetanud ja kommenteerinud Enn Tarvel. Tallinn 1982.
- Hopper, Paul & Traugott, Elizabeth 1993: *Grammaticalization*. Cambridge University Press, Cambridge.
- Hróarsdóttir, Thorbjörg 2000: Interacting Movements in the History of Icelandic. – Diachronic Syntax. Models and Mechanisms. Edited by Susan Pintzuk, George Tsoulas and Anthony Warner. Oxford University Press, Oxford – New York. 296–321.
- Huumo, Tuomas 1995: Paikallissijan kieliopillistuminen datiivi-genetiivin funktioon: uralilaisen *n*-sijan ja itämerensuomalaisen adessiivin kehityksen vertailua. *Sananjalka* 37. Turku. 55–79.
- Huumo, Tuomas 1997a: Lokatiivit lauseen semanttisessa tulkinnssa. Ajan, omistajan, paikan ja tilan adverbiaalien keskinäiset suhteet suomen kielessä. Publications of the Department of Finnish and General Linguistics of the University of Turku 55. Turku.

- Huumo, Tuomas 1997b: Domain shifts and the grammaticalization of case: a case study of the Finnish adessive. – *Folia Linguistica Historica* XVII/1–2. 73–95.
- Häkkinen, Kaisa 1996: Suomalaisten esihistoria kielitieteen valossa. Tietolipas 147. SKS, Helsinki.
- Hämäläinen 1958 = М. М. Хямяляйнен: Об агглютинатах в вепсском языке и в южнокарельских говорах карельского языка. *Прибалтийско-финское языкознание*. Труды Карельского филиала Академии Наук СССР XII. Ленинград. 83–94.
- Нämäläinen 1961 = М. М. Хямяляйнен: О развития внутренне-местных падежей в северо-восточной группе прибалтийско-финских языков. ⊣ Прибалтийско-финское языкознание. Труды Карельского филиала Академии Наук СССР XXIII. Ленинград. 84–109.
- Ikola, Osmo 1996: Abessiivin käyttö suomen yleiskielessä ja murteissa. – Sananjalka 38. 25–34.
- Inaba, Nobufumi 1998: Suomalais-ugrilaisten kielten omistusrakenteesta: typologinen ja geneettinen näkökulma. – Anneli Pajunen (toim.), *Kieliopillistumisesta, analogiasta ja typologiasta*. Suomi 185. SKS, Helsinki. 144–181.
- Inaba, Nobufumi 2000a: Genetiivin ja partitiivin datiivinen käyttö vanhassa kirjasuomessa: sijamerkinnän ja sijajärjestelmän suhteesta. *Sananjalka* 42. 47–86.
- Inaba, Nobufumi 2000b: Vanhan kirjasuomen datiivinen genetiivi I. Eräät nykysuomesta kadonneet lausetyypit Kuningas Kristoferin maanlain ensimmäisen suomennoksen valossa. – Anneli Pajunen (toim.), *Näkökulmia kielitypologiaan*. Suomi 186. SKS, Helsinki. 109–152.
- Inaba, Nobufumi 2001: Allative, genitive and partitive. On the dative in Old Finnish. – *Congressus nonus internationalis Fenno-Ugristarum. Tartu* 7.–13.8.2000. Dissertationes sectionum. Linguistica 1. 418–420.
- Itkonen, Erkki 1960: Die Vorgeschichte der Finnen aus der Perspektive eines Linguisten. Ural-Altaische Jahrbücher 32. 2–24.
- Itkonen, Erkki 1966: Kieli ja sen tutkimus. WSOY, Helsinki.
- Itkonen, Esa 1992: Two notions of universal grammar. *Suomen kielitieteellisen yhdistyksen vuosikirja* 5. [SKY Journal of Linguistics.] 53–90.
- Itkonen, Esa 1997: Maailman kielten erilaisuus ja samuus. Gaudeamus, Helsinki.

- Itkonen, Esa 1998: Mitä on 'kieliopillistuminen'? Anneli Pajunen (toim.), Kieliopillistumisesta, analogiasta ja typologiasta. Suomi 185. SKS, Helsinki. 11–41.
- Itkonen, Terho 1972: Historiantakaiset Häme ja Suomi kielentutkijan näkökulmasta. *Historiallinen Aikakauskirja* 70. 85–112.
- Itkonen, Terho 1983: Välikatsaus suomen kielen juuriin. *Virittäjä* 87. 190–229, 349–386.
- Itkonen, Terho 1984–85: Finnisch: eine agglutinierende Sprache? *Zbornik Matice srpske za filologiju i lingvistiku* 27–28. Novi Sad. 281–289.
- Jaakola, Minna 1997: Genetiivin kanssa esiintyvien adpositioiden kieliopillistumisesta. – Tapani Lehtinen ja Lea Laitinen (toim.), *Kieliopillistuminen. Tapaustutkimuksia suomesta*. Kieli 12. Helsinki. 121–156.
- Johnston, Jason 1997: Systematic Homonymy and the Structure of Morphological Categories. Some Lessons from Paradigm. Department of Linguistics University of Sydney. Web address: http://www.mpx.com.au/~jasonj/ syshom.pdf (May, 2000).
- Joki, Aulis J. 1973: Uralier und Indogermanen. Die älteren berührungen zwischen den uralischen und indogermanische Sprachen. MSFOu 151. Helsinki.
- Jokipii 1995 = *Itämerensuomalaiset. Heimokansojen historiaa ja kohtaloita.* Toim. Mauno Jokipii. Atena, Jyväskylä.
- JSFOU = Journal de la Société Finno-Ougrienne. Helsinki.
- Kahr, Joan Casper 1975: Adpositions and locationals: Typology and diachronic development. Working Papers on Language Universals 19.
 Department of Linguistics, Stanford University (California). 21–54.
- Kahr, Joan Casper 1976: The renewal of case morphology: sources and constraints. – Working Papers on Language 20. Department of Linguistics, Stanford University (California). 107–151.

Kallasmaa, Maarja 2000: Saaremaa kohanimed. Eesti Keele Instituut, Tallinn.

- Karelson, Rudolf 1972: Märkmeid kaassõna piirimailt. *ESA* 18. Emakeele Selts. Tallinn. 71–86.
- Karelson, Rudolf 1985: Probleme der Beziehungen zwischen Prä- bzw. Postposition und Adverb im Estnischen. – Ostseefinnische Untersuchungen. Studia Fennica 28. SKS. Helsinki. 41–47.
- Karlsson, Fred 1978: Finsk grammatik. SKST 339. Helsinki.
- Karlsson, Fred 1994: Yleinen kielitiede. Yliopistopaino, Helsinki.

- Karlsson, Göran 1957: Suomen kielen *nukuksissa* ja *hereillä* -tyyppiset paikallissija-adverbit. SKST 250. Helsinki.
- Karlsson, Göran 1995: Suomen kielen tavan adessiivi. Suomi 178. SKS, Helsinki.
- Keem, Hella 1997: Võru keel. Emakeele Selts, Tallinn.
- Keller, Rudi 1994: *On Language Change. The invisible hand in language.* Routledge, London – New York.
- Kel'makov, Valentin Saarinen, Sirkka 1994: *Udmurtin murteet*. Publications of the Department of Finnish and General Linguistics of the University of Turku 47. Turku Iževsk.
- Kel'makov, Valentin Hännikäinen, Sara 1999: Udmurtin kielioppia ja harjoituksia. Suomalais-Ugrilainen Seura, Helsinki.
- Keresztes, Lászlo 1999: Development of Mordvin definite conjugation. MSFOu 233. Helsinki.
- Kettunen, Lauri 1924: Lauseliikmed eesti keeles. Tartu.
- Kettunen, Lauri 1938: *Livisches Wörterbuch mit grammatischer Einleitung*. LSFU V. Suomalais-Ugrilainen Seura. Helsinki.
- Kettunen, Lauri 1943: *Vepsän murteiden lauseopillinen tutkimus*. MSFOu 86. Helsinki.
- Kettunen, Lauri 1947: *Hauptzüge der livischen Laut- und Formengeschichte*. Suomalais-Ugrilainen Seura.
- Kettunen, Lauri 1955: *Etymologische Untersuchung über estnische Ortsnamen*. Suomalaisen Tiedeakatemian Toimituksia 90: 1. Helsinki
- Kettunen, Lauri 1960: Suomen lähisukukielten luonteenomaiset piirteet. MSFOu 119. Helsinki.
- Kettunen, L. 1962 (1929): Eestin kielen äännehistoria. SKST 156. Helsinki.
- Kilby, David 1983: Universal and particular properties of the Evenki case system. *Papers in Linguistics* 16–3/4. 45–74.
- Kilby, David 1981: On case markers. Lingua 54. 101–133.
- Klaas, Birute 1994: Vaba daativi väljendusvõimalusest balti keeleareaalis. H. Remes (ed.), Lähivertailuja 6. Suomalais-virolainen kontrastiivinen seminaari Mekrijärvellä 10.–11.4.1992 Studies in Language 27. University of Joensuu, Joensuu. 37–44.
- Klaas, Birute 1996: Similarities in case marking of syntactic relaions in Estonian and Lithuanian. Mati Erelt (ed.), *Estonian: typological studies* I. Publications of the Department of Estonian of the University of Tartu 4. 37–67.

- Koivulehto, Jorma 1999b:Verba mutuata. Quae vestigia antiquissimi cum Germanis aliisque Indo-Europaeis contactus in linguis Fennicis reliquerint. MSFOu 237. Helsinki.
- Kont, Karl 1955: Translatiivist läänemeresoome keeltes ja mordva ning lapi keeles. *Emakeele Seltsi Aastaraamat* 1. 163–170.
- Koponen, Eino 1991: Itämerensuomen marjannimistön kehityksen päälinjoja ja kantasuomen historiallista dialektologiaa. *JSFOu* 83. 123–161.
- Koponen, Eino 1998: *Eteläviron murteen sanaston alkuperä. Itämerensuomalaista etymologiaa.* MSFOu 230. Helsinki.
- Koptjevskaja-Tamm, Maria & Wälchli, Bernhard 2001: The Circum-Baltic languages. An areal-typological approach. In: Dahl & Koptjevskaja-Tamm 2001b. 615–750.
- Korhonen, Mikko 1974: Oliko suomalais-ugrilainen kantakieli agglutinoiva? – *Virittäjä* 78. 243–257. (Also in: Korhonen 1996.)
- Korhonen, Mikko 1981: Johdatus lapin kielen historiaan. Suomalaisen Kirjallisuuden Seuran toimituksia 370. Helsinki.
- Korhonen, Mikko 1991: Remarks on the structure and history of the Uralic case system. *JSFOu* 83. 163–180. (Also in: Korhonen 1996.)
- Korhonen, Mikko 1996: *Typological and historical studies in language*. MSFOu 223. Helsinki.
- Kovács, Magdolna 2000: The grammaticalization of the Body Part Nouns *fej/fő* 'head' and *agy* 'skull/brain' in Hungarian. SKY Journal of Linguistics 13. 101–122.
- KRG = *Краткая русская грамматика*. Под ред. Н. Ю. Шведовой И В. В. Лопатина. Русский язык, Москва 1989.
- Kuryłowicz, Jerzy 1964: *The inflectional categories of Indo-European*. Carl Winter. Heidelberg.
- Kährik, Aime 1988: *Lõunavepsa deklinatsioonisüsteemi põhijooned*. Preprint KKI 57. Eesti NSV Teaduste Akadeemia, Tallinn.
- Laakso, Johanna 1990: Reflections on the problem of Uralic N/V word stems. – Congressus septimus internationalis fenno-ugristarum. Debrecen 27.VIII–2.IX.1990. Sessiones sectionum 3A. Debrecen.
- Laakso, Johanna 1999: Sprachhistorische Aspekte der Dialektologie: Ostseefinnisch. – Eugen Helimski (hrsg.). Diachronie in der synchronen Sprachbeschreibung. Mitteilungen der Societas Uralo-Altaica 21. Hamburg. 75–80.

- Laakso, Johanna 2000a = Johanna Laakso (ed.), *Facing Finnic. Some challenges to historical and contact linguistics.* Castrenianumin toimitteita 59. Helsinki.
- Laakso, Johanna 2000b: Sound history vs. historical grammar: some Finnic examples. In: Laakso 2000a. 113–136.
- Laakso, Johanna 2001a: The Finnic languages. In: Dahl & Koptjevskaja-Tamm 2001b. 180–212.
- Laakso, Johanna 2001b: Native or borrowed, or both is it possible to have many mothers? *Word* 52. 197–212.
- Laanest, Arvo 1956: Ees- ja tagasõnadest vepsa keeles. Tartu Riikliku Ülikooli Toimetised: Ajaloo-keeleteaduskonna ja õigusteaduskonna üliõpilaste teaduslikke töid 41. 157–170.
- Laanest, Arvo 1982: *Einführung in die ostseefinnischen Sprachen*. Helmut Buske Verlag, Hamburg.
- Lahiri, Aditi 2000 = Aditi Lahiri (ed.), *Analogy, Levelling, Markedness*. Trends in Linguistics, Studies and Monographs 127. Mouton de Gruyter, Berlin – New York.
- Larjavaara, Matti 1986: Itämerensuomen koillisryhmän synkretistiset paikallissijat. *Virittäjä*l 90. 413–427.
- Lass, Roger 1997: *Historical linguistics and language change*. Cambridge University Press, Cambridge.
- Lehmann, Christian 1995: *Thoughts on Grammaticalization*. Lincom Europa, München – Newcastle.
- Lehmann, Winfred P. 1991: The Importance of Models in Historical Linguistics. – Winfred P. Lehmann and Helen-Jo Jakusz Hewitt (eds.), Language typology 1988. Typological Models in Reconstruction. John Benjamins, Amsterdam–Philadelphia. 1–10.
- Lehtiranta, Juhani 1992: Arjeploginsaamen äänne- ja taivutusopin piirteet. MSFOu 212.
- Leino, Pentti 1989: Paikallissijat ja suhdesääntö: kognitiivisen kieliopin näkökulma. *Virittäjä* 93. 161–219.
- Leino, Pentti 1993: *Polysemia kielen moniselitteisyys*. Kieli 7. Helsingin yliopiston suomen kielen laitos, Helsinki.
- Leino, Pentti 1998: Lokatiivisten adverbiaalien vaikutusala. Virittäjä 102. Helsinki. 120–130.
- Leino, Pentti, Marja-Liisa Helasvuo, Petri Lauerma, Urpo Nikanne & Tiina Onikki 1990: Suomen kielen kielen paikallissijat konseptuaalisessa semantiikassa. Kieli 5. Helsingin yliopiston suomen kielen laitos, Helsinki.

- Leino, Pentti, Ilona Herlin, Suvi Honkanen, Lari Kotilainen, Jaakko Leino & Maija Vilkkumaa 2001: *Roolit ja rakenteet. Henkilöviitteinen allatiivi Biblian verbikonstruktiossa.* SKST 813. Helsinki.
- Lindén, Eeva 1964: Aiheetonta agenttirakenteen käyttöä suomen kielessä. – *Virittäjä* 68. Helsinki. 343–353.
- LLVV = Latviešu literārās valodas vārdnīca. Zinātne, Rīga. 1972-1996.
- Luraghi, Silvia 2001: Some remarks on Instrument, Comitative, and Agent in Indo-European. – *Sprachtypologie und Universalienforschung* 54. 385–401.
- LÄGLOS = Lexikon der älteren germanischen Lehnwörter in den ostseefinnischen Sprachen I–II. Begründet von A. D. Kylstra. Fortgeführt von Sirkka-Liisa Hahmo, Tette Hofstra und Osmo Nikkilä. Rodopi, Amsterdam 1991–1996.
- Majtinskaja 1979 = К. Е Майтинская: *Морфология финно-угорских языков*. Наука, Москва.
- Majtinskaja 1982 = К. Е Майтинская: *Служебные слова в финно-угорских языках*. Наука, Москва.
- Маrkianova 1991 = Е. Л. Маркианова: О влиянии русского языка на синтаксис и семантику падежей ливвиковского диалекта карельского языка. *Прибалтийско-финское языкознание*. Ответственные редакторы П. М. Зайков и Н. Г. Зайцева. Карельский научный центр, Петрозаводск. 29–32.
- Marle, Jaap van 1994: Morphological adaptation. Yearbook of Morphology 1993. Ed. by Geert Booij & Jaap van Marle. Kluwer Academic Publishers, Dordrecht – Boston – London.
- McMahon, April 1994: Understanding language change. Cambridge University Press, Cambridge New York Melbourne.
- Matsumura, Kazuto 1994: Is the Estonian Adessive Really a Local Case? – Journal of Asian and African Studies 46–47. 223–235.
- Matsumura, Kazuto 1996a: The Estonian Adessive as "Dative". Congressus Octavus Internationalis Fenno-Ugristarum. Pars IV. Sessiones sectionum, Syntaxis & semantica etc. Redegerunt: Heikki Leskinen, Sándor Maticsák, Tõnu Seilenthal. Jyväskylä. 82–86.
- Matsumura, Kazuto 1996b: The Estonian translative: a corpus-based description. M. Erelt (ed.), *Estonian typological studies* I. Publications of the Department of Estonian of the University of Tartu 4. 68–121.

- Matthews, W. K. 1956: The Latvian element in modern Livonian. Festschrift für Max Vasmer zum 70. Geburtstag. Zusammengestellt von Margaret Woltner und Herbert Bräuer. Veröffentlichungen der Abteilung für Slavische Sprachen und Literaturen des Osteuropa-Instituts an der freien Universität Berlin 9. 307–318.
- ME = *K. Mühlenbachs Lettisch-deutsches Wörterbuch*. Redigiert, ergänzt und fortgesetzt von J. Endzelin. Riga 1923–1932.
- Meillet, Antoin 1958: *Linguistique historique et linguistique générale*. La Société de linguistique de Paris, Paris.
- Mel'čuk, Igor A. 1986. Toward a definition of case. *Case in Slavic*, ed. by R.D. Brecht & J.S. Levine. Columbus, Ohio. 35–85.
- Metslang, Helle 1997: Eesti prefiksaaladverbist *ära* soome keele taustal.
 Riho Grünthal & Reet Kasik (toim.), *Lähivertailuja* 9. Suomalaisvirolainen kontrastiiviseminaari 3.–5.5.1996. Castrenianumin toimitteita 53. Helsinki
- Metslang, Helle 2001: On the developments of the Estonian aspect: The verbal particle *ära*. In: Dahl & Koptjevskaja-Tamm 2001b. 443–479.
- Mihkla, K., Rannut, L., Riikoja, E. & Admann, A. 1974: *Eesti keele lausõpetuse põhijooned* I. Valgus, Tallinn.
- Moora, Harri 1956: Eesti rahva ja naaberrahvaste kujunemisest arheoloogia andmeil. – Harri Moora (toim.), *Eesti rahva etnilisest ajaloost*. Eesti Riiklik Kirjandus, Tallinn. 41–119.
- Moravcsik, Edith A. 1978: On the Case marking of objects. Joseph H. Greenberg (ed.), *Universals of Human Language* 4. *Syntax*. Stanford University Press, Stanford. 249–290.
- MSFOu = Mémoires de la Société Finno-Ougrienne. Helsinki.
- MSFOu 100 = *Näytteitä äänis- ja keskivepsän murteista*. Keränneet E. N. Setälä ja J. H. Kala. Julkaissut ja suomentanut E. A. Tunkelo apunaan Reino Peltola. Helsinki 1951.
- MSFOu 106 = *Näytteitä liivin kielestä*. Kerännyt E. N. Setälä. Suomentanut ja julkaissut Väinö Kyrölä. Helsinki 1953.
- Mullonen 1967 = М. Муллонен: О влиянии синтаксического строя русского языка на вепсский язык. Прибалтийско-финское языкознание. Вопросы фонетики, грамматика и лексикологии. Ленинград. 39–43.
- Must, Mari 1987: *Kirderannikumurre: häälikuline ja grammatiline ülevaade*. Valgus, Tallinn.
- Must, Mari 2000: Vene laensõnad eesti murretes. Eesti Keele Sihtasutus, Tallinn.

- Mägiste, Julius 1937: Laenatud indo-euroopa verbiprefikseist läänemere-sm. keelis. *Eesti Keel* 16. 65–86.
- Mägiste, Julius 1962: Äldre ryska lånord i estniskan, särskilt i det gamla estniska skriftspråket. *Lunds Universitetets Årsskrift* Avd. 1, Bd. 55, Nr. 1.
- Mägiste, Julius 1964: Liiviläisiä tekstejä. SKST 276. Helsinki.
- NEV 1 = Lauri Kettunen: Näytteitä etelävepsästä I. *Suomi* 4:18. SKS, Helsinki 1920.
- NEV 2 = Kettunen, Lauri: Näytteitä etelävepsästä II. Suomi 5:4. SKS, Helsinki 1925.
- Nevis, Joel 1982: Suffix Versus Clitic: Four Estonian Case Endings. *Proceedings from the Eighteenth Regional Meeting of the Chicago Linguistics Society.* Ed. by Kevin Tuite, Robinson Schneider and Robert Chametzky. 400–406.
- Nevis, Joel 1988: On the development of the clitic postposition category in Estonian. -FUF 48. 171–197.
- Newmeyer, Frederick 1998: Language form and language function. MIT Press, Cambridge (Mass.).
- Nichols, Johanna 1986: Head-marking and dependent-marking grammar. *Language* 62. 56–119.
- Nichols, Johanna 1993: Heads in discourse: structural versus functional centricity. *Heads in grammatical theory*. Ed. by Greville G. Corbett, Norman M. Fraser and Scott McGlashan. Cambridge University Press, Cambridge. 164–185.
- Nītiņa, Daina 1978: Prievārdu sistēma latviešu rakstu valodā. Zinātne, Rīga.
- NK = Alho Alhoniemi, Osmo Ikola, Päivi Rintala & Kaarina Visakanto: Nykysuomen käsikirja. Toim. Osmo Ikola. Kolmas, uudistettu painos. Weilin & Göös, Helsinki 1974.
- Norde, Muriel 2001: The loss of lexical case in Swedish. In: Faarlund 2001a. 241–272.
- NS = Nykysuomen sanakirja I–III. 3. painos. WSOY, Porvoo Helsinki. 1970.
- Oinas, Felix 1956: Russian Calques in the Balto-Finnic Languages. Indiana University Publications. Slavic and East European Series 2. Ed. by Michael Ginsburg & Joseph T. Shaw. Bloomington. 225–240.
- Oinas, Felix J. 1961: *The development of some postpositional cases in Balto-Finnic languages*. MSFOu 123. Helsinki.

- Oinas, Zsuzsanna 1993: Mõnest eesti ja soome possessiivtarindist. Keel ja Kirjandus 36. 537–542.
- Ojutkangas, Krista 1998: Itämerensuomalainen näkökulma kieliopillistumiseen. – Sananjalka 40. 67–86.
- Ojutkangas, Krista 2000: Grammaticalising possessive constructions in Finnic: *käsi* 'hand' in Estonian and Finnish. – In: Laakso 2000a. 137–155.
- Ojutkangas, Krista 2001: Ruumiinosannimien kieliopillistuminen suomessa ja virossa. SKST 845. Helsinki.
- Onikki-Rantajääskö, Tiina 2001: Sarjoja. Nykysuomen paikallissijaiset olotilanilmaukset kielen analogisuuden ilmentäjinä. SKST 817. Helsinki 2001.
- Onishi, Masayuki 2001: Non-canonically marked subject an objects: Parameters and properties. – Alexandra Y. Aikhenvald, R. M. W. Dixon & Masayuki Onishi (eds.), *Non-canonical marking of subjects and objects*. Typological studies in language 46. John Benjamins, Amsterdam – Philadelphia. 1–51.
- Pai, Kristina 2001: Essiivne ja translatiivne predikatiivadverbiaal. Reet Kasik (toim.), Keele kannul. Pühendusteos Mati Erelti 60. sünnipäevaks 12. märtsil 2001. Tartu Ülikooli eesti keele õppetooli toimetised 17. Tartu. 232–249.
- Pajusalu, Evald 1958: Adessiivi funktsioonidest eesti murretes ja lähemates sugulaskeeltes. *Keel ja Kirjandus* 1. 246–258.
- Pajusalu, Karl 1996: *Multiple Linguistic Contacts in South Estonian: Variation* of Verb Inflection in Karksi. Publications of the Department of Finnish and General Linguistics of the University of Turku 54. Turku.
- Palancar, Enrique L. 2002: *The Origin of Agent Markers*. Sprachtypologie und Universalienforschung 5. Akademie Verlag, Berlin.
- Pall, Valdek 1969–1977: Põhja-Tartumaa kohanimed. Valgus, Tallinn.
- Paunonen, Heikki 2003: Suomen kielen morfologisista muutosmekanismeista.
 Lea Laitinen, Hanna Lappalainen, Päivi Markkola & Johanna Vaattovaara (toim.), *Muotojen mieli. Kirjoituksia morfologiasta ja variaatiosta*. Kieli 15, Helsingin yliopiston suomen kielen laitos Helsinki. 187–248.
- Payne, John 1993: The headedness of noun phrases: slaying the nominal hydra.
 Heads in grammatical theory. Ed. by Greville G. Corbett, Norman M. Fraser and Scott McGlashan. Cambridge University Press, Cambridge. 114–139.
- Penttilä, Aarni 1963: Suomen kielioppi. Toinen, tarkistettu painos. WSOY. Porvoo – Helsinki.

- Plank, Frans 1979: The functional basis of case systems and declension classes: from Latin to Old French. – *Linguistics* 17. Mouton Publishers. The Hague – Paris – New York. 611–640.
- Plank, Frans 1991 = Frans Plank (ed.), Paradigms. The Economy of Inflection. Empirical Approaches to Language Typology 9. Mouton de Gruyter, Berlin, New York.
- Plank, Frans 1992: From cases to adpositions. Nicola Pantaleo (Ed.), *Aspects* of English diachronic linguistics. Schena editore, Fasano. 17-61.
- Plank, Frans 1995: Entgrammatisierung Spiegelbild der Grammatisierung. – In: Boretzky & al. 1995. 199–219.
- Plank, Frans 1998: The co-variation of phonology with morphology and syntax: A hopeful history. *Linguistic Typology* 2. 195–230.
- Plank, Frans 1999: Split morphology: How agglutination and flexion mix. *Linguistic Typology* 3. 279–340.
- Plank, Frans 2003a: Noun phrase structure: *An und für sich*, in time, and in space. In: Plank 2003b. 3–33.
- Plank, Frans 2003b: *Noun Phrase Structure in the Languages of Europe*. Mouton de Gruyter, Berlin – New York.
- Posti, Lauri 1942: Grundzüge der livischen Lautgeschichte. MSFOu 85. Helsinki.
- Posti, Lauri 1945: Liivin äännehistorian alalta. Virittäjä 49. 205–208.
- Raag Raimo 1982: *Lexical Characteristics in Swedish Estonian*. Acta Universitatis Upsaliensis. Studia Uralica et Altaica Upsaliensia 13. Uppsala.
- Raag, Raimo 1999: *Från allmogemål till nationalspråk : språkvård och språkpolitik i Estland från 1857 till 1999.* Acta Universitatis Upsaliensis, Studia multiethnica Upsaliensia 12. Uppsala.
- Raag, Virve 1998: *The effects of planned change on Estonian morphology*. Studia Uralica Upsaliensia 29. Uppsala.
- Raag, Virve 1999: Kas julgesime olla maailmas esimesed? *Keel ja Kirjandus* 42. 609–621.
- Ravila, Paavo 1941: Über die Verwendung der Numeruszeichen in den uralischen Sprachen. FUF127. 1–136.
- Ravila, Paavo 1945: Suomalais-ugrilaisten kielten taivutuksen historiaa. – *Virittäjä* 49. 314–326.
- Ravila, Paavo 1953: Sanaluokat, erityisesti uralilaisia kieliä silmällä pitäen. – *Virittäjä* 57. 41–50.
- Rédei, Károly 1962: Die Postpositionen im Syrjänischen unter Berücksichtigung des Wotjakischen. Akadémiai Kiadó, Budapest.

Rédei, Károly 1996: Zu der Gescichte des PU-PFU Kasussystems. Die Rolle der Koaffixe in der Herausbildung der Deklination. – Lapponica et Uralica. 100 Jahre finnisch-ugrischer Unterricht an der Universität Uppsala. Herausgegeben von Lars-Gunnar Larsson. Studia Uralica Upsaliensia 26. 257–271.

Remes, Hannu 1983: Viron kielioppi. WSOY. Porvoo - Helsinki - Juva.

RG = Русская грамматика. Том І. Наука, Москва 1982.

- Riese, Timothy 1992: Der Translativ in den uralischen Sprachen I. *Linguistica* Uralica 28. 251–261.
- Riese, Timothy 1993: Der Translativ in den uralischen Sprachen II. Linguistica Uralica 29. 1–20.
- Rudzīte, Marta 1964: Latviešu dialektoloģija. Latvijas valsts izdevniecība. Rīga.
- Rudzīte, Marta 1993: Latviešu valodas vēsturiskā fonētika. Zvaigzne, Rīga.
- Russkaja dialektologija = *Русская диалектология*. Под редакцией проф. Н. А. Мещерского. Высшая школа, Москва 1972.
- Rätsep, Huno 1978: Eesti keele lihtlausete tüübid. Valgus. Tallinn.
- Rätsep, Huno 1979: *Eesti keele ajalooline morfoloogia II. Õppevahend eesti filoloogia osakkonna üliõpilastele.* Tartu Riiklik Ülikool. Tartu.
- Saagpakk, Paul 1982 = *Estonian-English Dictionary*. Compiled by Paul F. Saagpakk. Yale University Press, New Haven London.
- Salminen, Tapani 1993 = Tapani Salminen (toim.), *Uralilaiset kielet tänään*. Snellman-instituutti, A-sarja13/1993. Kuopio.
- Salminen, Tapani 1997: *Tundra Nenets inflection*. Mémoires de la Société Finno-Ougrienne 227. Helsinki.
- Salminen, Tapani 1998a: Nenets. Daniel Abondolo (ed.), *The Uralic languages*. Routledge. London New York. 516–547.
- Salminen, Tapani 1998b: Pohjoisten itämerensuomalaisten kielten luokittelun ongelmia. In: Grünthal & Laakso 1998. 390–406.
- Sammallahti, Pekka 1977: Suomalaisen esihistorian kysymyksiä. (Summary: Problems of Finnic prehistory.) *Virittäjä* 81. 119–136.
- Sammallahti, Pekka 1998: The Saami Languages. An Introduction. Davvi Girji, Kárášjohka.
- Sands, Kristina & Campbell, Lyle 2001: Non-canonical subjects and objects in Finnish. – Alexandra Y. Aikhenvald, R. M. W. Dixon & Masayuki Onishi (eds.), *Non-canonical marking of subjects and objects*. John Benjamins, Amsterdam – Philadelphia. 251–305.

- Sapir, Edward 1921: Language. An Introduction to the Study of Speech. Harcourt, Brace & co. New York.
- Sarhimaa, Anneli 1999: Syntactic transfer, contact-induced change, and the evolution of bilingual mixed codes: focus on Karelian-Russian language alternation. Studia Fennica Linguistica 9. SKS, Helsinki.
- Sarhimaa, Anneli 2000: Neighbours getting together in Karelia. In: Laakso 2000a. 185–209.
- Schneider, Edgar W. 1997: Chaos theory as a model for dialect variability and change. – Alan R. Thomas (ed.), *Issues and Methods in Dialectology*. Department of Linguistics, University of Wales Bangor. 22–36.
- Schwegler, Armin 1990: Analyticity and Syntheticity. A Diachronic Perspective with Special reference to Romance Languages. Mouton de Gruyter. Berlin – New York.
- Siro, Paavo 1964: Suomen kielen lauseoppi. Helsinki.
- de Sivers, Fanny 1971: Lettischen Präfixe des livischen Verbs. Nancy.
- de Sivers, Fanny 2001: *Parlons live. Une langue de la Baltique*. L'Harmattan. Paris – Budapest – Torino.
- Sjögren, Anders Johan 1861 = Joh. Andreas Sjögren's gesammelte Schriften. Band 2, Theil 2. Livisch-deutsches und deutsch-livisches Wörterbuch. Bearb. von F. J. Wiedemann. St. Petersburg.
- SKP = *Suomen kielen perussanakirja* 1–3. Valtion painatuskeskus, Helsinki. 1990–1994.
- SKST = Suomalaisen Kirjallisuuden Seuran Toimituksia. Helsinki.
- Song, Jae-Jung 2001: *Linguistic typology. Morphology and syntax.* Harlow, Longman.
- Spencer, Andrew 1997: Inflectional morphology and functional heads.
 Wolfgang U. Dressler, Martin Prinzhorn, John R. Rennison (eds.) Advances in Morphology. Trends in Linguistics, Studies and Monographs 97. Mouton de Gruyter, Berlin New York. 31–49.
- Spencer, Andrew 2000: Inflection and the lexeme. Acta Linguistica Hungarica 47. 335–344.
- SRJa = Современный русский язык. Часть І. Под ред. Д. Э Розенталя. Вышая школа, Москва 1979.
- SSA = Suomen sanojen alkuperä. Etymologinen sanakirja 1–3. Päätoim. Erkki Itkonen ja Ulla-Maija Kulonen. SKS, Helsinki 1992–2000.
- Stang, Christian S. 1966: *Vergleichende Grammatik der Baltischen Sprachen*. Universitetsforlaget. Oslo – Bergen – Tromsö.

- Stanisheva, D. S. 1958 = Д. С. Станишева: Творительный социативный. *TPSJa*. 41–75.
- Stassen, Leon 2000: AND-languages and WITH-languages. *Linguistic Typology* 4. Mouton de Gruyter, Berlin New York. 1–54.
- Stoebke, Renate 1968: *Die Verhältniswörter in den ostseefinnschen Sprachen*. Indiana University Publications. Uralic and Altaic Series 93. Bloomington.
- Stolz, Thomas 1992: *Lokalkasussysteme. Aspekte einer strukturellen Dynamik.* Pro lingua 13. Gottfried Egert Verlag, Wilhelmsfeld.
- Stolz, Thomas 2001a: Comitatives vs. instrumental vs. agents. Walter Bisang (ed.), Aspects of typology and universals. Akademie Verlag, Berlin. 153–174.
- Stolz, Thomas 2001b: On Circum-Baltic instrumentals and comitatives. In: Dahl & Koptjevskaja-Tamm 2001b. 591–612.
- Suhonen, Seppo 1973: *Die jungen lettischen Lehnwörter im Livischen*. MSFOu 154. Helsinki.
- Suhonen, Seppo 1975: *Liivin kielen näytteitä*. Castrenianumin toimitteita 5. Helsinki.
- Suoniemi-Taipale, Inga 1994: *Itämerensuomalaisten kielten prolatiivi*. SKST 616. Helsinki.
- Söderman, Tiina 1996: Lexical characteristics of the north eastern coastal dialect. Studia Uralica Upsaliensia 24. Uppsala.
- Tauli, Valter 1955: On the Foreign Contacts of the Uralic languages. Ural-Altaische Jahrbücher 27. 7–31.
- Tauli, Valter 1956: The Origin of Affixes. FUF 32. 170–225.
- Tauli, Valter 1966: Structural Tendencies in Uralic Languages. Indiana University Publications, Uralic and Altaic Series 17. Mouton & co, London – The Hague – Paris.
- Tauli, Valter 1968: Keelekorralduse alused. Eesti Teaduslik Selts Rootsis, Uppsala.
- Tauli, Valter 1980: *Eesti keele grammatika II. Lauseõpetus*. Finsk-ugriska institutionen. Uppsala.
- Tauli, Valter 1984: Is the Structural Change of Languages Really Predestined? – *Ural-Altaische Jahrbücher*, N.F. 4. 25–35.
- Tereščenko 1973 = Н. М. Терещенко: Синтаксис самодийских языков. Наука, Ленинград.
- Thomason, Sarah G. 2001: *Language Contact. Introduction*. Edinburgh University Press, Edinburgh.

- Tihomirova 1958 = Т. С. Тихомирова, Процесс адвербиализации творительного падежа. *TPSJa* 313–350.
- Tikka, Toivo 1988: Itämerensuomalaisia paikallissijojen synkresiatapauksia.
 Muusa Ojanen & Ilkka Savijärvi (toim.), *Kielikontakteja I. Tutkimuksia venäjän ja itämerensuomalaisten kielten alalta*. Studies in Language 13, Joensuu. 79–100.
- Tikka, Toivo 1992: Vepsän suffiksoituneet postpositiot. Kieliopillisiin sijoihin liittyvä suffiksoituminen. Studia Uralica Upsaliensia 22. Uppsala.
- Tommola 1986 = Hannu Tommola: *Аспектуальность в финском и русском языках*. Neuvostoliitto-instituutin vuosikirja 28. Helsinki.
- TPSJa = *Творительный падеж в славянских языках*. Под редакцей С. Б. Бернштейна. Издательство Академии Наук СССР, Москва.
- Trosterud, Trond 2001: The changes in Scandinavian morphology from 1100 to 1500. *Arkiv för nordisk filologi* 116. 171–191.
- Tveite, Tor 2001: *The case of the object in Livonian*. A corpus based study. Pro gradu thesis. Department of Finno-Ugrian Studies. Helsinki University. [An unpublished manuscript.]
- UEW = Károly Rédei, *Uralisches etymologisches Wörterbuch I–II*. Akadémiai Kiadó, Budapest 1986–88.
- Vaba, Lembit 1977: Läti laensõnad eesti keeles. Valgus, Tallinn.
- Vaba, Lembit 1990: Die baltischen sonderentlehnungen in den ostseefinnischen Sprachen. – Itämerensuomalaiset kielikontaktit. Läänemeresoome keelekontaktid. Kotimaisten kielten tutkimuskeskuksen julkaisuja 61. Helsinki. 125–139.
- Vaba, Lembit 1997: Uurimusi eesti-läti keelesuhetest. Eesti Keele Instituut, Tallinn.
- Vainik, Ene 1993: Esimerkkejä viron ulkopaikallissijoista kognitiivisen kieliopin kontekstissa. Matti K. Suojanen ja Auli Kulkki-Nieminen (toim.): 19. Kielitieteen päivät Tampereella 8.–9. toukokuuta 1992. Folia Fennistica & Linguistica. Tampereen yliopiston suomen kielen ja yleisen kielitieteen laitoksen julkaisuja 16. Tampere.
- Vainik, Ene 1995: *Eesti väliskohakäänete semantika*. Eesti Keele Instituut, Tallinn.
- van Valin, Robert D. 2001: An Introduction to Syntax. Cambridge University Press, Cambridge.

- Viitso, Tiit-Rein 1990: Eesti keele kujunemine flekteerivaks keeleks. *Keel ja Kirjandus* 33. 456–461, 542–548.
- Viitso, Tiit-Rein 1993: Eteläiset itämerensuomalaiset kielet eilen ja tänään. – In: Salminen 1993. 59–65.
- Viitso, Tiit-Rein 1998: Fennic. Daniel Abondolo (ed.), *The Uralic languages*. Routledge. London – New York. 96–114.
- Viitso, Tiit-Rein 2000: Finnic affinity. Congressus Nonus Internationalis Fenno-Ugristarum 7.–13.8.2000 Tartu. Pars I. Orationes plenariae & Orationes publicae. Redegerunt Anu Nurk, Triinu Palo, Tõnu Seilenthal. Tartu. 153–178.
- Viks, Ülle 1984: Sõnavormide homonüümia eesti keeles. *Keel ja Kirjandus* 27. Tallinn. 97–105.
- Vilkuna, Maria 1989: Free word order in Finnish : its syntax and discourse functions. SKST 500. Helsinki.
- Vilkuna, Maria 1996: Suomen lauseopin perusteet. Kotimaisten kielten tutkimuskeskuksen julkaisuja 90. Edita. Helsinki.
- Vilkuna, Maria 1998: Word order in European Uralic. Siewierska, Anna (ed.), *Constituent Order in the Languages of Europe*. Empirical Approaches to Language Typology 20–1. Mouton de Gruyter. Berlin – New York. 173–233.
- Vincent, Nigel 1974: Analogy reconsidered. John Anderson and Charles Jones (eds.), *Historical Linguistics* 1–2. North Holland, Amsterdam. 427–445.
- Vincent, Nigel 1993: Head- versus dependent-marking: the case of the clause. – Heads in grammatical theory. Ed. by Greville G. Corbett, Norman M. Fraser and Scott McGlashan. Cambridge University Press. 140– 163.
- Virtaranta & Suhonen 1983 = Lähisukukielet. Näytteitä uralilaisista kielistä III. Toim. Pertti Virtaranta ja Seppo Suhonen. Suomi 119:3. SKS, Helsinki.
- Winkler, Eberhard 1994 = Salis-livische Sprachmaterialen. Hrsg. von Eberhard Winkler. Veröffentlichungen des Finnisch-Ugrischen Seminars an der Universität München 21. München.

- Winkler, Eberhard 1999 = Ältere livische Sprachmaterialen. Hrsg. von Eberhard Winkler. Veröffentlichungen des Finnisch-Ugrischen Seminars an der Universität München 22. München.
- Winkler, Eberhard 2000: Zum lettischen Einfluss auf das Livischen. *Latvijas Zinātņu Akadēmijas vēstis* 54: 3–4. Rīga. 17–24.
- Wurm 2001 = Atlas of the World's languages in Danger of Disappearing. Editor: Stephen A. Wurm. Second edition, revised, enlarged and updated. Unesco publishing, 2001.
- Wurzel, Wolfgang Ullrich 1995: Alterscheinungen in der Morphologie. In: Boretzky & al. 1995. 67–91.
- Wälchli, Bernhard 2000: Livonian in a genetic, areal and typological perspective, or is Finnish better Finnic than Livonian? In Laakso 2000a. 210–226.
- Wälchli, Bernhard 2001: Lexical evidence for the parallel development of the Latvian and Livonian verb particles. In Dahl & Koptjevskaja-Tamm 2001b. 413–441.
- Vääri, Eduard 1995: Liiviläiset ja liivin kieli. In: Jokipii 1995. 127–146.
- Zajceva, Marija 1981 = М. Зайцева: Грамматика вепсского языка. Фонетика и морфология. Наука, Ленинград.
- Zajceva, Marija 2001: Vepsän kielen lauseoppia. MSFOu 241. Helsinki.
- Zajceva, Marija & Mullonen, Maria 1972 = М. Зайцева и М. Муллонен: Словарь вепсского языка. Наука, Ленинград.
- Zajceva, Nina 1981 = Н. Зайцева: Именное словоизменение в вепсском языке. История и функционирование форм слова. Карелия, Петрозаводск.
- Zajceva, Nina 1995: Vepsä-venälaine, venä-vepsläine vajehnik. Karelija, Petrozavodsk.
- Zeps, Valdis 1962: Latvian and Finnic Linguistic Convergences. Indiana University Publications, Uralic and Altaic Series 9. Bloomington.
- Zwicky, Arnold 1985: Heads. *Journal of Linguistics* 25. Cambridge University Press, Cambridge. 1–29.
- Zwicky, Arnold 1993: Heads, bases and functors. Heads in grammatical theory. Ed. by Greville G. Corbett, Norman M. Fraser and Scott McGlashan. Cambridge University Press. 292–311.

Index of subjects

abessive 27, 51, 81-83 ablative 27–29, 38, 41, 48, 57, 59, 62, 66, 69, 71, 72, 75, 108, 116–125, 131, 137, 138, 144–147, 151, 154, 158, 195 accusative 90, 189–195 accusative(-instrumental) 190, 191, 193-195, 198 adessive 27–29, 59, 63, 64, 69, 74, 104, 108, 116, 117, 119, 122, 125, 129, 131, 136–144, 146, 151, 162, 169 - 172adpositions 28, 30, 35–37, 39, 43–71, 74-80, 83, 84, 92, 93, 97, 102, 109, 114, 121, 127, 129, 155, 166, 177, 178, 180, 193, 199 bipositional adpositions 46, 47, 61, 67-69, 76-81, 84, 114 opaque adpositions 46, 49 adpositional phrase 13, 14, 16, 17, 30, 35, 45–47, 52, 53, 56, 61, 62, 64, 66-69, 71, 84. 88, 97, 104, 105, 109, 114, 120, 129, 139, 163, 166, 189, 195, 196, 199 adverb 28, 46–48, 53, 54, 56, 57, 60, 69, 70-72, 92, 93, 98-103, 110, 113, 125, 129, 159, 180 affix placement 35, 36 agreement case agreement (see *case*) number agreement 170 agglutinating 24, 26, 38, 43, 121 allative 27–29, 59, 66, 69, 72, 122, 130, 136, 142 allomorphism 112, 114, 180, 191 analogy (analogical change) 33, 37, 40– 44, 50, 90, 108, 150, 153, 158, 177, 188, 194 196, 197, 198, 200, 201 constructional analogy 197, 201 approximative 27, 29, 51, 122, 123, 125, 158 attribute phrase 59, 65, 89, 91, 92, 95, 98, 99, 107, 134, 144, 159, 163 Baltic 89, 176, 191 Balto-Slavic 191 benefactive 90

body-part nouns 43, 94, 98, 128, 130, 148 - 150borrowing 34, 37, 45, 53–55, 82, 89, 104, 160, 175, 177, 179, 193-201 case: case affix 13, 26, 28, 30, 47, 51, 66, 71, 73, 76, 117, 118, 134–136, 139, 151–153, 167, 179, 194, 196 case agreement 50, 51, 95, 96, 134, 152, 163 case ending 28, 30, 41, 46, 48, 50, 52, 59, 63, 66, 70, 72, 74, 75, 81, 85, 86, 90, 96, 106, 109, 110, 117, 123, 124, 126, 129, 133, 136, 138, 143, 148, 153, 163, 165 case form 26, 41, 59, 65, 75, 111-113, 126, 128, 130, 152, 153 case government 17, 36, 45, 55, 62, 69, 71, 76, 77, 85, 114, 152, 167 179, 182, 183, 189, 192, 193, 197, 199, 201 case inflection 14, 17, 28, 29, 46, 49, 56, 65, 92, 109–115, 166 case paradigm 26, 27, 29, 41, 48, 52, 60, 119, 122, 126, 137, 152, 158, 162 case suffix 16, 17, 25, 26, 30, 34, 35, 37-39, 49, 50, 51, 55, 62, 65, 66, 74, 77, 78, 85, 87, 96, 108–110, 112, 115, 119, 121, 123–125, 134, 147, 151, 152, 160, 162, 170, 174, 175, 177, 178, 195, 199 case system 13–15, 17, 24, 27, 34, 37, 38, 41, 51, 74, 75, 81, 92, 116, 117, 119–121, 124–128, 132, 139, 140, 152–159, 166, 169, 185, 191 circumspatial relations 63, 65, 76, 80, 114 comitative (cf. prolative-comitative and translative-comitative) 14, 17, 18, 25, 27, 29, 41, 50, 5, 69, 71, 72, 76, 120, 135, 139, 143, 162–165, 167-176, 178-180, 182-188, 191, 193, 197, 200

compensation 40, 87, 114, 121, 144, 151

complement 45, 47, 52, 60, 63, 64, 66, 67-69, 72, 77, 78, 84-86, 92, 94-96, 98-101, 105-109, 114, 120, 178, 185, 186, 188, 198 contact-induced change 13, 17, 37, 40, 41, 56, 88, 114, 160, 162, 176, 177, 190, 194, 195, 201 cumulative exponence 181 dative 27, 29, 61, 69, 71, 90, 91, 93–95, 99–104, 136, 142, 174, 189–193 deflexion 33 degrammaticalisation 33 derivation (derivational form) 34, 166, 167 egressive 27, 29, 39, 123, 124, 158 elative 25–27, 29, 57, 66, 69, 71, 72, 74–77, 106–108, 116–119, 122–125, 130, 131, 134, 145, 147–149, 151, 155 endocentric 105 endogenous change 13, 17, 18, 37, 43, 88, 139, 141, 145, 147, 160, 162, 169, 171, 172, 182, 195 English 42, 64, 91, 161 Erzya Mordvin 48, 96, 98, 140, 154, 167, 185, 186 essive 27, 29, 51, 126, 186-188 Estonian 13-16, 19-26, 34, 39, 41, 50, 51, 53, 54, 56–58, 60, 63, 66–87, 89-91, 95, 98, 102-104, 106, 107, 109–113, 115, 117, 120, 125–127, 129, 136, 139, 142–144, 146, 147, 152, 153, 161, 166, 169, 170, 180, 181, 183, 185-187 exocentric 47, 104 experiencer 90, 91, 94, 101, 104, 129, 139, 141–144, 171 Finnish 13-16, 20-28, 42, 45-50, 56, 57, 59, 61, 63, 64, 66, 67, 69–76, 78-82, 85, 89, 90, 98, 100, 103, 105–107, 109, 111–113, 117, 119 123–126, 128, 129, 136–140, 142, 143, 145, 153, 161, 166, 169, 171, 180, 185–188 Finno-Permic 66, 127, 155 Finno-Ugric 19, 21, 24, 35, 36, 38, 39, 45, 48–50, 52, 53, 61, 65, 66, 78, 90, 91, 96, 97, 100, 112, 121, 126, 127, 128, 135, 136, 139, 140, 142, 156, 161, 167, 177, 186, 188, 195 flexion 24

flexive (forms) 23, 26, 38, 39, 83, 89, 112, 143 French 37, 50, 91 functor 41, 106, 107 gender 106, 154, 174, 176, 191 genitive 25–29, 36, 37, 39, 45, 51, 52, 55, 57, 59–61, 63–70, 72, 83–86, 89–101, 104, 105, 109–112, 115, 136, 142, 152, 193 genitive(-accusative) 25-28, 39, 85-93, 95, 96, 99–101, 104, 105, 108, 109, 112, 115, 152, 153, 182, 195 genitive-governing (adposition) 59, 63, 65, 67, 68, 71–73, 78, 79, 84, 166 genitive attribute 64, 65, 86, 89, 90, 92, 96, 107, 195 genitive phrase 36 German 54, 102, 147, 160, 161 Germanic languages 14, 33, 89, 91 grammatical relations 14, 30, 31, 47, 60, 61, 88, 92, 96, 98, 101, 110, 114, 115, 121, 127, 128, 130, 139, 147, 152, 153, 164, 183, 185, 196, 200 grammaticalisation 33, 39, 43, 55 heads functional head 30, 45, 86, 105, 108, 113

syntactic head 45, 56, 67, 68, 86, 94, 96, 105–108, 115, 134 Hungarian 48–50, 52, 126, 165

Illative 23, 25–29, 39, 57, 59, 67, 70–74, 108, 112, 122, 123, 130, 152, 153, 181, 182 "long illative" 23 "short illative" 112, 181 inessive 27, 29, 59, 63, 66, 74, 76, 77, 110, 117, 119, 122, 123, 125, 131, 133, 148, 149, 151, 155 inflection: inflection type 28, 112, 181 inflectional affix 17, 26, 33, 48, 50, 52, 89, 91, 97, 105, 115 inflectional asymmetry 134 inflectional category 29, 34, 50, 75, 108, 116, 152, 157, 171, 174–177, 197, 198 inflectional element 34, 46, 48, 50, 53, 56, 61, 79, 88, 106, 108, 120, 125, 164, 177, 181, 191 inflectional form 30, 33, 45, 46, 50,

62, 105–107, 117, 130, 152, 154, 164, 191 inflectional handicap 70, 152 inflectional morphology 24, 25, 34, 51,200 inflectional paradigm 60, 81, 132, 170, 180 inflectional reduction 84, 90, 91, 96 inflectional suffix 26, 81, 114, 116, 159 inflectional (sub)system 42–44, 85, 91, 122, 150 noun inflection 24, 25, 47, 50, 61, 70, 74, 75, 77, 85, 86, 110, 112, 166, 174 inflectional homonymy 26, 27, 39, 93, 95, 152–154, 157, 181 cumulative homonymy 154 non-cumulative homonymy 154 systematic homonymy 38, 85, 93, 154, 181 unsystematic (accidental) homonymy 85, 152 instrumental 63, 76, 78, 83, 115, 121, 146, 162, 169–179, 188, 190–197, 205 instrumental-comitative 169, 176, 182, 184, 193 negative instrumental 76, 78, 81-83, 115 instrumental relations 30, 51, 119, 128, 129, 132, 137, 139–143, 162, 164, 169–172, 178, 182, 184–186, 191, 193, 204 intransitive clause 94, 101 Karelian 14, 19, 20,–22, 27, 55, 56, 63, 142, 155, 161, 162, 169 Khanty 52 Komi 55, 165, 170 language change 15, 23, 31–33, 39, 44, 119, 160, 203 language contact 14, 15, 18, 31, 60, 88, 89, 141, 145, 160–204 Latin 21 lative 48, 62, 121, 122, 124, 125, 139, 140, 154, 186, 188 Latvian 53, 54, 60, 61, 83, 89, 102, 160, 161, 176–180, 183, 188–201, 205 Lithuanian 60, 102, 176 Livonian 13–31, 36, 39, 45, 53, 54, 56, 59-61, 63, 66, 67, 69-71, 73, 74, 78-82, 84-115, 120, 122, 125, 147,

153, 160, 161, 166, 169, 175, 177, 179–205 local case 28, 31, 38, 44, 50, 52, 57, 63, 66, 68–72, 76, 77, 84, 106, 111, 116-159, 203, 204 exterior local case 28, 70-71, 74, 104, 116, 117, 120, 123–127, 132, 133, 136, 137, 139, 141, 151, 157, 166, 204 interior local case 61, 74, 116, 120, 122–127, 130, 132, 136, 151, 159, 166 local case ending 46, 48, 51, 57, 63, 66, 74, 75, 117, 123, 136, 148 local case form 59, 111, 126, 130 local case set 28, 43, 47, 62, 65, 70, 73, 116, 117, 122, 124–127, 132, 133, 135, 139, 154, 156, 158, 159 local case suffix 38, 50, 55, 62, 74, 76, 87, 123, 125, 152 local case system 14, 15, 17, 24, 34, 38, 41, 74, 75, 116–159, 203, 204 localist hypothesis 17, 129, 132, 156 locative 48, 62, 63, 119, 122, 125, 126, 140, 146, 154, 188, 204 Lude 14, 19–21, 25, 27, 120, 155, 161, 169 Mansi 48, 49, 52 Mari 19, 67, 90, 96, 127, 140, 155, 156, 165, 170 Middle Swedish 26 modifier 30, 64, 83, 105–108, 134, 163, 164, 183 Moksha 186 Mordvin 19, 48, 49, 55, 78, 96, 98, 127, 140, 154, 166, 167, 170, 184–189 morpheme 40, 51, 118, 123 bound morpheme 51, 56, 117, 181 conjunction morpheme 170 free morpheme 51 inflectional morpheme 174 suffixed morpheme 52 morpheme boundary 26, 46 morpheme order 113 morphology 14, 24, 26, 30, 32, 34, 38, 41, 42, 48, 53, 92, 107–109, 112, 115–117, 119, 120, 151–154, 161, 166, 185, 189, 191, 195, 200, 202-204 inflectional morphology 24, 25, 51 morphological adaptation 42, 50, 61, 117, 124, 134, 156, 172, 177, 190 morphological category 30, 37, 97,

- 127, 159
- morphological change 17, 31, 35, 43, 84
- morphological innovation 75, 112, 124
- morphological loss 13, 17, 99, 114 morphological marking 86, 87, 124,
- 152 morphological productivity 39, 74,
- 158 morphological reduction 68, 87, 88,
- 97
- morphological rule 50, 106, 109,
- 112, 134, 157, 159
- morphological system 181, 195, 203, 204
- morphologisation 13, 41, 51, 69, 154, 156, 160
- morphosemantic transparency 56, 117, 157
- morphosyntax:
 - integrating morphosyntax 109–115 segregating morphosyntax 109–113 morphosyntactic borrowing 37, 82 morphosyntactic change 14, 17, 32-44, 62, 74, 82, 84-117, 119, 127, 128, 130, 139, 149, 153, 156 morphosyntactic information 70, 72, 83, 105, 123, 136, 142, 149, 151, 157, 163, 181, 182, 184 morphosyntactic locus 47, 60, 68, 75, 105, 106–109, 115, 120, 175 morphosyntactic pattern 52, 66, 69, 72, 74, 78, 82, 84, 96, 104, 109–111, 165, 175, 180, 182–184, 194, 195, 198, 200, 201 morphosyntactic property 39, 40, 50, 73, 82, 114, 116, 122–125, 128, 130, 135, 141, 149, 151, 154, 175, 177,
 - 135, 141, 149, 151, 154, 175, 177, 181, 182, 188, 189, 191, 193–201, 204, 205
 - morphosyntactic representation 50, 68, 115, 156, 198, 204 morphosyntactic structure 17, 30, 43, 51, 52, 62, 66, 74, 81, 92–104, 114,
 - 162, 166, 167, 189, 195, 196, 203
- Nenets 65, 154
- nominative 25–29, 52, 60, 63, 66, 69, 71, 85, 86, 89–93, 95–97, 99, 101, 104, 108, 112, 152, 153, 162, 170, 182, 187, 192, 204 nominative(-genitive(-accusative)) 87, 95, 96, 99

- nominative-governing (adposition) 55, 63, 66 orwegian 161
- Norwegian 161
- object 85–91, 98, 103, 129, 149, 150, 152, 154, 174, 181, 182, 185, 186, 189, 190, 193–195
- oblique case 69, 87, 96, 109, 111, 112
- Ob-Ugric 52
- Old Icelandic 88
- Old Literary Finnish 100, 142, 145
- Old Swedish 26
- Olonetsian 14, 20, 21, 25, 155, 161
- Orok 117
- partitive 23, 25–29, 36, 39, 48, 52, 55, 59, 63, 65–68, 71, 73, 76, 81–87, 96, 110, 114, 142, 152, 153, 164, 167, 181, 182, 195, 200 partitive-governing (adposition) 55, 59, 65, 66–68, 77, 78, 81–85, 120, 165–167, 172, 195 path 48, 51, 63, 65, 76–79, 91, 114, 162, 164, 166–169, 172, 174, 176, 181, 189, 197, 200, 203–205 Permic 19, 49, 52, 66, 78, 97, 126, 155, 167 phonology: phonological change 20, 24, 32, 37, 42, 43, 75, 121, 181 phonological erosion (~ attrition, ~ reduction) 13, 17, 18, 31, 38, 43, 84, 88, 105, 112, 114, 115, 117, 121, 124, 144, 147, 150, 153, 159, 167, 181, 192, 193, 200, 204 polysemy 128, 153 possessive relations 65, 66, 83, 88, 104, 112, 113, 114, 119, 128, 129, 132,
 - 136–139, 141, 143, 195
- possessive suffixes 46, 63, 65–67, 91, 97, 109, 112, 113, 124, 134
- postpositions 13, 14, 16, 24, 29, 33–37, 41, 45–122, 124, 125, 129, 138, 147, 151, 155, 158–169, 171, 172, 173, 175, 176, 177, 180, 186, 193, 195, 200, 203, 204 postpositional phrase 14, 17, 36, 38, 41, 43, 45–115, 120, 123, 162, 164, 195, 203, 204 predicative adverbial 178, 179, 182–191,
- 193, 197, 198 preposition 13, 17, 34–36, 45–47, 49,
- 53–68, 76–85, 88, 89, 103, 108, 109, 114, 115, 120, 147, 166, 169,

174-180, 182-184, 188-197, 199, 201, 205 prepositional phrase 36, 43, 45, 47, 55, 58, 59, 62–64, 76–84, 114, 174– 177, 182, 188, 191, 194, 196, 197, 199, 204, 205 preservative change 32–34, 39–41, 43, 44, 57, 203 prolative 27–29, 79, 160, 162–177, 189, 204, 205 prolative-comitative 14, 17, 31, 52, 153, 160, 162–177, 199, 204 propinquative 51, 123, 135 Proto-Baltic 192 Proto-Finnic 21, 126, 165 Proto-Finno-Ugric (PFU) 49, 160 Proto-Uralic (PU) 49 reanalysis 14, 17, 18, 33, 37, 38, 40, 78, 116, 117, 127–130, 136, 138, 139, 141–147, 153, 157, 159, 160, 172, 175, 177, 188, 195–201, 204, 205 contact-induced reanalysis 31, 160, 176, 177, 194, 201 preservative reanalysis 40 relational nouns 47, 50, 61, 75 Romance languages 21, 22, 37, 50 Russian 22, 53–56, 59, 102, 106, 107, 145-147, 160-162, 169, 172-177, 188, 195-197, 205 Sámi: Lule Sámi 70 North Sámi 48, 155, 156, 187, 188 Sámic 19, 21, 39, 45, 46, 52, 53, 70, 89, 96, 127, 155, 156, 165, 187, 188 Samoyedic 39, 66, 78, 140, 167 Slavic 14, 176 sociative 162, 169, 170, 191 spatial relations 30, 50, 56, 57, 63, 65, 69, 70, 74, 78, 102–104, 106, 108, 110, 117, 119–121, 124–129, 132– 137, 139, 141, 148–151, 155–159, 163, 164, 169, 176, 189, 204 stem alternation 24, 39, 43, 47, 85, 86 subject 86-88, 91, 97-101, 113, 115, 129, 147, 154, 170, 178, 185, 186, 188, 198 suffix: suffixed postpositions 16, 24, 29, 33, 34, 37, 38, 41, 50–52, 73, 78, 109, 116–125, 134, 138, 143, 144, 150, 151, 157–177, 180, 181, 200,

203 - 205

Subject index suffixing preference 14, 17, 36–38, 44, 109, 117, 119, 120, 151, 202 Swedish 64, 88, 91, 145, 160, 161 syncretism 28, 85, 92, 95, 96, 99, 116, 119, 125, 150–156, 160, 169, 177, 181 syntax 13, 14, 30, 31, 33, 34, 37–39, 41, 46, 47, 49, 51, 53–55, 61, 63–69, 71, 79, 81, 83–110, 114–117, 119, 130, 139, 145, 150–152, 154, 156, 157, 159. 161, 162, 164, 167, 169, 170, 176–179, 181–185, 188, 191, 197-199, 203 temporal adverb(ial) 125, 128, 129, 135, 136, 148 terminative 25, 27, 29, 51, 83 transitive clause 87, 103, 189, 190, 195 transitivity 87, 94, 182 translative 27, 29, 31, 71, 126, 177-205 translative-comitative 14, 18, 31, 120, 153, 160, 175, 177–205 Turkic 117 Udmurt 48, 155, 167, 169, 170 Veps 13–21, 24–31, 34, 38, 41, 44, 51– 56, 59, 61, 63, 66, 69, 71, 73–80, 82, 111, 112, 114, 116-177, 194-205 verb: verb particle 87, 102, 103 verb prefix 36, 54, 89, 179 Volgaic (languages) 127 Vote 14, 19, 20–22, 25, 27, 34, 41, 50, 56, 82, 83, 111, 112, 169 vowel harmony 52 word class 49, 53, 57, 60, 61, 114 word order 14, 17, 31, 35-37, 45, 46, 53, 61, 62, 67, 68, 84, 86–91, 96, 99, 100, 102, 103, 114, 115, 120, 151 constituent order 38, 68, 84, 86, 108, 109, 141, 166 SOV 35–37, 45, 46, 61, 88–91, 102, 114, 151 SVO 35, 36, 45, 46, 61, 88–91, 102, 114, 120, 151