Passive and Reflexive Categories
in Languages of the Volga Region

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An Areal Typological Study

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Pictures on the cover: Erzya villages in the Dubenki raion of Mordovia (Merja Salo 2013)

Map on p. 19: Anna Kurvinen and Merja Salo
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Abstract

All of the Volga region languages investigated in this study (Mordvin, Mari, and Chuvash) have a rich derivational morphology. In general linguistics terms, they all have a passive classified as a reflexive passive. The relationship between the derivative and the root verb is described using the valence roles of case grammar. The role of the first, or primary, actant is crucial in defining all the different meanings of the derived verbs in question. The main roles used to express the first actants are: AGENTIVE, ACTOR, NEUTRAL, EXPERIENCER, and FORCE. In Mordvin, passive sentences contain a special polyfunctional derivative suffix, *-v-*, which also renders the *automative, reflexive, perfective* and *unintentional meaning*, as well as *dynamic modality*. Besides the *-v-,* another suffix, the rare and nowadays almost forgotten *-t-,* shares most of these meanings. Moreover, in many respects, these suffixes show parallel development. Contemporary speakers mostly use these *t*-verbs to express unpleasant feelings and negative physiological states. *t*-derivatives can also be used to describe weather conditions as the only constituent part of a sentence, but this use is quite marginal. These two usages bring the *t*-derivatives close to the impersonal in the Indo-European languages. Furthermore, Mari and Chuvash have very similar suffixes, the reflexive-passive *-əlt-* or *-Alt-,* and the passive *-l-* and the reflexive *-n-*, respectively. Their *passives* do not permit an agent, and *automative* meanings are quite common, as are *reflexives*. My material proves that both Chuvash suffixes can have identical meanings. Interestingly, in all three languages, *zero meaning* occurs with intransitive root verbs. Finally, meteorological verbs in 14 Uralic languages were studied from a syntactic perspective. Some verbs have zero valence, others display a more or less semantically faded subject, while others feature an object. With causative transitive verbs, the prevailing restriction seems to be that either a subject or an object is possible, but both are not. Earlier, it was assumed that the basic minimal sentence type V is Uralic, but according to my findings it is absent in some of the Samoyed languages and that the SV or VS type is more widely known. The introduction provides background information on the history of the Volga region and the many alternative ways of expressing passive and related meanings in the Uralic languages. An agent in a passive sentence is relatively rare, and thus special attention is given to its expression. It seems obvious that the agent has been completely absent in passive sentences in the Uralic and Turkic languages. Many of these languages, however, have now developed an agent under the influence of the Indo-European languages. Furthermore, the foreign construction with a dummy subject has started to spread from the west and now occurs in the Saami and Finnic languages.

Foreword and Acknowledgements

This book has its roots in my *master's thesis* written decades ago. I am particularly grateful to professor Raija Bartens, who suddenly proposed the topic of Mordvin *v*-verbs to me during one of her lectures by remarking: "Merja, sinullahan ei ole vielä gradun aihetta. Otapa nämä mordvan *v*-johtimiset verbit. Siinä olisi sinulle erinomainen aihe. / Merja, you don't have a topic for your thesis, why don't you take these Mordvin *v*-verbs. That would be an excellent topic for you." Since then the theme has gone through many changes; some parts have grown and some have been left aside, for further research that I hope to conduct in the near future. Around ten years ago I changed my mind and decided to write, instead of a monographic work, a series of articles to be published in journals and handbooks aimed at the international linguistic community. While, the feedback from outside has been quite modest, I am nevertheless indebted to all the editors and known or anonymous reviewers of the five publications where my articles were accepted, as well as to the readers and inspectors of this final complete presentation.

Fatefully, Erzya Mordvin was the first distant, more exotic Finno-Ugric language which I became acquainted with, at the beginning of 1980's, which might be why its grammar has never faded from my memory. Undoubtedly, it is the strongest of my foreign Finno-Ugric languages. Moreover, I have participated in the practical[1] courses held at the Department of Finno-Ugric studies by native Erzya speakers Mikhail Mosin, Grigoriy Yermushkin, Nina Adushkina and Olga Yerina as well as by native Moksha speakers Aleksandr Feoktistov and Valentina Katainen (née Markina). While I was teaching Finnish in Saransk, I was given private lessons by Tamara Tikhonova-Surkova (Erzya) and Osip Polyakov (Moksha). I also participated in Nina Adushkina's course for native speakers. I have had several practical Meadow Mari teachers: Yuriy Anduganov, Georgiy Valitov, Valentin Vasilyev and Svetlana Hämäläinen (née Elembayeva) and one Hill Mari teacher: Julia Kuprina. Udmurt I have studied under Valey Kelmakov's guidance. Practical Chuvash courses have not been on the official menu, but the amanuensis of the Department of Asian and African studies, Harry Halén, kindly offered to give me lessons during his reception time. My Tatar knowledge is founded on the lectures of Ymär and Okan Daher, father and son. Seven of these people have already passed away.

I have been conducting active fieldwork among Mordvin speakers since summer 1990. The trip was arranged by the first lecturer of kindred languages, Nina Adushkina[2], who secured invitations for us from the State University of Mordovia. For me and my Finnish colleagues Arja Ahlquist, Anni Linkola and Riho Grünthal, that trip was unforgettable, in many ways. We were invited to participate in the usual field trip of Erzya students, when after their second year of studies they conduct obligatory dialectal fieldwork in their native tongue. At this time the target was the Erzya village Timyashevo in Shentala raion in the oblast of Samara (former Kuibyshev), which meant a very long journey on an extremely uncomfortable night train from Ruzayevka to Samara. From there our party of around 30 people travelled by minibuss with our camping equipment, including 10 tents and sacks and buckets full of groceries. In less than two weeks we were required to visit three other Erzya villages: Podlesnaya Andreyevka, Mordovskoye Ofonkino and Bagana. In Bagana I was able to record a real treasure, a 76-year-old lady who sang long epic historical poems which she had learned from her

[1] In this connection *practical* means that the focus was on contemporary literary use of language, not on historical linguistics. Often the courses were filled with grammatical information and exercises.
[2] She belonged to the staff of the Department of Finno-Ugrian Studies in 1988–1990.

grandmother, born in 1869. In her repertoire were poems which I had become acquainted with in the pages of *Mordvinische Volksdichtung*. For a moment I was transported back to time of Heikki Paasonen. In a chest she had a traditional Erzya dress, which I managed to persuade her to put on. However, she was so worried that the neighbours might see her that she hid behind a high fence in her own courtyard. This encounter convinced me that fieldwork in Mordvin villages can still be very rewarding!

Since then I conducted fieldwork almost every summer (with minor interruptions) in the titular republic of Mordovia and surrounding areas in the Volga region of Central Russia. My last visit to Mordovia was in August 2013 with the HALS (Helsinki Area & Linguistic Studies) group from the University of Helsinki. Then our target was Erzya raion Dubenki, not far from Saransk.

Since graduating in 1989, I have participated in projects Uralic language projects in three different departments of the Faculty of Humanities and the Institute for the Languages of Finland (Kotus). This has offered me many opportunities for increasing my professional competence, for which I am extremely grateful to the project leaders: Mikko Korhonen, Seppo Suhonen (both now departed), Juhani Nuorluoto, Maija Könönen, Matti Miestamo and Jack Rueter. In addition, Ildikó Lehtinen and Anna-Leena Siikala have used my abilities in smaller projects. During my long years as a postgraduate student I have enjoyed much high-level teaching, for which I am particularly grateful to Juha Janhunen, Tapani Salminen, Eino Koponen, Florian Siegl, Katya Gruzdeva and many others. For her constant mental support I have first of all to thank Paula Kokkonen.

The instructors of my dissertation were Raija Bartens and Ulla-Maija Forsberg, whose famous dissertation *Passive in the Ob-Ugrian,* has worked as an inspiring model for this research. My dissertation's official preliminary inspectors were Gerson Klumpp, Jussi Ylikoski and Sirkka Saarinen, the latter whom also agreed to be my opponent in the public defence of my dissertation. Her expertise in the languages of the Volga region is profound and multifaceted, as one would expect from a product of Turku University. Much advice during this last stage of my academic career has been given by Riho Grünthal, Seppo Kittilä, Leena Kolehmainen, Marja Leinonen and Matti Miestamo. As to the language informants themselves, I have provided detailed information in each article separately. To all of them I am very grateful.

My dissertation was financed by the Alfred Kordelin Foundation, Emil Aaltonen Foundation and the Finnish Cultural Foundation; and my field trips by the Finno-Ugrian Society, Oskar Öflund Foundation and Niilo Helander Foundation, to which I express my gratitude, as well as to the Department of Finnish, Finno-Ugrian and Scandinavian Studies for offering me a place to accomplish my study.

Kimberli Mäkäräinen and Jack Rueter have been quite indispensable in revising the four articles of this study and Matthew Billington in revising this introduction. Anna Kurvinen's magical final touch in the layout of this study saved me from many problems.

Without the continuous support of my mother Lilja and late father Aatos, sister Vanamo and daughters Selja and Talvikki all this would not have been possible.

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Article 2

Mordvin *t* derivatives – semantic equivalent for impersonal. In *Ural-Altaic Studies / Uralo-altajskie issledovanija,* 2010, 2 (3): 72–87. (2010)

(It was necessary to alter the original layout, since it was too small to be further reduced in size. The new layout with 25 pages is more readable. Some minor misprints have been corrected.)

Article 3

The Derivational Passive and Reflexive in Mari Grammars. In Nuorluoto, J. (ed.) *The Slavicization of the Russian North, Mechanisms and Chronology*. [Slavica Helsingiensia 27.] pp. 328–340. (2006)

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Deverbal reflexive and passive in Chuvash. In *Journal de la Société Finno-Ougrienne* 94: 223–255. (2013)

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PART I

1. Introduction

1.1 The aim of this study

To date, other studies comparing the languages of the Volga region have mainly focused on phonology or loanwords and conspicuous grammatical elements, thus often ignoring some finer nuances of the languages. The starting point of my investigation is *v* and *t* derivatives in Mordvin, after which the scope is extended to a comparison of corresponding categories in Mari, Chuvash and other Turkic languages, the intention being to deepen knowledge of passive and reflexive categories in Mordvin, Mari and Chuvash and identify unifying and distinguishing features. I have exhaustively examined the different meanings of two semantically close derivational suffixes in Mordvin and Chuvash, and one derivational suffix in Mari. Moreover, I have attempted to discover what other meanings are usually linked to the passive-automative-reflexive axis, which meanings are common among the world's languages, which are language specific, which are borrowed or copied and which have developed in parallel.

I have also examined the historical development of grammars describing these meanings. It has been assumed that many speakers of Finno-Ugric languages have traditionally been, at least to some extent, bilingual. However, today linguistic outcomes are very different, which is a puzzle requiring extralinguistic information. My research concentrates on two derivational suffixes from Mordvin (*-v-* and *-t-*), one from Mari (*-Alt-, -lt-*) and two from Chuvash (*-n-* and *-l-*), which are discussed in four articles. In the fifth article, I approach what is certainly one of the oldest layers of any spoken language: meteorological verbs. In this article 10 Finno-Ugric and 4 Samoyed languages are studied from a syntactic perspective. In this last article the focus is the role of the surface subject and its presence or absence in a structure. Some verbs have zero valence, others, to a greater or lesser degree, display a semantically faded subject, while others feature an object. With causative transitive verbs, the prevailing restriction seems to be while either a subject or object is possible, the presence of both is not.

The study area, the Great Volga Bend, covers areas also inhabited by Udmurts, Tatars, Bashkirs and later by Russians. Because of this, it has been necessary to add some information to the introduction in order to demonstrate more clearly the large diversity of solutions in the language families in question, mainly in the Uralic languages, for expressing the passive and, to a lesser extent, reflexive categories. Only those reflexive suffixes which also have a passive meaning have been included. Special attention is paid to the agent in passive structures, although it is possible, the structure is rather uncommon in the Uralic languages. A common focus for the examples presented in my thesis is how the syntactic function of the subject is performed. The last article provides a typological classification of detailed information on meteorological verbs in 14 Uralic languages and detailed information on their appearances in different syntactical constructions. Meteorological events do not include typical semantical participants such as agents or patients. While there is a degree of inconsistentency in my sources, I have tried to treat them equally in order to make a rough typological description of the subject in the Uralic languages.

The Turkic side of this study rests very much on observations of Chuvash and to a lesser degree Tatar, Bashkir and Turkish. Russian has had an overwhelmingly strong influence on every language spoken in the Russian Federation today at the grammatical level. Thus, for this reason, I was interested in discovering how this has manifested itself in Mord-

vin, Mari and Chuvash. Adapting Lehiste (1995: 27) the Volga region is a convenient target for areal linguistics to study the relationships amongst languages spoken by the linguistic communities in the area. In this study, the similarities between unrelated languages that may be attributed to language contact are of particular interest. The region is definitely a convergence area in which genetically unrelated languages are gradually approaching typologically, at least for certain grammatical features.

The introduction widens the scope even further by demonstrating how typical the passive, reflexive and impersonal meanings in the languages studied in my articles are compared to other Uralic languages and, to some degree, other neighbouring and more distant languages. The criteria for the background data have been functional as well as morphological.

1.2 Definition of the Volga region

Many of the Finno-Ugric languages are situated along the Volga and its tributaries between the Great Volga Bend and the Ural Mountains. The main Uralic languages spoken now in this region are Erzya, Moksha, Hill Mari, Meadow Mari, and Udmurt,[3] the latter of which is given but a cursory review in this study. Around and among them, sometimes even in same villages, live speakers of the Turkic languages Chuvash, Tatar, and Bashkir.[4] It is generally assumed that in the Volga region intensive contact with Indo-Iranian[5] languages has occurred over many centuries and millennia, as Mordvin, Mari and the Permic languages have many layers of loan words from various eras. The typological similarity between Uralic and Turkic languages is obvious; both are agglutinative, in contrast to Indo-European languages, which have different roots. To my knowledge, there are few documents attesting to the early grammatical influence of Indo-Iranian languages on Finno-Ugric languages. Moreover, it seems likely that the majority of their ancient neighbours have now disappeared. In contrast, the area is pervaded with Russian speakers, and consequently I restrict my comparisons to those of Russian standard grammar. Indeed, the whole Volga region is a patchwork quilt of different languages. In particular, the Mordvin diaspora is remarkable, for example in the mid-20th century there were 72 Mordvin villages in Tatarstan, 51 in Chuvashia and around 90 in Bashkortostan (Feoktistov 1965: 342). Only the Tatars are more dispersed. For long, the closest neighbours with Mordvins have been the Mishar Tatars, speakers of a western Tatar dialect. They live on right side of the Volga and in Mordovia alone there are around 80 Mishar Tatar villages (Feoktistov 1965: 337–338). Currently, different combinations of local languages mean that non-Russians are bilingual, trilingual or even quadrilingual.

[3] These five are written languages. The differences between Erzya and Moksha are more perceptible than between Hill and Meadow Mari.

[4] Chuvash or Volga Bolgar forms its own group, whereas Tatar and Bashkir belong to the Kipchak or North-West Turkic group. Actually, Chuvash is descended from Volga Bolgar and deviates from the other members of its linguistic family (Clark 1998: 434).

[5] Koivulehto (2007) lists the different loan word layers as North-West Indo-European, Pre-Aryan, early Proto-Aryan, (Early-)Proto-Iranian, and Proto-Iranian.

Map. The administrative districts and main cities of the Volga Region.

The Great Volga Bend was once considered the original home of the Uralic languages, after which other regions were proposed.[6] However, Salminen (1999: 21) makes the case the re-habilitation of Great Volga Bend, arguing that the basic vocabulary of Uralic languages points to inland forests, ice sheets and big game and that the only known migration to the south was made by the Hungarians. Moreover, while all known northern Uralic language-communities have moved to the north as a result earlier or later expansions, the Mordvins seem to have always lived in their present habitat. Furthermore, the Great Volga Bend is the area with the greatest variation between Uralic languages.

[6] E.g. Janhunen has repeatedly proposed a primary homeland on the Siberian side, not too far from the 'Altaic' homelands (Janhunen 2001, 2007).

1.2.1 Regional history

Generally, speakers of Finno-Ugric languages are regarded as the indigenous peoples of the Volga-Kama region. The first significant Turkic tribes entered the area in the 8th century, when Bolgar groups moved from the steppes and occupied both sides of the Volga (Róna-Tas 1988: 761). Since 922, Islam has been (at least nominally) the as the official state religion of the Volga Bolgar state (Winkler 2003: 135, Arık 2007: 38). Based on archeological evidence, it can be assumed that the first Slaves appeared in western[7] Mordvin areas even before that, in the 6th century. Nevertheless, it was only from 12th century that Slavic penetration became stronger, leading to the gradual assimilation of the Muroma, a group between Finnic and Mordvin, into the Slavic population (Lallukka 1986: 53). The Volga Bolgars came to dominate the ancestors of the Maris, Mordvins and Udmurts across vast territories. The Proto-Permic languages of the time are categorized using loanword analysis (Bartens 2000: 13). While the western Mordvin[8] tribes became the subjects of Slavic principalities, the eastern and southern tribes lived under Bolgar rule. An important turning point was the foundation, in 1221, of Nizhni Novgorod at the confluence of the Oka and the Volga, which strenghtened Slavic influence in the western Mari areas (Lallukka 1986: 52). Two facts are important for linguistic development: 1) the Bolgar state was a rich, powerful empire with high cultural prestige and a socially dominant language; 2) until the 13th century, Bolgar tribes seem to have assimilated several Finno-Ugric groups living among them, including certain Mari tribes (Johanson 2000: 169–170).

In the 1230s, however, circumstances dramatically changed with the Mongol invasion, the fall of the Bolgar state and the accession to power of the Golden Horde. The Bolgars were left with three choices: seek protection from the Russians, retire to today's Chuvashia or remain in their old settlements to be later assimilated. The Maris were divided, with Meadow Maris subjugated by the Golden Horde, and Hill Maris, who lived farther west and northwest, absorbed into the Principality of Moscow (Johanson 2000: 169). In 1240 the southern part of the Udmurts' homeland fell directly under Golden Horde rule, where it remained until the mid-16th century. It is assumed that part of the Udmurts and Bolgars were assimilated, forming a southern group of Udmurts. Today, in the area inhabited by northern Udmurts there is a group, the *Bessermans,*[9] who are considered to be a former southern Udmurt group which under protracted Bolgar influence converted to Islam and subsequently moved north (Bartens 2000: 14–15, Winkler 2003: 136–137). The northern Udmurts became subjects of the Vladimir-Suzdal principality, and later their area was incorporated into Muscovite Russia (Lallukka 1990: 52).

The Golden Horde's rule was short lived, with its disintegration in the early 15th century and the emergence of the Kazan Khanate in 1438. In this new state, the Kipchaks, ancestors of the Tatars and Bashkirs, rose to power. Amalgamation of the Kipchaks, Bulgars, and Finno-Ugrians led to the emergence of a new ethnic group, the Kazan Tatars. The Kazan

[7] Then the Mordvin settlements stretched considerably further westward than today (Lallukka 1990: 53).
[8] In the 11th century the Mordvin tribes comprised about 60 000-70 000 people in a territory of c. 90 000 km2 (Lallukka 1986: 53).
[9] Today, however, Bessermans are Orthodox. An other possibility is that they were originally Bolgars who never fully accepted Islam and were later assimilated into the Udmurts (Winkler 2003: 136–137).

Tatars had a strong influence on Chuvash, Bashkir, Meadow Mari, Mordvin and Udmurt. Permanent administrative-military settlements were established, particularly in the southern Moksha areas, which is the cause of Moksha having absorbed more Turkic influences than Erzya. When Muscovite Russia grew stronger and the Kazan Khanate weakened, the Mordvins and Hill Maris allied with the Russians.

When the Khanate of Kazan fell in 1552, however, the southern Udmurts, Tatars and most Maris fought against the Russian invaders. After their defeat, the whole Volga-Kama region came under the rule of Russia and Ivan the Terrible (Lallukka 1990: 52–53, Johanson 2000: 169–170). Soon after, Russian colonization and settlement by Russian peasants divided the linguistic regions, with some groups, such as the Meadow Mari and Mordvins migrating to the Ural region (Johanson 2000: 170). The Maris did not accept their new rulers, rising in rebellion against the Russians in 1573, 1582 and 1595, and suffering heavy losses. The northernmost Erzyas, the *Teryukhans*, were totally Russianized at the end of the 18th century (Bartens 1991: 10). A group of Mokshas and Erzyas near the Volga, the *Karatays*, lasted longer, but have now almost disappeared through assimilation with the Tatars (for fresh information see Salo 2009).

Traditionally, it is believed that the Chuvash somehow escaped Kipchak assimilation. Neither were they converted to Islam, though a Muslim mission had been active in the area. Moreover, the Maris, Mordvins and Udmurts retained their polytheistic beliefs. However, in southern Udmurt the Tatar impact is strong, with a part of the population having been totally assimilated. Udmurts have also converted to Islam, even as late as the beginning of the 20th century. In contrast, by 1760 practically all Mordvins had been baptized, although for the broad masses this meant only a superficial departure from their earlier religious habits (Lallukka 1990: 55). While several sources from the 19th century describe the Mordvins as devout Orthodox Christians,[10] their religiosity nevertheless remained of a largely syncretic quality, combining animist elements with Christianity (Lallukka 1990: 56).

A recent article in a Muslim journal (Arık 2007) gives a contrasting and detailed picture of the relation of the Chuvashes to Islam, describing their changing ethnic identity as a form of Tatarization. According to the author, the Muslim mission was, in fact, partially successful, managing to convert some Chuvashes, Bashkirs, Maris and Mordvins at the beginning of the 11th century. (Arık 2007: 39–40, 44). Islam continued to spread throughout the Volga Bolgar state during the rule of the Golden Horde and the Kazan khanate among the Chuvashes and Finno-Ugric tribes. However, adopting Islam meant remaining deeply under Tatar influence with respect to religion, language and culture and eventual Tatarization.

Nowadays all the Turkic languages in Europe show traces of contact-induced linguistic changes. In addition to influences from typologically different languages (such as Arabic, Persian, Russian, and English) some of these Turkic languages have been influenced by other, more prestigious Turkic languages; for example, Chuvash and Bashkir have been and are still influenced by Tatar (Menz 2011: 174). Apart from the obvious influences on the lexicon, all of the other linguistic levels have been affected by such contact-induced changes as: foreign sounds, intonation patterns, and even plural suffix the Chuvash (Luutonen 1999).

[10] On the other hand, it has sometimes been claimed that the Mordvins were the last European pagans (Häkkinen 1996: 53).

1.2.2 The beginning of linguistic research

In Russia research into other nations and their languages began in the 18th century, with the formation of Finno-Ugric and Turkic studies at the turn of the 19th century. The Mordvin languages and Mari are usually grouped together as Volgaic languages, but evidence of a common Proto-Volgaic language has not appeared in the literature since Otto Donner's work in 1879 (Donner 1879: 157) (Keresztes 1986: 189). Initially, the position of Chuvash was the subject of much debate, and it was long considered a member of the Finno-Ugric family. It was only in 1841 that Wilhelm Schott (1807–1889) in his dissertation *De lingua Tschuwaschorum*, proved it to be a genuine Turkic language (Winkler 2007: 120). According to Korhonen (1986: 60), Schott had demonstrated the link between the Finno-Ugric languages and the Turkic languages of Central Asia even before M. A. Castrén. Chuvash is the last remaining language of the first split in the unity of Turkic, and massive foreign influence has caused it to deviate considerably from the normal Turkic type.

1.2.3 Typological features of the Finno-Ugric and Turkic languages in the Volga region

It seems clear that the Volga region has the clearest boundaries between neighbouring Finno-Ugric languages. The basic dominant word order from Finnic to Mordvin is SVO, while from Mari eastwards it is SOV,[11] which is also the prevailing order in the Turkic languages. In comparison to the Finnic and Saami languages, Mordvin has a strikingly similar basic declension of nouns (with an additional definite declension of nouns, which is easily explainable as a development from demonstrative pronouns), but verbs have two conjugations, subjective and objective (or indefinite and definite), the latter being characteristic of Hungarian and languages in Siberia. In contrast, Mari has a rich system of converb structures, which brings it closer to the Turkic languages. Indeed, its relationship to Chuvash has even been called symbiotic (Johanson 2000: 168–169). The peculiarities of Mordvin are, first, it has nominal conjugation, at least in the indicative mood and, second, nouns can take case suffixes twice (the so called second declension[12]), which is also possible in Mari; moreover, the first case ending is always genitive (Bereczki 1990: 35[13]). Usually there are seven moods represented in Erzya and Moksha grammars, some of which are rare in speech. In contrast, Mari,[14] Udmurt, Tatar, Bashkir and Chuvash have three moods (with other meanings expressed by derivational suffixes). According to some scholars, the grammar of Mordvin, with its definiteness-marking and agreement phenomena resembles Iranian languages, and an Ossetic influence must be kept in mind (Stipa 1973: 10 referring to Lewy's articles, Zaicz 1998: 213). In contrast, Mari has a rare peculiarity: free variation of the order of declensional morphemes (Luutonen 1997). A central role in the emergence of this kind of variation is played by the grammaticalization process, where secondary plural suffixes are formed from words.

[11] Very often agglutination and SOV are linked together.
[12] In Erzya, nouns which already have an inessive or abessive case ending can take other case endings; additionally in Moksha nouns with an elative or comparative case ending also behave equally (Aljamkin 2000: 72–73, Cygankin & al. 2000: 107–108).
[13] Information given by Sirkka Saarinen.
[14] The fourth modus, the conditional, is no longer productive, as Sirkka Saarinen has pointed out.

Typologically, Finno-Ugric and Turkic languages are quite similar, having agglutinative morphology, relatively large case systems, a predominantly SOV word order (in western areas it has changed due to strong Indo-European influence to SVO), a system of vowel harmony, an abundant vowel inventory, and avoidance of word initial consonant clusters. In other words, both these language families have at various times in their history been heavily influenced by both kindred languages and those of other language families. Nevertheless, despite their many similarities, the effects of Turkic on Volgaic or Udmurt are hard to detect. Thomason and Kaufman's (1988: 74–76) five point borrowing scale is better suited to a situation where languages differ greatly from each other. Nevertheless, it would be reasonable to assume a rating for Mari of at least level 4, based on the many borrowings in various grammatical categories described in chapter 1.2.5.

According Lindstedt (2000), languages in the middle of a prestige hierarchy show extraordinary mutual convergence, owing to extensive mutual multilingulism, whereas the languages at the top and bottom of such a hierarchy are less convergent, which can be verified in the Balkan languages. Applying this hierarchy to grammatical features in the Volga region suggests that Chuvash was certainly a middle-level language, since today it deviates from other Turkic languages in the direction of Finno-Ugric languages. Mari has also held such a position, as has Udmurt, but Mordvin was probably lower and Tatar, to certain extent, higher. It is self-evident that Russian is now the most prestigious language of all.

1.2.4 Common elements in Mordvin and Mari

Due to their geographical proximity (and possibly Turkic influence) Mordvin and Mari were earlier considered to belong to a common Volgaic branch. This idea last found support as late as a quarter of a century ago by such scholars as Serebrennikov (1989), nevertheless this opinion no longer corresponds to contemporary theories. Since there has been presented detailed criticism of this hypothesis, it can now be regarded as obsolete (Bereczki 1974; 1988: 314–315). Quite recently, Blažek (2012) has quantitatively compaired lexical isoglosses and results of historical phonetics and morphology. According to his results, Mordvin stands closer to Finnic, and Mari is closer to Permic, than Mordvin to Mari.

Mordvin and Mari share but a handful of common words, according to the *Tscheremissisches Wörterbuch* just six[15] (Saarinen 2010: 337): Erzya *moro*, Moksha *mora*, Mari *muro* 'song'; Erzya *tašto*, Moksha *tašta*, Mari *tošto* 'old (of -animate)'; Erzya *paŋgo*, Moksha *paŋga*, Mari *poŋgo* 'mushroom'; Erzya *śija*, Moksha *śijä*, Mari *šij* 'silver'. Common morphological features include 3rd person possessive suffixes, in the singular: Erzya *-zo*, *-ze* ~ Mari *-šo*, and in the plural: Mordvin *-st* ~ Mari *-št*. Moreover, the marker of the infinitive is an old lative ending: Mordvin *-s* ~ Mari *-š* (Serebrennikov 1989: 17–20, Saarinen 1991a: 111). These morphemes may also be the result of parallel development, for their use is similar and equal elements can be found in other related languages (Saarinen 1991b: 43).

[15] According to Bereczki (1988) the number was 20. There are approximately 100 words that are common both the Mordvin and Finnic languages, but that are not found in Mari. Approximately 150 words are common to both Mari and the Permic languages (Bereczki 1988: 314).

1.2.5 Mutual linguistic borrowings between Finno-Ugric and Turkic languages

To date, the phonological and lexical connections between Finno-Ugric and Turkic languages have received special attention from researchers. Saarinen (1997: 388) lists a dozen monographs published between 1897 and 1994 dedicated to Turkic and Russian loanwords in Mordvin, Mari and Udmurt. More recently there has been at least one monograph on Turkic loanwords in Mordvin (Butylov 2005) and one on Tatar and Chuvash code-copies in Mari (Hesselbäck 2005). Evidently, the influence of Chuvash goes deeper than that of Tatar, since it is generally detectable in every dialect of Mari.

Phonetic evidence suggests that the timing of the Turkic influence on Finno-Ugric languages varied considerably, with the Permic languages being affected at least 150 years before Mordvin and Mari. According to Rédei and Róna-Tas (1972: 297), Permic–Bolgar contact began in the 9th century. In contrast, the presence of Bolgar loanwords in Mordvin suggests close contact before the 13th century (Rona-Tas 1988: 767).

One early effort at comparative Ural-Altaic syntax was made a century ago by Beke (1914–1915). In this study the Volgaic and Permic languages are central, but the Turkic side is more widely represented. In this 77 page study, 24 different features are described with abundant examples, mostly concerning nouns. Verbs are dealt with in only six cases: missing agreement in number between the subject and the predicate, aspectual converbs, verbs meaning 'come' and their development to express the modal meaning 'want', two cases of verbal government, and the negative participial structure + ablative case. More recently, Bereczki has occasionally examined syntactic questions in languages of the Volga-Kama region, mainly Mari, Udmurt, Chuvash and Tatar (e.g. Bereczki 1983: 227–234). It has also been observed that Mari uses converbial constructions similarly to Chuvash and Tatar (Serebrennikov 1960: 180, 271). It has also been assumed that Chuvash has a Mari substrate, since it is known that the northern parts of Chuvashia, and perhaps other areas too, were earlier inhabited by Maris (Serebrennikov 1960: 259, Feoktistov 1965: 332).

In Mordvin, the Turkic impact is mainly lexical, with around 300[16] identified Tatar loanwords (Bartens 1999: 17). However, the influence is stronger in Moksha, as they previously lived farther south and came into contact with Turkic tribes from the Caucasus (Saarinen 1991a: 113). It has been proposed that the Moksha negative conditional has developed under Turkish influence, since Tatar and Chuvash have an equal order of morphemes: verb+NEG+COND+person (Manzelli, forthcoming); however Honti (1997: 247–249) considers the Moksha form as having evolved independently. Mishar Tatar has also been influenced by Mordvin, mostly by Moksha, but on a minor scale. Mordvin loanwords mainly concern botanical terminology and the names of household utensils; however, some studies have also found evidence of loanwords for abstract concepts (Mahmutova 1976). Mari has about 500 Chuvash and 200–2100 Tatar loanwords, depending on the dialect, while Udmurt, in contrast, has 100 loanwords from Chuvash and 200–1100 from Tatar (Saarinen 1997b: 389). Analysis based on the dictionary *Tscheremissisches Wörterbuch* (2008) reveals that the basic Mari lexicon consisting of 4666 words, can be divided into several groups, of which 488 or 10.4

[16] The number was smaller in the 60-s: over 200 (Feoktistov 1965: 334), which seems to be the prevailing number in many later investigations, such as (Mahmutova 1976: 153, Rogačev–Bajazitova–Safarov 2013: 179). However, Butylov (2005: 56) offers totally different figures for Turkic loanwords in Mordvin: over 500.

percent are of Chuvash origin, 735 or 15.7 percent of Tatar origin, 875 or 20.8 percent of Russian origin, 556 or 11.9 percent original words, and 196 or 4.2 percent descriptive-onomatopoetics, etc. (Saarinen 2010: 338). Moreover, Agyagási (2000) lists 50 Mari loanwords in Chuvash based on Bereczki's (1992) investigations. Tarakanov reports in Udmurt of nearly 200 Bolgar and around 1400 Tatar loanwords, of which some 200 are common in the whole language area, while over 400 are typical of the southern dialects and over 800 of southern dialects on the periphery (Tarakanov 1982: 170).

The strong influence of Turkic is visible at all levels of Mari grammar, which can be explained by the large number of bilingual speakers. Even today close contact or even Mari-Tatar bilingualism has been reported in Bashkortostan and Tatarstan (Bereczki 1994: 70, Saarinen 1997a: 193, Volodin 1997: 35). As Comrie (1981: 102) writes: "Turkic influence is most noticeable in Mari, which is quite similar typologically to a Turkic language, with verb-final word order and widespread use of nonfinite verb forms." According to Johanson (2000: 168) and Saarinen (1997: 389), this transformation might be due to the widespread bilingualism of Finno-Ugric speakers in the contact areas. Meadow Mari has vowel harmony in closed syllables, postpositions (*köra* 'in view of' 'because of'[17]), particles (interrogative *mo*), clitics, derivational and inflectional suffixes, e.g. frequentative *-kal*, causative *-ar, -tar*, a caritive suffix for adjectives *-sər*, comparative *-rak*, the suffix of the deverbal nomen actoris *-ze,* and adjective suffixes *-le, -ləк* forming abstract nouns, the superlative *en* 'most', the comparative or modal case ending *-la*, of which nearly all functions are calques from Chuvash, although the element *-(l)la* is considered an adverb suffix in Chuvash. These borrowed elements in Mari are mostly of either Chuvash or Tatar origin, while their corresponding elements in Udmurt are of Tatar origin (Saarinen 1991a: 113–114, 1997, Bereczki 2007, Johanson 2010: 666).

The fact that Mari does not mark the plural of nouns is regarded as Turkic influence. (Saarinen 1991b: 47). Moreover, according to Alhoniemi, nor is the plural of Mordvin nouns entirely free of problems: in the indefinite declension the plural can only be formed in the nominative; in the definite declension, the plural can be formed in all cases, in the local cases either synthetically or by means of a postposition in Erzya and solely by means of a postposition in Moksha. Consequently the Moksha plural, at least loses the opposition between indefinite and definite nouns (Alhoniemi 1982: 41). Nevertheless, the Mari and Mordvin use of the plural can not be compared, since in these languages the conditions of the absence or presence of a plural marker are different (Saarinen 1991b: 47). Mordvin has also developed a noun conjugation that is unique among Finno-Ugric languages (more information in Turunen 2010). Similar conjugations of nouns occur in Samoyed and certain Turkic languages, but according to Saarinen (1991b: 48) its presence in Mordvin can be considered the consequence of a strong tendency towards synthesis.

Mari and Turkic languages also have phonetically identical derivational suffixes, which makes their etymologization more difficult (Saarinen 2010: 335). According to Johanson (2011), case markers and case functions are acquired through processes of 'borrowing', 'diffusion', 'transfer', 'interference', and 'replication'. Case markers or case functions are copied by speakers from a model code (or 'source', 'donor', or 'diffusing' language) and inserted into their basic code (or 'recipient' or 'replica' language). Johanson prefers the term 'copying' in order to stress the difference between modeling and copying. According to Tho-

[17] The word is also a Tatar loanword in E *koŕa*, M *koŕä,* mostly used in the illative *koŕas* 'according to' (Saarinen 2007: 91)

mason and Kaufman (1988: 75), the copying of case affixes and case categories is possible 'under strong cultural pressure'.

The influence of Turkic languages has helped Mari preserve old Uralic features in its syntax: SOV word order and infinitival structures instead of conjunctions are still used. In many Finno-Ugric languages these features have begun to fade, probably due to the influence of Indo-European languages. The so-called aspectual converb structure, where the gerund and the predicate verb form a phrase, is of Turkic origin. In Mari, there are around 40 verbs that have aspectual use (Saarinen 1991a: 114–115; 1997: 393). The Mari simple (or II) past form *tolənam* 'I came' has an exact counterpart in Northern Chuvash (Bereczki 2005). Moreover, its negative formation in Hill Mari is especially important, being the result of Turkic influence which reaches to Udmurt. In Mari and Permic the II past entails unwitnessed evidentiality, which is an unknown feature in other Finno-Ugric languages.[18] According to Manzelli (forthcoming), here it displays a structural resemblance to Tatar.[19] The coexistence of Mordvins and Tatars is widely manifested in the respective languages, e.g. in place names, including street names, in formal personal names and nicknames as well as in the folklore and customs (Rogačev–Bajazitova–Safarov 2013).

Chuvash has Finno-Ugric loanwords, and even earlier words derived from Arabic and Persian (Johanson 2001: 1740). One special feature in Chuvash verbal morphology is still a matter of dispute, namely negation of the imperative, an immutable *an*, which is strikingly similar to the Uralic system (that is, Udmurt), for it precedes the main verb (Menges 1968: 145, with literature, Rédei & Róna-Tas 1980: 125–126). Manzelli (forthcoming) considers this feature to have been borrowed from Udmurt. The Tatar impact on Chuvash, particularly in Lower Chuvash, has also been remarkable (Johanson 2001: 1721), as has the Mari impact on Upper Chuvash, especially the Sundyr dialect, where there is a substrate of Mari words due to the assimilation of a local population, e.g. *lĕpĕ* 'butterfly', *yantar* 'glass', *pürt* 'house'. Many of these have now vanished from Mari (Johanson 2010: 664). Interestingly, there are fewer than 300 identified Mari loanwords in Chuvash, much fewer than the number of Chuvash loanwords in Mari (Johanson 2000: 168). On the other hand, Bolgar loanwords in the Permic protolanguage are far fewer, only 19, and there are barely more in Mordvin (Bereczki 2007: 13).

In linguistics it is generally assumed that the morpheme order in a word is fixed. But in Mari declension, the morpheme order is practically free. This variation involves the combination of plural markers, some case endings and possessive suffixes; sometimes all three can participate and sometimes just two, but the PX is always present. E.g. the utterance 'to my friends' has three representations:

joltaš-em-βlak-lan PX-PL-DAT
joltaš-βlak-lan-em PL-DAT-PX
joltaš-βlak-em-lan PL-PX-DAT
joltaš 'friend'
-em possessive suffix 1st singular
-βlak plural marker
-lan dative case ending (Luutonen 1997: 13)

[18] Interestingly, in the Balkans no evidentiality was encoded in Ancient Greek, Latin, or Old Church Slavonic before some form of Turkic contact (Mišeska Tomić 2008: 212–213).
[19] Honti (1997: 249) sees no Turkic influence, but Manzelli claims that the unwitnessed resultative past is common to almost all Turkic languages.

This kind of variation is typical in languages where the Turkic impact has been strong, such as Mari and also the Permic languages and Moksha. The Turkic order PX+CX has not been able to affect local cases, but it could be behind the variation in grammatical cases. Even the Mari plural markers *-šaməč* (in Meadow Mari), *-βlak* (in Eastern Mari) and *-βlä* (in Hill Mari) most probably originate from a Turkic loan word (Bereczki 1988: 342). Moreover, typological support can also be found for this assumption, as secondary word-like pluralizing morphemes have the tendency to be shared among languages in the same area, and since Chuvash, with which Mari has had very close contacts, has a secondary plural marker *-sem* (< Bolgar *sām* 'number' < Common Turkic *sān* 'id.') remarkably similar to the Mari plural morpheme, it is reasonable to assume that the Mari and Chuvash elements belong together etymologically (Luutonen 1997: 79).

The Permic languages have lost the synthetic Proto-Uralic plural suffix ***t,*** replacing it with more analytic secondary morphemes**:** *-jos ~ -os* in Udmurt and *-jas* in Komi. Serebrennikov (1963: 93–99) posits a geographical link between the plural innovations of Komi, Udmurt, Mari and Chuvash. Permic plural suffixes can be traced back to words denoting some kind of group. It can be assumed that speakers of Proto-Permic were the starting point of this development, and the Bolgars and Maris perhaps adopted the analytic method of expressing plurality from them. The kernel area of the innovation was the Volga-Kama region, on the periphery of which survived the ancient plural suffix. Parallel development can be found in the so-called Altaic languages, which seem to have abandoned their original simple plural suffixes and replaced them either with an innovation or a combination of loans and innovations. An other typological parallel can be found in the Indo-Aryan branch of the Indo-Iranian languages (Luutonen 1999: 73–74, 84, 93–94).

1.2.6 Russian influence

Due to their repression under Russian rule, many Finno-Ugric and Turkic languages have adopted a considerable number of Russian loanwords and translated conceptions. Before the Russian Revolution these words came via spoken language; however, subsequent to it the written form has become more influential (Ivanov–Moisio 1998, spec. 56–70). During the Soviet period this trend was especially pronounced, and consequently many speakers of other language families became bilingual, with code-switching between minority languages and Russian common. Sometimes people fail even to notice when they change language, as I have repeatedly witnessed during my fieldtrips in Central Russia. It could even be claimed that in the case of Erzya and Moksha their use in many places of the Mordvin diaspora has declined so much that they have become sociolects of Russian preferred only in the family and with friends in the countryside.

The stronger and more protracted impact of Russian on Mordvin can be seen on not only the lexical but also the syntactic level, in the SVO order and in the use of subordinate clauses with conjunctions. In Mari the result is double marking: a Russian subordinate conjunction is used at the beginning of a subordinate clause, whereas a Mari conjunction is employed in the final position. Since Russian differs typologically from Finno-Ugric languages, they very seldom borrow suffixes from Russian. Moreover, as a rule, Russian adjectives have only been adopted in the masculine form (Saarinen 1994: 213–214, 1997b: 388–389).

Interestingly, numerals also seem to have been subject to change. I have noticed that today Mordvins have begun to forget their own numbers and very often use Russian numerals

when stating their age or date of birth. Futhermore, when they handle money in shops, they also use Russian terms. The Erzya and Moksha grammars use a mixed system with their numerals, but they have mostly abandoned the old Finno-Ugric habit of singular use after numerals: from 2 to 10 nouns are in the plural, from 11 onwards nouns are in the singular, which can be regarded as Russian influence (Bátori 1980: 138–140).

Inevitably, more changes will occur in the contemporary era of globalization. Social conditions and the school system are guaranteed threats to linguistic multiplicity, with Finno-Ugrians living in the diaspora outside their titular area being in greatest danger. My experiences in the field prove that local authorities have a huge influence on the matter. For instance, sometimes civil servants understand the importance of primary education in minority languages, and sometimes it is not available at all (for examples see, e.g. Salo 2005). Quite recently, there was conducted a comprehensive education reform to ensure the free choice of languages in education by citizens. However, it has been argued that the results have not been as good as one expected (Zamyatin 2012). Moreover, Johanson (2000:168) claims that there is an immense and at the same time structurally superficial Russian influence on all varieties of the area. A flood of Russian words and international lexical elements mediated by Russian has affected the higher registers, in particular the styles of mass media and science. More importantly, Russian dominance has led numerous minority groups living among Russian majorities, e.g. many Mordva groups, to abandon their native language and shift to Russian as their primary code (Johanson 2000: 168).

1.2.7 Connections between the Volga region and the larger areal Sprachbünde

Usually the term *Sprachbund* is used to refer to several originally rather dissimilar languages which as a result of prolonged and intense geographical contact have experienced structural convergence, as has happened in the Balkans. A similar development has also been investigated in neighbouring Uralic languages. The Volga–Kama Sprachbund is a relatively coherent and obvious unit, but also other possibilities can be offered separately for each language.

An ancient *Core of (Central) Uralic languages,*[20] comprising Ugric, Permic, Mari, and only marginally Mordvin, may be characterized as a former Sprachbund or an areal-genetic grouping. This core Uralic was relatively loose, with the Permic languages occupying the central position both geographically and linguistically. Agglutination dominated and monosyllabic stems spread in Permic as accentual patterns changed to a single word stress, which triggered reductive processes affecting primarily word-final vowels and syllables. Seemingly, an important role in the development of these features was played by contact with southern neighbours – first with Indo-Iranian and then with Turkic languages (Helimski 2003: 161–162).

Somewhat more mysterious is the *Volga–Oka Sprachbund*, which in the first millennium (or even earlier) perhaps included now extinct Baltic dialects of the Eastern Baltic belt as well as Mordvin, Mari and the equally extinct Muroma, Meshchera, and Merya. Its core

[20] Surrounding the core were the *Peripheral (Lateral) Uralic languages,* including Finnic, Saami, and Samoyed, which seem to have much better preserved many original Proto-Uralic features than the core groups. Actually Mordvin belonged neither to the Core nor to Lateral Uralic; it was the only Uralic language "on its own" (Helimski 2003: 162).

territory was later completely erased by Russianization, which, in the absence of new evidence, makes the whole issue speculative (Helimski 2003: 160–161).

At present, the *Volga–Kama Sprachbund* includes Mari, Chuvash, Udmurt, Tatar and Bashkir as core members, and Mordvin and Komi[21] as peripheral members. In particular, the position of Mordvin is unclear, and several classifications have in effect ignored it, including those of Bereczki (1983), Wintschalek (1993), and Helimski (2003: 159–160). The various features of the Sprachbund occur at all levels of linguistic structure, beginning with parallel phonetic developments and isomorphic temporal systems. Nevertheless, the composition of this Sprachbund has changed over time, as at the beginning to the middle of the first millennium Magyar (> Hungarian) and Alan[22] (> Ossete[23]) were also members of this group. In contrast, 1000 years ago the most active role was played by Volga Bolgarians. The Volga-Kama-area is characterized by the systematic rise of broad vowels and the centralization and shortening of closed vowels. Both tendencies occur in the Finno-Ugric languages of the area, but in Turkic languages they have inner phonological motivation (Johanson 2001: 1723). This accentuation rule must have been one of the early Volga–Kama Sprachbund manifestations (Helimski 2003: 159–160).

The Rossic Sprachbund covers the languages of the Russian Empire and its successers. Nevertheless, as a Sprachbund it has received little academic attention. It covers Eastern Slavic and many other languages of the Russian Federation including, on the Uralic side, Votic, Veps, Karelian, Ingrian, Mordvin, and Komi; less involved are or were Eastern Lapp, Mari, Udmurt, Mansi, Khanty, and Selkup. According to Helimski (2003: 157), all other Uralic languages, with exception of Hungarian, Southern Saami, and Northern Saami – may be viewed, presently or historically, as marginal participants in this Sprachbund. Moreover, the influences are almost exclusively unidirectional from Russian. The result is political, social, cultural, and ideological Russianization of the speakers. The most obvious manifestations lie in the lexical and semantic domain (including phraseology). Typical phenomena are trends towards a palatalized articulation of consonants before front vowels, towards double negation (including negative pronouns), towards reducing the number of verbal moods, or towards using compound sentences instead of original polypredicative constructions (Helimski 2003: 157–158).

A parallel and partly overlapping entity is *Standard Average European* (SAE), comprising the Romance, Germanic and Balto-Slavic languages, the Balkan languages and more marginally the westernmost Finno-Ugric languages, due to the fact that they are in many ways strikingly different from eastern Uralic (Haspelmath 2001). There are 12 features common to most members of SAE, and when they are represented as maps, the Uralic languages are usually outside the borders of the feature in question. Moreover, actually the map of relative clauses with relative pronouns is to some degree imperfect, for it includes Finnish, Estonian and Hungarian, but not Mordvin, which nevertheless has relative pronouns, *kona* and *ko-* (+ e.g. local case endings), fitting the description (Haspelmath 2001: 1494). However, while definite and indefinite articles are quite common in SAE, Mordvin only has definite post-

[21] Earlier the Komi speakers lived farther south (Bereczki 2007: 11).

[22] It is known that the Alans migrated from the area between Lake Aral and the Caspian Sea in the 1st century B.C. They lived in a tribal union with Sarmats and other Iranian peoples in the Steppes south of the Finno-Ugrians (Bartens 2000: 12).

[23] In the second half of the 4th century the Huns forced the Alans to flee to the Northern Caucasus, where they mixed with the local peoples. Together they formed a group called the Ossets, speaking an Iranian language in which the influence of Caucasic languages is remarkable (Bartens 2000: 12).

articles. Haspelmath's cluster map combining nine features shows conclusively that Hungarian is closer to the SAE core area, while Estonian, Finnish, Komi, Udmurt and Nenets remain closer to the periphery (Haspelmath 2001: 1505). Nonetheless broader and deeper knowledge of Uralic languages would presumably change that picture.

1.3 Basic terminology

The passive voice is considered one of the most important types of voice alternation observed across languages. Researchers of Finno-Ugric and Turkic languages do not usually specify the exact meaning of passive, at least in the older grammatical descriptions; however, we can assume that it signifies structures similar to those in Russian, German or English, where an active sentence like *Mary slapped John* can have two passive variants: a) *John was slapped* or b) *John was slapped by Mary* (Keenan 1985: 243). In a) the primary actant is demoted from the subject position and replaced by a secondary actant, the object of the original sentence. Moreover, the primary actant can be present as an agent, as in b). This kind of personal passive is usually regarded as the core case of the passive. Generally, the foregrounding feature (i.e. rising of the object into the subject position) of the passive exists in Uralic languages, but the backgrounding feature (i.e. the inclusion of the subject of the action as an agent) does not, which has confused linguists for a long time. In some Uralic languages even agentless passive sentences are rare. Many languages mark passives in the morphology of the verb in order to create what Keenan (1985: 250–) calls *strict morphological passives*. In other languages, however, it is marked by an auxiliary verb, forming what he calls *periphrastic passives* (Keenan 1985: 257–61). These verbs can be of four kinds: 1) verbs of being or becoming, 2) verbs of reception, 3) verbs of motion and 4) verbs of experiencing. Neither these auxialiary constructions nor the participial or infinitival structures of Uralic languages are included in my investigations.

As Haspelmath (1990: 27) states, the passive can be regarded, first and foremost, as a verbal morphological category whose meaning implies certain changes in the clause structure. In many languages the grammatical morphemes that mark the passive can have other functions, such a reflexive, reciprocal, anticausative or potential passive use. Reflexive constructions are often linked with a middle voice interpretation, because there is no implication of the existence of an agent (Keenan 1985: 245). On the other hand, reflexive markers a inclined to develop in 'automative' direction. In my investigation *automative* means that the subject of an automative construction is not AGENTIVE. According to Kulonen (1985: 294) the passive or automative use of Finnic *U*-derivatives is older than the reflexive use.

It is often assumed that impersonal passives differ from personal passives in two major respects. Whereas personal passives are typically rearded as being restricted to transitive verbs taking as the agent a human, animate, abstract or natural force, impersonal passives are primarily associated with intransitives, and their agents are claimed to be restricted to humans (Siewierska 1984: 96). On the other hand, impersonalization always defines a subjectless form, irrespective of the arguments structure of its input. Hence, the impersonal forms of transitive verbs retain grammatical objects, which in Finnic languages can alternate between partitive and nominative.[24] Impersonals also tend to maintain an active interpretation associated

[24] The nominative is added by the author, even a morphological accusative occurs, but it is restricted to pronouns.

with an indefinite, canonically human agent. A similar interpretation is often given to subjectless passives and subjectless 3rd person plural forms in many languages. (Blevins 2003: 475). The impersonal in the Finnic languages is most similar to the French *on,* as in *on chante* 'someone sings', the German *man* as in *man singt*, the Swedish *man* as in *man sjunger*.

The peculiarity of the passive in Uralic languages has been acknowledged in linguistic circles since von der Gabelentz (1861). His study included Estonian, Finnish, Hungarian, Khanty, Komi, Mansi, Mari, Mordvin, Saami, Samoyed, and Udmurt. He categorizes his findings into different groups, such as *Passivum duch Hülfsverba*, *Impersonelles Passivum*, *Passivum durch das Causativum* and *Passivum durch das Reflexivum,* and these categories remain valid to this day.

1.4 Methodology

1.4.1 Valence roles

The data in the first four articles were examined using the same method of analysis. The aim was to find the roots of verbs with derivational suffixes in order to illustrate the changes caused by these suffixes in the syntactic behaviour of the verbs. The relationship between the formant and the root verb has been shown using valence roles from case grammar. For my analysis, I have used the same roles identified in Geniušienė (1987: 39–41), since it was a new and suitable model for analysis concentrating on subjects, and thus forms the basis for all my syntactic studies presented here. The other roles are of lesser importance, and hence I have paid less attention to them, as in line with Kulikov (2011: 369) I consider that a language seldom needs to distinguish between all minor roles. In most cases, only two or three basic oppositions within the complete inventory turn out be syntactically relevant. In the passive sentences I discerned three roles for primary actants (Geniušienė's hyper-roles semantic subjects): AGENTIVE, EXPERIENCER and CAUSER (or FORCE) which optionally appear as agents in the dative case in Mordvin passive sentences. In fact, these roles occur quite seldom in my material, but in principle they can be added to at least to *v* passives, while alternative *t* passives never accept agents. The fourth role of the primary actant is NEUTRAL, being the only actant of automative sentences (see Kulonen 1985: 290, 1989: 11), and it is approximately the same as Anderson's NOMINATIVE (1971: 37)). The fifth role of the primary actant, ACTOR, occurs only in reflexive, or in a narrower sense intentional (a subgroup of reflexive) sentences when the primary and secondary actant, in other words, the subject and object, conflate. These five roles have been crucial in separating the many meanings of Mordvin *v* verbs. For semantic objects or secondary actants, I have used two roles: GOAL/PATIENT and CONTENT. One role has proved sufficient for the semantic dative: BENEFACTIVE, a living being who benefits from the action.

At some points in the analysis however other roles are necessary, such as LOCATIVE (expressing motion into/towards or the location of the referent or time), SOURCE (expressing a starting point of a motion or an indicator of origin), and INSTRUMENT (the inanimate participant of an action). The roles used in this paper are also used in the description of basic sentences in Finnish (Hakulinen, Karlsson 1979: 102–104).

Another relatively new, and far more detailed, description of semantic roles in Uralic languges has been made by Sammallahti (2005: 304–305). In his study he has distinguished a

total of 24 roles in Northern Saami: 16 participant roles, 4 local roles and 4 possessive units. Of these the AGENTIVE, EXPERIENCER and PATIENT roles seem to be equal to those used in my study. Sammallahti analysed 6500 basic Northern Saami verbs with their contexts, which resulted in 9 roles for the subject and 10 for the object. However, his description is too accurate and troublesome (with many new terms for aspects of Saami) for those other than linguists specialized in Saami syntax, and it suffers from a total lack of references to other studies. Moreover, his roles are more dependent on Saami verbal semantics than on the general features of deep cases. Nevertheless, the basics of Sammallahti's ideas should be translated into English in order for them to gain a wider scientific audience.

The last article presented in my study offers a different approach to Uralic meteorological verbs, which form an interesting group that exhibits great internal diversity. Some space is also devoted to a brief overview of the nature and origins of basic meteorological vocabulary. Probably the most salient feature of meteorological expressions is their lack of canonical participants, such as the agent and patient. For this obvious reason, the last article concentrates on syntax and offers a typology specially designed for Uralic meteorological verbs. The different argument structure patterns are discussed, particularly the primary meteorological construction used in Uralic: avalent constructions featuring avalent predicates. Here, the presence or prohibition of a subject or object is examined, as well as the choice of verbal conjugation. Of particular interest are sentences where some of the participants are missing.

1.4.2 Division of derivational suffixes

I once again utilize Kangasmaa-Minn's (1982) three-fold division of derivational suffixes. I have applied this approuch in two earlier studies (Salo 1988, 1990) and it has influenced, to some degree, the background of my articles, even if it has not always been mentioned in the content.[25] The division, expressed with the terms CHANGER (Finnish MUUTTAJA), TRANSFORMER (MUUNTAJA) and MODIFIER (MODIFIOIJA) does indeed exist in derivational morphology. The CHANGER moves the stemword from one main category to another, e.g. makes verbs nouns and the reverse. The TRANSFORMER, in contrast, operates within the main categories: it turns transitive verbs into intransitives or nouns into adjectives. The MODIFIER does not cause any significant changes to the semantics or behaviour of verbs; it can only give different kind, of nuances. In Mordvin, Mari and Chuvash derivational reflexive-passive-automative suffixes behave identically; they are sometimes TRANSFORMERS, sometimes MODIFIERS. For example, the chain can be seen in the Erzya *ašo,* and Moksha *akša* 'white, light' > E *ašolgadoms,* M *akšəlgədəms* 'turn lighter (itr.), dawn' > E *ašolgavtoms,* M *akšəlgəɸməms* 'make lighter, bleach' > E *ašolgavtokšnoms,* M *akšəlgəɸməkšnəms* 'idem, frequentative'; similarly in Mari there is *oš, ošo* 'white' > *ošemam*[26] 'turn lighter' > *ošemdem* 'make lighter, bleach' > *ošemdalam* 'idem, frequentative'. Chuvash derivational patterns can be found at the end of article 5.

The Mordvin rich verbal morphology has been analysed by Nad'kin (1980), he suggests that derivational, tempus, and modus suffixes have even 13 places + 3 places for di-

[25] Unfornately, I have been told to shorten my articles and concentrate on relevant content and reduce statements of opinion in order to get my studies published.
[26] Usually the two different conjugations (*-am*, and *-em*) are expressed with 1. person singular forms.

minutive clitics. Some suffixes can be added several times. The Mari verbal suffixes have some restrictions, some of them can occur only once after the verbal stem (Jambulatova 1997). The Turkic verbal suffixes are more flexible, as attested in article 4.

1.5 Data

For the first two articles, which concern Erzya and Moksha, the eight volumes of *Mordwinische Volksdichtung* (MV, 1938–1981) and the two-part *Proben der mordwinischen Volkslitteratur* (PM, 1891 & 1894), totalling some 4400 pages, are analysed. This folklore material was collected by Heikki Paasonen (1865–1919) or his native-speaking Mordvin assistants. The material covers all the main Erzya and Moksha dialects spoken in Central Russia and is also the basis of the extensive dictionary *H. Paasonens mordwinisches Wörterbuch* as well as its Russian and German indices (MW 1–6, 1990–1998, over 3500 pages). Newer material as applicable has been collected from Erzya-Russian (ERS, 1993) and Moksha-Russian (MRS, 1998) dictionaries, consisting respectively of 27 000 and 41 000 words. The translations of folklore have been crucial to understanding the semantic nuances of both *-v-* and *-t-* suffixes as context is often the determining factor. Thus, I analyse the meanings of Erzya and Moksha derivatives in sentences collected from folklore, dictionaries and, to some extent, modern literary sources. Erzya material is more abundant in all of these sources. At the last stage of this book the *Reverse Dictionary of Mordvin* (RDM, 2004) proved an indispensable complement to these studies. A concise historical overview of Mordvin grammars, beginning from the first half of the 19th century, is also presented. In addition, some other sources have also been consulted.

Research into Mari, the focus of the third article, began even earlier, with the first Mari appearing in 1775, from which point the derivational suffix *-Alt-, -əlt-*, in both its reflexive and passive meaning, has been described in various different grammars. This tradition and the current opinions of native or foreign researchers on these early studies are also examined. Both Russian-Mari and Mari-Russian dictionaries (RMS, 1991, and MRM, 1999) are also used.

For the fourth article on Chuvash, the textual source used is *Gebräuche und Volksdichtung der Tschuwassen* (Gebr), collected in 1900 by Heikki Paasonen, but only published posthumously in 1949 by others. The second source is John R. Krueger's *Chuvash Manual* from the year 1961 (ChM). Later, a comprehensive Chuvash-Russian dictionary (ČRS), a smaller Chuvash-Finnish dictionary by Moisio-Fomin-Luutonen (TšSS, 2007), a small reference book by Ašmarin; *Sbornik" čuvašskih" pěsen"* (Sbor, 1900), and the electronic corpus Pavlik Morozov (PaMo) have also been consulted.

The fifth article deals with meteorological verbs in Uralic languages, and as such represents one of the very few studies to address this area. As primary sources, 23 dictionaries were consulted, as were a large number of native speakers or eminent researchers of the 10 (in some places even more) Finno-Ugric and 4 Samoyed languages presented in the article.[27]

[27] I have been accused of not using the electronic material available in Uralic languages. When I started my research, such data was in its infancy at least concerning minor Uralic languages. I wanted to begin with original texts, preferably old texts with translations, so large Mordvin folklore collections were the obvious choice. I totally agree with Miestamo (2013: 47, 52) that Bible translations form their own branch of research, because they do not always describe the true essence of a language.

2 The typological classification of passives in Uralic languages and some remarks on their neighbours

The following typology is based on functional resemblance, as suggested e.g. by Kittilä (2000: 307–308). As Greenberg (1963) observes in his classical study on universal linguistic features, in practice comparison between languages is founded on semantics. Thus, this is the starting point, after which I move on to morphology. For example, the demotion of the agent from the surface level can be a good basis. As a result, there can be many structurally different constructions. At the same time, I also discuss the historical development of the derivative suffix in question.

Since the derivational passive and corresponding reflexive suffixes are exhaustively examined in my earlier works, there is no need to consider them here. Passive sentences in Erzya and Moksha are formed with the productive polysemantic suffix *v,* which also has six other meanings (more information in article 1). To some degree, parallel development shows that the rare unproductive suffix *t* has fewer meanings (more information in article 2). The Mari passive is expressed with the deverbal suffix *-əlt-* or *-Alt-,* which has three other meanings (more information in article 3).

2.1 The (multi)personal passive as a deverbal derivative

2.1.1 Finnish

In Finnish the basic deverbal derivative *-u-/-y-,* which has a general intransitive meaning, occurs in many compound derivatives. One of its meanings, the automative-reflexive-passive, is certainly quite old, dating back to the old Finno-Ugric **w*. Moreover, this suffix has cognates in other Finnic languages, Saami languages, Mordvin, Mansi, and Hungarian. The Estonian *u*-derivatives are often relatively young; it has even been assumed that there have been created under the influence of Russian, due to conscious language planning, or even modelled after the Finnish usage (Laakso 2001: 195). Furthermore, quite recently, many deeply insightful studies have been published on this topic (Kulonen 1985, 2010,[28] Räisänen 1988, Koivisto 1991, 2004, Siitonen 1999, Vilkuna 2004; on Saami cognates see Schlachter 1953 [= 1968], Schiefer 1983, on Mordvin cognates see Bartens 1999: 160, Salo 1990, 2006 [= the first article in this study], on Mansi cognates see Kulonen 1989, 2007, general information on the Finno-Ugric passive is offered by Schiefer 1983).

Another suffix used in the reflexive, the passive or other related functions is -TE- (-TTE-). In the Western Finnic languages, it only appears in a few lexicalized, obscure derivatives, but in the eastern Finnish dialects and the Eastern Finnic languages, it is used productively to form reflexives from transitive verbs (Laakso 2001: 195). Due to its eastern distribution, it has also been claimed that this is partially from Russian (Koivisto 1995). This suffix is, however, outside the scope of this study.

[28] According to the author, there are two different*U* suffixes in Finnish, the other is a continuative suffix occuring mainly in expressive verbs, and it has cognates in Saami (Kulonen 2010: 282).

2.1.2 Saami languages[29]

An older basic study of Saami grammar (Nielsen 1926: 285[30]) gives only a very short list of Northern Saami passives, three different derivational suffixes:

> 1) *-ut: -uje* (which also has an inchoative meaning and makes verbs from Scandinavian loanword nouns);
> 2) *-tâllât: -l-* (meaning there is something unpleasant to which the subject has to unwillingly submit, the same suffix also has a partly frequentative-causative, partly frequentative-reflexive and even partly reciprocal meaning; it consists of the causative suffix *-tit* and the frequentative *-(â)llât)*;
> 3) *-sit* (this group of passive verbs implies that the action happens by itself).

Phonologically, the Saami passive derives from the same source as the Finnish automative-passive suffix **-u-*. The element *-v-,* occuring both in the Saami passive and automative-passive, such as *bor'rojuvvo,*[31] 'get eaten' or *giebahuvva,* 'sooty stain' can be explained as a natural remainder after a stressed syllable: in an unstressed position the *vowel + the -v-* have merged, and the result is a *rounded vowel + -j-*; in a stressed position *-v-* has labialized the preceding vowel while remaining itself unchanged. This is the reason why the Saami passive has two different markers, **-Oj-* and **-Ov-* (Sammallahti 1998: 84–85, 1999: 72).

According to Sammallahti (1998: 115), Northern Saami passive verbs derived from **transitive stems** can be divided into five subgroups:

> (a) automative passive verbs (having no notional agent): *gul'lot* 'be audible' < *gullat* 'hear', *oidnot* 'be visible' < *oaidnit* 'see';
> (b) agentive passive verbs (an agent is possible: locative for verbs ending in *-[j]uv'vot*, illative for verbs ending in *-ot*): *gul'lojuv'vot* 'be heard (by somebody)' < *gullat* 'hear', *oidnojuv'vot* 'be seen (by somebody)', *bor'rot* 'be eaten' < *borrat* 'eat';
> (c) agent-oriented passive verbs (having a subject but no agent): *čuohpahit* 'lend itself for cutting' < *čuohppat* 'cut';
> (d) patient-oriented non-agentive passive verbs (having a subject but no agent): *čuohppasit* 'be amenable for cutting, be cut easily (because of the quality of the object)' < *čuohppat* 'cut';
> (e) patient-oriented agentive passive verbs (having a subject and an agent in the illative): *oainnạhallat* 'be seen (against one's will)' < *oaidnit* 'see'. In these sentences the surface subject is always +animate, often +human.

[29] Olli Heinänen, Julianna Molnár and Radosław Wójtowicz (my students on the course *Saamen rakennekurssi*) have found some passive examples for me.
[30] In the old scientific orthography, called Nielsen's orthography, the marking of vowels and especially consonant clusters is different.
[31] In fact this verb has a triple passive suffix, originally of the same shape. The pattern is restricted to Northern and Inari Saami.

(1) *Unna Junná dahkko-juvv-o golmma gill-ii,*
U. J.ACC make-PASS-PRES.3SG three language-ILL
'Unna is made in three languages.'(Oktavuohta: http://www.samediggi.fi/index.php?option=com_content&task=view&id=253&ltemid=282&lang=davvi)

(2) *Sushi borro-juvv-o maid marine-juvvo-n*
sushi.ACC eat-PASS-PRES.3SG also marinate-PASS-PRET.PTCL
dahje juo vuššo-juvvo-n gul-iin.
or already cook-PASS-PRET.PTCL fish-COM
'Sushi is also eaten with marinated or cooked fish.'
(http://gtweb.uit.no/korp/ *borrojuvvo*)

(3) *Rádji bidj-u-i Birgge+njárgga ja Vuorján+joga*
border put-PASS-PRET.3SG B.+cape.GEN and V.+river.GEN
gask-ii.
POP'between'-ILL
'The border was placed between Birgenjárga and Vuorjánjohka.'
(http://gtweb.uit.no/korp/ *biddjui*)

(4) *Speaisku muitali-i áŋgirit, movt lei-gga njáhka-n*
Sp. remember-PRET.3SG hard how be-PRET.3DU creep-PTCL.PRET
beatnaga meattá ea-ba-ge lea-n oainna-halla-n
dog.GEN POP'past' NEG-3DU-CLT be-PTCL.PRET see-PASS-PTCL.PRET
'Speaisku remembered well, how they(du.) crept by the dog,
without being noticed.' (Yo-kirjoitus, pohjoissaame, lyhyt oppimäärä, 3.10.2011, 2. Ráhkaduskkus, p. 4)

The passive in other western Saami languages is little reported. However, a textbook of Lule Saami (Spiik 1977: 147–148) describes how passives can be formed with the suffixes *-duvvat, -uvvat,* and *-dallat*.

Intransitive verbs can have passive counterparts:

(a) non-agentive passive verbs that only take certain kinds of inanimate subjects and no overt agent (the psychological/underlying agent is thought to be human): *vulgojuv'vot* 'leave' < *vuolgit* 'leave', *el'lojuv'vot* 'live' < *eallit* 'live',
(b) non-agentive passive verbs that take a (human or non-human) subject but no (overt or underlying) agent: *borgot* 'become covered with snow' < *borgat* 'snow in windy weather', *sēvnnjoduvvat* 'get overtaken by the darkness' < *sēvnnjodit* 'get dark' (Sammallahti 1998: 116).

One group of Saami passive verbs is particularly interesting: verbs with the derivational suffixes *-(a)sit* and *-ašuvvat,* meaning respectively that something happens unexpectedly or slowly, during a long process, as in *seallat* 'become covered with snow (about trees, forest) by the weather, the wind or people' > *saellasit* 'suddenly become covered with snow' and *seallašuvvat* 'slowly become covered with snow' (Nickel & Sammallahti 2011: 568–573).

(5) *Danin go mariidna biebmo+gollosi-s lea-t nu*
because when marine- food+chain-LOC be-PRES.3PL so
*ollu lađđasa-t, de čoaggá-**s**-a eane-mus mirko*
much member-PL then gather-PASS-PRES.3SG many-SUP.ATTR poison
biebmo+gollos-a baji-mus oassa-i,
food+chain-GEN upper-SUP.ATTR part-ILL
'Because the marine foodchain has so many members, the most poison gathers in the upper part of the foodchain,'
(Raporta/Rapport 1/2013, Sámi logut muitalit 6, Čielggaduvvon sámi statistihkka 2013.)

(6) *Maŋŋil sirdá-s-ii girje+giela*
afterwards transfer-PASS-PRET.3SG literary+language.GEN
suopman+vuođđu luksa 1740-jag-iin ja olles
dialect+basis to.the.South 1740-year-PL.LOC and whole.ATTR
Biibbal prente-juvvu-i ng. lullisámi
Bible print-PASS-PRET.3SG so-called Lule.Saami.GEN
girje+giela (sydlapska bokspråket) mielde
literary+language.GEN (South Saami literary language) POP'according'
'Afterwards the dialect basis was transferred to the South in the 1740's and the whole Bible was printed according to the Lule Saami (South Saami) literary language.'
(http://site.uit.no/aigecala/files/2012/12/2012.magga.pdf)

The Saami languages have at least three different derivational suffixes for the passive and reflexive. Passives having a ***t*-suffix** are eastern, whereas their western counterparts have an ***l*-suffix**. *t*-passives occur in the north, in Inari Saami, where from the root verb *kodđeđ* 'kill, fish, hunt' can be derived the causative *kodettiđ* 'let kill', the curative or a special passive *kodettattađ* 'be killed, allow to be killed/getötet werden, sich töten lassen', as well as the *u*-passives *kudačču**đ*** 'be killed', *kudduđ* 'be killed, be captured' (InWB 1613. entry). In Skolt Saami the *-õõtta-* suffix is mainly used to express the *adversative passive.*[32] The term means that the surface subject is partly responsible for its unpleasant fate. Eastern Saami (Skolt, Akkala, and probably Kildin and Ter) mediopassive verbs take a subject and an object denoting something that belongs to the subject: *tuäp'põõttâd* 'collect, snatch (one's own belongings or for oneself)' < *tuäppad* 'snatch, catch (several objects)' (Sammallahti 1998: 116). Following the Russian grammatical tradition, the newest Eastern Saami – Russian dictionary presents four voices, including the passive with the suffixes *-uvv-*, *-xuvv-* and *-juvv-* (SRS 554).

The most extensive Skolt Saami grammar to date (Feist 2010) gives only one type of passive. However, as a native speaker of an Indo-European language Feist has obvious difficulties in accepting that passives can also be derivational. His example is an analytical form with the auxiliary *lee'd* followed by a passive participle, which is quite similar to the English passive seen in the translation, e.g.:

[32] Occasionally other suffixes can also have a passive meaning: *-õõvva-* suffix is sometimes used to express the adversative passive, e.g. *čalmmõõvvad* 'be bewitched (act. be looked with an evil eye)'.

(7) *mõõn-i* *to-k* *ko-'st* *leä-i*
go-PRET.3SG that-LAT wha-LOC be-PRET.3SG
e'čče-s *čiõkk-u-m*
father-PX.3SG bury-PASS-PRET.PTCL
'She went there where her father had been buried.' (Feist 2010: 298)

***j*-passives**

It has been assumed that the reflexive morpheme **j* existed in proto-Uralic and that it survives to this day in the proto-Khanty passive suffix **aj*, **äj*, and the Saami polysemantic suffix *-j-* and also has counterparts in Samoyed languages (Honti 1984: 52).

According to one interpretation (Feist 2010: 296–297), the *j*-derivatives in Skolt Saami are neither passive nor active, but representatives of a middle voice treating the situation as a process and ignoring the role of the agent, e.g. *puâll'jed* 'catch fire' < *pue'lled* 'burn', *puâc'cjed* < *puôccâd* 'be ill'. The first refers to an intransitive state, while the second refers to a process which leads to burning. According to Kemmer (1993: 225–227), the meaning of the middle voice borders on the reflexive.

However, this is a matter of definition. Another Skolt grammar compiled by a Finnish linguist and two members of the Skolt Saami speaker community terms *j*-derivatives simply passives and gives three examples: *kåddjed* 'get killed' < *kå'dded* 'kill', *koll'jed* 'be heard' < *kuullâd* 'hear', *reãkkjed* 'get beaten' < *riökkâd* 'beat' (KSKK 136). Other researchers, such as Auli Oksanen,[33] are also inclined to consider them passives, for instance *pårrjed* 'get eaten' < *poorrad* 'eat', *vä'lljed* 'be taken', or a longer form *vä'lddjõõvvâd* 'id.' (actually having two passive suffixes) < *vä'ldded* 'take' (Auli Oksanen's research material).

2.1.3 Permic languages

Both Permic languages have a reflexive suffix deriving from the Finno-Ugric frequentative suffix **-śk-* which is related through metathesis to the Finnic and Saami frequentative suffix and the Estonian, Livonian and Saami markers of the conditional (Korhonen 1981: 253, Bartens 2000: 286). It has been assumed that the Permic languages had two homonymous suffixes: the **-śk-* reflexive, which still exists in both languages (because the development from a reflexive to a (frequentative-)continuative suffix is common and understandable, but not vice versa) and the **-śk-* frequentative, which has almost completely vanished from Komi (Fokos-Fuchs 1913–1914: 128–129).

Bartens lists seven meanings for the Komi *-ś-* derivatives: *reflexive*, *reciprocal*, *automative*, *passive*, *resultative* 'enough, to the end', *continuative* and *habitual* 'do something regularly, professionally or have a natural tendency towards something' (Bartens 1999: 285). To this list could also be added the *zero-meaning* too, due to the fact that intransitive verbs sometimes take this suffix only to point out their intransitivity. Some grammars even reveal that this suffix can be added twice, where the first suffix provides a passive meaning and the second a reflexive meaning, while some other sources suggest that the first suffix has a reflexive meaning and the second a zero-meaning (Fuchs 1913–1914: 114, 284–285, with refer-

[33] She prepared a doctoral dissertation on polysemantic *-õõtta*-verbs in Skolt Saami. Unfornately untimely death ended her career at the beginning of the autumn 2014.

ences). In some of these meanings continuative transitive verbs can take an object in the accusative case (Fuchs 1913–1914: 117–118, 286, 296). In addition there is a group of verbs, mainly descriptive, called deponents, which lack a counterpart without the reflexive suffix (Fuchs 1913–1914: 119, 287, 296, 301). In some of the meanings listed above, the influence of the Russian *sja*-verbs is evident, especially in the meaning 'do something to the end' and 'do something professionally'. Its use to indicate typical behaviour for some animal (without an object), as in *pon kurčča-ś-ę* 'the dog can bite / is enclined to bite', is also similar to Russian *sobaka kusajetsja* (Šebolkina 1999: 282). Thus, the meanings of these Permic derivative suffixes need be examined in comparison to Russian *sja*-verbs. According to many older studies, this reflexive suffix seems to have an etymological counterpart in the Northern Khanty reflexive suffix *-ś-*, but this suffix is completely missing in Lehtisalo (1936), whereas Serebrennikov (1963: 336) sees it as an iterative aspect marker.

In the literature one frequently comes across examples of the Udmurt derivational passive with the suffix *-śk-* (Haspelmath 1990: 29, 34, 36; copious examples in Geniušienė 1987); however, actual Udmurt grammars pay it little attention. According to Kondrat'eva (2009: 82), the reflexive marker of the verb can express a passive meaning. The reflexive and the passive both use the same suffix, *-śkį-*, *-iśkį-*, or *-śk-*, as seen in example (8), and it even renders a present tense in the 1st and 2nd persons, as well. Both these suffixes probably have the same origin (Bartens 2000: 189–190). In Udmurt grammars printed in Russia, reflexive verbs are regarded as a voice of their own formed from the non-reflexive stems *-śkį-* (in the I conjugation) and *-iśkį-* (in the II conjugation), e.g. *beŋiktįnį* 'turn (tr.)' > *beŋiktiskįnį* 'turn (itr.)' or *diśanį* 'dress (tr.)' > *diśaskįnį* 'dress (itr.)'. In the I conjugation, the suffix has several dialectal variants, especially when it is added to stems ending with *tį* (Kel'makov–Saarinen 1994: 122–124). The Permic passives can occasionally have agents in the instrumental case, although this is considered to be foreign influence from Russian (cf. the examples in section 2.2.3.3). The Udmurt passives, on the other hand, are mainly agentless: *kńiga giž-ś-ę* 'the book is going to be written' (Šebolkina 1999: 283).

(8) *Badʒ'įm* *no* *pići* *bukva-os* *ʒ'uć* *kįl-įn*
big and small letter-PL Russian language-GEN
gožjan *pravilo-os-ja* *ik* *gožti-śk-o*
orthography rule-PL-ADVL AFF write-PASS-PRES.3PL
'Big and small letters are written according to the orthographical rules of Russian.' (Bartens 1999: 284)

Udmurt passives do not normally accept an AGENTIVE agent; only INSTRUMENTS in the instrumental case are allowed, such as:

(9) *ta* *busį* *tabere* *traktor-**en*** *gįri-śk-e*
this field now tractor-INSTR plough-PASS-PRES.3SG
'this field is now ploughed with a tractor' (Alatyrëv 1983: 582)

The etymological counterparts of the Udmurt suffix in Komi, *-ś-, -aś-, -č-*, give stems reflexive meanings (such as *paśtaśnį* 'dress itr.', *komaśnį* 'put on one's shoes'), and they also can have reciprocal meaning. Occasionally, the result is very similar to Russian impersonal verbs with the suffix *-sja*, and even *modal* nuances can be involved, as in the following example:

(10) *menam o-z uź-ś-į ni o-z śoj-ś-į.*
I.GEN NEG-PRES.3SG sleep-REFL-CONNEG not NEG-PRES.3SG eat-REFL-CONNEG
'Mne ne spitsja i ne jestsja.'
'I don't want to sleep or eat.' (Lytkin & Timušev 1961: 896)

The Komi suffix can also have a passive reading, as in the next example:

(11) *košav-ś-ęnį važ zdańije-jas da vęć-ś-ęnį vįl-jas.*
tear-PASS-PRES.3PL old house-PL and build-PASS-PRES.3PL new-PL
'Old houses are torn down and new ones are built.' (Bartens 1999: 285)

2.1.4 Hungarian

The opposition of transitive and intransitive verbs is of primary importance in Hungarian because the suffix *-ik* only denotes non-transitive verbs (Dezső 1988: 303). The longer variant, *-ód-ik*, *-őd-ik* (or *-kod-ik*, *-köd-ik*, *-köd-ik*, *-koz-ik*, *-këz-ik*, *-köz-ik*), can give verbs many different meanings: reflexive (*húz* 'draws' > *húzódik* 'withdraws', *mos* 'washes' > *mosakodik* 'washes oneself', *mutat* 'shows' > *mutatkozik* 'shows oneself'), passive (*elad* 'sell' > *eladódik* 'get sold'), reciprocal, intransitive and a form of continuative or frequentative (Fuchs 1913–1914: 120–123).

A second possibility which is usually presented is a medial form with *-ul/ül*, which non-natives tend to term reflexive. For instance, Sammallahti (1998: 85) links this suffix to the Finnish, Saami, Mordvin and Mansi passive-reflexive labial suffix. It has been proposed that *-ul/ül* is reminiscent of the Finno-Ugric root for 'be' *ol-,* which, it is claimed, is strikingly similar to the Common Turkic passive suffix *-il/-ıl* (Hetzron 1976: 377). The suffixes of passive verbs are non-productive in Hungarian, and they exist in grammars only for the sake of comprehensiveness. Many researchers even claim that Hungarian does not have a passive (e.g. Siewierska 1984: 23). These obsolete passive verbs were formed from causative verbs with the suffix *-ik*, e.g. *ír* 'write' > causative *ír-at* 'make to write' > passive *ír-at-ik* 'is written' (Dezső 1988: 306). The majority of *-ik*-verbs are formed from verbs in which the reflexive or reciprocal feature is irrelevant: they are called proper medial (or pseudo-reflexive) verbs. In most cases the transitive stem can be found, but the *-ik*-derivatives have become intransitive due to the fact that they are no longer directed towards an external object (Dezső 1988: 317).

(12) *A klub fel-ép-ül-t*
DEF.ART club PREF-build-REFL-PRET
'The club has been built.' (Dezső 1988: 293)

2.1.5 Ob-Ugric languages

According to Kulonen (1989), there are two major passive types in Ob-Ugric languages: the personal and impersonal passive. Impersonal passive sentences are formed from semantic structures that only contain as nuclear elements an (indefinite) agentive in addition to the verb (V-Agentive). Moreover, personal passive sentences are formed from many semantic structures. In Kulonen's analysis, the subject of an Ob-Ugric passive sentence can be NEUTRAL, a PATIENT, LOCATIVE/RECIPIENT/BENEFACTIVE nouns, or even TEMPORAL or SOURCE noun phraces. In the two Ob-Ugric languages, verbal conjugation follows the same pattern in almost every respect. Even where the elements are different, the structure looks similar (Kálmán 1988: 407, with references).

Older grammars devide Mansi into two voices: active and passive. The fact that the use of the Mansi passive is wider than in those languages where the passive usually occurs, also justifies the description of a passive voice in Mansi (Kulonen 2007: 165). In Mansi, the passive verbs are derived from transitive or intransitive stems with the marker *-(a)we-*, which is continued by a proto-Uralic reflexive-passive derivational suffix, **-w-*. Some Mansi verbs also have the passive marker as a derivational suffix,[34] due to the fact that they do not have active (= subjective or objective) conjugations at all, as in the Eastern Mansi *åjøw-* 'sleep' or *püümløw-* 'freeze (itr.)', the Northern Mansi *ojawe-* 'sleep, fall asleep', *nātawe-* 'drive (itr.), be driven (with the stream)', *pēlamlawe-* 'catch fire', and *marśəmawe-* 'get tired, get bored' (Kulonen 1989: 134–136). With these verbs an AGENTIVE subject is not possible (Kulonen 2007: 165–166, 176). In Northern Khanty similar verbs are: (incl. past tense suffix) *pɔtsaj-* 'feel cold, freeze (itr.)', *wŏjəmsa-* 'fall asleep'; (incl. present tense suffix) *nɔpətʌa-* 'swim, be driven with the stream', and *nĭlaj-* 'be, become visible' (Kulonen 1989: 142). Furthermore, these verbs occur in all Ob-Ugric dialects. In Obdorsk Khanty there is also a group verbs with only passive conjugations, these verbs never have agents, as some kind of agent (FORCE or INSTRUMENT) can already be included in the verbal semantics: *kijartə-* 'become frosty', *xuwlə-* 'fill (itr.) with water', *muwət-* 'fill with dirt', *kărńit-* 'be covered with the first ice (a river)' (Nikolaeva 1995: 153). This is the same group of verbs which, on the Indo-European side, are called deponents or medials.

In Eastern Mansi the passive optative has its own marker, *-nk°-*, which is a portmanteau morph containing both voice and mood (Kulonen 2007: 177). Paradigms consisting of passive conditionals have also been found, and here the mood marker precedes the voice marker (Kulonen 2007: 180–181). As a rule, Khanty tempus markers also precede the passive marker.

It has been assumed that the proto-Khanty passive suffix **aj*, **äj* is a descendant of the proto-Uralic reflexive morpheme **j,* which has counterparts in the Saami polysemantic suffix *-j-* and in Samoyed languages (Honti 1984: 52; 1998: 372). In Northern and Southern Khanty, the passive marker is *-aj*. *-äj*, in Eastern Khanty *-uj*.

[34] This is a matter of opinion and theoretical speculation, because in languages of this kind it is quite common for some verbs to have only one conjugation. E.g. Nenets has verbs belonging to four conjugational groups, and each verb has from 1 to 3 conjugations (Salminen 1998: 531–532).

2.1.6 Selkup

Selkup is not a unified language but a continuum of several – perhaps as many as 12 – distinct dialects, of which the data are unfortunately very scattered. The grammar of the best known dialect, Northern Taz, reveals that durative verbs (having the suffix *-tru-* or *-ru-*) derived from transitive verbs can have a passive reading, but agents are not allowed. (In Ket dialect they are, see chapter 2.2.3.3.) Originally, old Selkup texts had only 3rd person singular passive forms (Kuznecova–Helimskij–Gruškina 1980: 219–221). In other Southern Samoyed languages, the situation remains unclear (Siegl 2013: 404).

2.1.7 Nenets

The existence of the passive in Nenets is a matter of dispute. According to Siegl (2013: 255, 404), it is absent from both varieties of Nenets. However, the rare reflexively conjugated unproductive suffix *-ra-*[35] does indeed make passive verbs: e.g. *xada-* 'kill' > *xadara-* 'get killed' (Salminen 1998: 43). In this context an agent is never possible. The only example available: *tï xadarej"* 'volk ubyl olenja (act. olen' okazalsja ubitym) / it seems to be that the reindeer has been killed [by a wolf]' (NRS 715) is used in order to avoid the word for 'wolf', which is a taboo.

2.1.8 Enets

A modern and very detailed description – one chapter, 21 pages – of this area of Forest Enets syntax is offered by Siegl (2013: 404–424). The passive marker *-ra/-la* triggers third conjugation and agrees with its subject. Morphologically, it should be classified as derivational. There is a homonymous suffix, the inchoative *-ra/-la*, which also triggers third conjugations. Furthermore, both suffixes can only be added to intransitive stems. Siegl tentatively assumes that lative-marked agents were introduced to the intransitive inchoative predicate to express an external enforcer which brought a situation into being. Here, we can thus see the grammaticalization of the passive (Siegl 2013: 420–421).

2.2 The expression of an agent with synthetic structures in the Uralic languages: case suffixes

Even if Uralic languaguages have a passive category, it is not clear that agents are allowed, and even if they are allowed, they seldom appear in the surface structure. Since the case inventory in different Uralic languages varies from 3 in Northern Khanty[36] to 18 in Hungarian, it is practical to make the first rough division according to directional cases.

[35] Mostly the suffix *-ra-* is used in forming transitive verbs from intransitives; sometimes valence remains untouched (Tapani Salminen, p.c.).

[36] It has been suggested that the northernmost Obdorsk Khanty has only two cases – nominative and locative including lative – my own fieldmaterial shows that the translative has developed into a full case which also occurs after the possessive suffixes (Salo 1993).

2.2.1 'from where / woher' cases

2.2.1.1 Elative

In the Saami languages there can occur two (earlier even three) AGENTS in different cases. The first argument of a passive sentence has to experience something unpleasent, which means that it must be an animate, often +human. Sometimes Saami passives take an AGENT in the elative case.

Southern Saami

(13) *Piere gaatska-htall-i bienje-**ste**.*
P. bite-PASS-PRET.3SG dog-ELA
'Piere was bitten by the dog.' (Bergsland 1982: 95)

2.2.1.2 Ablative

In old literary Finnish AGENTS could be present in passive sentences. In a very famous song performed even today every Christmas by so-called 'starboys', (Finnish *tiernapojat)* is found this peculiar structure:

(14) *ole-n minä kaiki-**lta** tunne-ttu*
be-PRES.1SG I all-ABL know-PASS.PRET.PTC
'I am known by all'

In contemporary Finnish some *u*-verbs often occur with an agent-like adverbial, e.g. *hoitua* 'be taken care of', *unohtua* 'forget', *onnistua* 'succeed (in)', *luonnistua* 'turn out well' (adapting Vilkuna 2004: 1279).

(15) *Minu-lta unohtu-i kirja kot-iin.*
I-ABL forget-PRES.3SG book home-ILL
'I left the book at home.'

In old Hungarian passive utterances, the agent was occasionally visible in the ablative case,[37] as in example (16) from the Jókai-kódex:

(16) *Ad-at-yk kyral-**tol** ytelet*
give-CAUS-PRES.3SG king-ABL verdict
'A/the verdict (was) given by the king.' (Kiss–Pusztai 2003: 456)

[37] Nowadays the case ending is *-tól, -tél, -től*

2.2.2 'to where / wohin' cases

2.2.2.1 Illative

According to Nielsen's grammar, *uje*-passives take an AGENT in the illative case, as do the *tallat*-, *hallat*-passives.

Northern Saami

(17) *Áldu* *borr-u-i* *guvž-**ii**.*
female.reindeer eat-PASS-PRET.3SG bear-ILL
'A female reindeer was eaten by a bear.'
(Nickel & Sammallahti 2011: 566)

(18) *Láppis borr-u-i* *gump-**ii**.*
sheep eat-PASS-PRET.3SG wolf-ILL
'A sheep was eaten by a wolf.' (Nickel & Sammallahti 2011: 406)

(19) *Máhtte* *bealkka-hala-i /* *belk-u-i* *Máreh-**ii**.*
M. scold-PASS-PRET.3SG scold-PASS-PRET.3SG M.-ILL
'Máhtte was scolded by Máret.'
([Sammallahti 2005: 62,] Nickel & Sammallahti 2011: 566)

(20) *manna gaskâ-tala-i* *bædnâg-**ii**.*
child bite-PASS-PRET.3SG dog-ILL
'The child was bitten by the dog.' (Schlachter 1965: 399)

(21) *Mun* *fille-hall-en* *da-n* *olbmu-**i**.*
I cheat-PASS-PRET.1SG that-ACC person-ILL
'I was cheated by that person.' (Nickel 1994: 419)

(22) *Dat* *cápmá-hala-i* *iežas* *isid-**ii***
that beat-PASS-PRET.3SG own husband-ILL
'She was beaten by her own husband.' (Nickel 1994: 419)

(23) *Ja* *Hearrá* *bija-i* *merkka* *Kain-**ii**,* *amas*
and Lord put-PRET.3SG mark.ACC Cain-ILL for.not
gottá-halla-t *gea-**sa**-ge* *gii* *deaivid-a* *su.*
kill-PASS-INF who-ILL-CLT who meat-PRES.3S he.ACC
'And the Lord put a mark upon Cain that no one who found him should kill[38] him.' (1 Moos. 4:15, faithofgod.net/tanak/ge.htm)

Moreover, this type of structure has been adopted in Finnish dialects in Lapland,[39] where one can hear frequentative forms with a passive meaning, even with an agent, e.g.:

[38] In Saami the passive structure deviates from the English and Finnish versions. In Finnish: 'Ja Herra pani Kainiin merkin, ettei kukaan, joka hänet kohtaa, tappaisi häntä.'

(24) *Poro* *pure-ttel-i* *koira-**an**.*
reindeer bite-FREQ-PRET.3SG dog-ILL
'A reindeer was bitten by a/the dog.'

In Northern Saami, examples of the passive are *adversative passive* (= a compound suffix with an obscure meaning) derivations with a participant in the illative resembling an AGENT but actually being closer to somekind of FORCE. Furthermore, passive sentences cannot be made active, e.g.:

(25) *Màhtte* *fáhte-hala-i* *nurvu-**i**.*
M. get-PASS-PRET.3SG cold-ILL
'Máhte got cold.[40]' (Nickel & Sammallahti 2011: 565)

Inari Saami passive structures can also take agents in the illative.

(26) *to-m* *vajjaas* *pænnu-**j*** *käski-ttitt-i-m.*
that-ACC angry dog-ILL bite-PASS-PRET-1SG
'I was bitten by an angry dog.' (InWB 1332. entry)

(27) *tun* *purr-uu-h* *čuoškää-i-**d**.*
you eat-PASS-2SG mosquito-PL-ILL
'You are going to be eaten by mosquitoes.' (InWB 3539. entry)

2.2.2.2 Lative

According to Kulonen, possible semantic roles for the agent in Mansi are also FORCE or inanimate INSTRUMENTS (Kulonen 1989, 2007: 174–175). Even if the Mansi lative suffix looks very similar to the Khanty locative case expressing the agent, it is nevertheless of different origin, as it derives from the Ugric postposition **nää-* (Honti 1998: 352–353). Because of their geographical proximity, it is possible that Northern Mansi and Northern Khanty have influenced each other; however, the *-n* marking of passive agents in Mansi is now synchronically a lative.

Northern Mansi
(28) *por-nē-**n*** *aṅ* *ńāwram* *tot-we-s*
Por-woman-LAT now child take-PASS-PRET.3SG
'the child was now taken away by the Por woman' (Kulonen 1989: 75)

[39] In Enontekiö sentences such as the following can be heard: *Kuulettelettako tet, ymmärrättekö toistenne kieltä* 'Do you understand each others language?', where the same idea is expressed a second time with other words. The first verb is borrowed from the Northern Saami *gulahallat* 'can hear each other; understand each other; discuss; hear from each other' (found in Finnish dialectal net-vocabulary by Auli Oksanen).
[40] In Finnish 'Máhtte sai nuhan / sairastui nuhaan.'

Eastern Mansi

(29) *näg* *kääsyø-m-**nø*** *äl-wø-n*
you younger.brother-PX.3SG-LAT kill-PASS-PRES.2SG
'you are going to be killed by my younger brother' (Kulonen 2007: 199)

The usual case for the agent in a passive sentence in the Surgut variant of Eastern Khanty is locative (Csepregi 1998: 30), but it seems from some texts that lative agents are also possible, as seen in (30). However, this agent[41] is meteorological, which means that further studies are needed.

(30) *os* *ťenə* *əntə* *æwt-a-t* *quntə,* *weλi-λəw*
yes here NEG cut-PASS-3PL when reindeer-PX.1PL(PL)
*toram-**a*** *pæw-a-t*
God/weather-LAT freeze-PASS-3PL
'If I[42] had not cut them (loose), our reindeers would have frozen (to death).'
(Csepregi 1998: 62)

In Forest Enets, passives are only formed with the derivational suffix *-ra/-la* from reflexively conjugated transitive verbs, also termed third conjugation verbs, depending on the researcher's opinion. For instance, Siegl (2013: 320–321) claims that because prototypical reflexive verbs, such as 'to cut oneself' or 'to wash oneself', do not belong to this group, term 'reflexive conjugation' is inappropriate. Since there are no clear semantic criteria for belonging to the third conjugation group, membership seems to be determined lexically (Siegl 2013: 257). The element *-i* preceding the personal ending in the third conjugation has been reconstructed as a reflexive marker (Lehtisalo 1936: 76–78). In these structures, the former patient, the syntactic object, surfaces as the subject. The former agent can be encoded by the lative case. Moreover, Siegl (2013: 406) cites Sorokina as explicitly stating that only transitive verbs can be passivized. Furthermore, the passive marker precedes the mood suffix. Moreover, Tundra Enets also allows lative agents (Siegl 2013: 404).

(31) *(mod'[43])* *bunki-**d*** *sakra-r-iiʔ*
I dog-LAT bite-PASS-REFL.CONJ.1SG
'I was bitten by a/the dog.' (Siegl 2013: 321, 408, 411, 416)

(32) *iblejgu* *nađiku* *pinuju* *bunki-**d*** *kađa-ra-bi-đ*
little reindeer.calf at.night dog-LAT kill-PASS-PLU.PERF-3SG
'last night a little reindeer calf was killed by a dog' (ES 154)

Probably the newest member among the passives in Uralic languages can be found in Nganasan. Although its passive constructions had been presented in earlier grammars, the Nganasan

[41] According Márta Csepregi (e-mail 20.3.2015) *toram* is not an agent but an adverbial in this phrase.
[42] The agent is known from the context.
[43] There are three alternate forms, *mod'*, *mud'* and even an archaic *mod'i,* for the personal pronoun 1SG. In the accusative another pronominal stem, *ši-* + accusative possessive suffixes, is used (Siegl 2013: 186–187).

passive was only adequately identified in 1998 by Helimski (1998: 510). In Nganasan, passive verbs are derived with the marker *-RU- (-ru, -rị, -rü, -ri, -lu, -lị, -ľü, -ľi)* from both perfective and imperfective transitive stems. Moreover, in the lative case, the +animate actor is optionally expressed. The –animate agent is in the locative case (cf. section 2.2.3.1). The personal forms of the verb are reflexively or subjectively conjugated (Wagner-Nagy 2002: 175–176). There is also a special participial form for the passive *-məə*, as can be seen from ex. (33):

(33) *Śitəbi* *imiď'i-**ndə**-tuŋ* *ď'ebtu-məə.*
fairytail grandmother-LAT-PX3PL tell-PASS.PTCL
'The fairytail is/was told by their grandmother.' (Wagner-Nagy 2002: 175)

(34) *ď'ü-ťenï-nə* *kəmə-ru-huaďa-nə* *nuľaďə-**ndə***
dream-LOC-PX1SG take-PASS-EVID-REFL.CONJ.1SG wolf-LAT
'In my dream, I happened to be taken by the wolf.' (Leisiö 2006: 216)

(35) *Təbtə* *təndə[-˚]* *s'üď'i* *ŋuə-**ntə*** *kontu-ru-suəď'əə.*
also there[-ACC] Sjüdjü deity-LAT take.away-PASS-PAST.PTCL[-3SG]
'He was taken away by Sjüdjü (= the smallpox), too.' (NK-04_kehy_luu.127)

2.2.2.3 Dative

Mordvin passive sentences can have an agent in the dative, as seen in the article 1.

2.2.3 'where / wo' cases

2.2.3.1 Locative

In old Saami translations of the Bible, the passive verbs *-(o)t, -(o)juvvot* sometimes take agents in the locative, but they are considered archaisms influenced by Norwegian or Swedish. Today in Skolt Saami the *adversative passive* (consisting of the causative *-tõ-* and reflexive *-tt-* suffixes) can take a locative agent, but this is extremely rare.

Northern Saami
(36) *Jesus* *dolvo-juvvu-i* *meahccá-i* *vuoiŋŋa-**s**.*
J. take-PASS-PRET.3SG desert-ILL spirit-LOC
'Jesus was taken into the desert by the spirit.' (Nickel 1994: 227)

Skolt Saami
(37) *kää'sǩ-tõtt-em* *pie'nne-**st***
bite-PASS-PRET.1SG dog-LOC
'I got bitten by a dog' (Auli Oksanen's research material)

In the whole Khanty area, basic passive sentences are formed with a verb and an agent in the locative case. However, the agent is most common in Southern Khanty (Kulonen 1989: 84).

This case ending is derived from the proto-Uralic locative **-nV,* where it already served to mark the agent in passive sentences (Honti 1998: 352). Meteorological agents can also be in the locative, as can be seen from the following example from Surgut (38).

(38) *tam ťet wåt qatəλ wœrtə λat-nə, wåt-**nə***
now here wind day make-PRES.PTCL time-LOC wind-LOC
iλməγtə-λ-o, tu-λ-o, – əjmətəλi-pə əntəm.
lift-PRES-PASS.2SG bring-PRES-PASS.2SG nothing-CLT NEG
'Now when a windy day comes, the wind shall pick you up and carry you away – there is nothing!' (Csepregi 1998: 64)

Eastern Khanty (Vakh)

(39) *äämp-**nə** por-s-ooj-əm*
dog-LOC bite-PRET-PASS-1SG
'I was bitten by a dog' (Honti 1998: 352)

Southern Khanty (Konda)

(40) *ikə-**nə** paŋx sewər-t-aj*
old.man-LOC fly.agaric crush-PRES-PASS.3SG
'the fly agaric is crushed by the old man' (Kulonen 1989: 75)

Southern Khanty (Demyanka)

(41) *täpət-jŏŋ ńot-**nə** pet-aj*
70 arrow-LOC pierce(.PRET)-PASS.3SG
'he was pierced by 70 arrows' (Kulonen 1989: 87)

Northern Khanty (Synya)

(42) *xŏj-**ən** want-əm-ət?*
who-LOC see-PRET.PTCL-PL
'who has seen them?' (Kulonen 1989: 84)

In ditransitive constructions (with three placed verbs,) in the Surgut variant, the recipient or BENEFACTIVE can be missing, as it is actually known from the context (Márta Csepregi e-mail 20.3.2015), and the object can be expressed with instructivus-finalis, as in (43). The corresponding Mansi examples are mostly without the agent, the BENEFACTIVE is expressed with zero-anaphora by the verb and the PATIENT in the instrumental case, meaning that the constituent marked oblique in active sentences stays in the oblique also in passive sentences. However, in ditransitive passive constructions the three valencies are seldom simultaneously filled (se examples in Kulonen 1989: 197–251).

Eastern Khanty (Surgut)

(43) *ťu imi-**nə** ăλ-tə tåγi-jat wær-i.*
that woman-LOC sleep-PRES.PTCL place-IFIN make-PASS.3SG
'[She/he] was made with sleeping place by that woman.' (Csepregi 1998: 30)

According to Nikolaeva (1995: 193), the passive structure occurs if the status of the PATIENT is higher than the status of the AGENT, or if the agent has some kind of power which (s)he uses against the main person (PATIENT).[44] In this northernmost dialect of Khanty, Obdorsk, the locative represents all local cases.

Northern Khanty (Obdorsk, S)

(44) *ma* *lekkar-**na*** *jăm-mi* *wer-s-aj-əm*
I doctor-LOC good-TRANSL make-PRET-PASS-1SG
'I was cured by the doctor' (Nikolaeva 1995: 193)

For the narrative mood, Nenets use a structure where the surface subject is in the nominative and the agent is in the locative, as in:

(45) *man* *weńako-**xəna*** *śakal-me-da* *ŋœ-we-dm*
I dog-LOC bite-PRET.PTCL be-NARR-1SG
'I got bitten by a dog' (Lotta Jalava's[45] fieldworkmaterial from Taymyr 2011)

In Nganasan, it has been proposed that AGENTS are possible in the locative case. But the examples presented by Wagner-Nagy (2002: 176) are obviously INSTRUMENTS, *taansa-**tənu*** 'lasso-LOC', *śürü-**tənu**/ śürü-**tə*** 'snow-LOC', *deŋguj-**čini*** 'trap-LOC'.

2.2.3.2 Locative-instrumental

In Forest Enets, some rare cases where a locative-instrumental agent is possible have been observed (Siegl 2013: 416–417), and they even have a slightly different semantic nuance. Nevertheless, Siegl is skeptical of its authenticity, instead attributing it to the influence of Russian:

(46) *bi-kun* *kada-ra-bi-đ?*
water-LOC carry-PASS-PERF-REFL.3SG
'It was taken away with the stream.' (Siegl 2013: 417)

In this context a lative agent would also be possible, but according Siegl's consultant the difference is due to volition; the locative gives the nuance 'by accident'.

2.2.3.3 Instrumental

For reflexive derivatives, the Permic verbs with an *-śk-* suffix in Udmurt (47) and an *-ś-* suffix in Komi (48) and (49) can typically also have a passive function. Both suffixes can take an agent in the instrumental case, which in both languages belongs to the translated literary language, strongly influenced by Russian.

[44] Ulla-Maija Forsberg (formerly Kulonen) claims that this explanation sounds odd. Maybe the poor informant had simply invented it when asked to explain the structure.
[45] The focus of her doctoral studies is Nenets verbal morphology.

(47) *Avtonomnij respublika-len Verhovnoj Sovet-ez*
autonomous republic-GEN Supreme Council-PX3SG
*graždan-jos-**ĮN** ńįľ ar-lį burji-śk-e*
citizen-PL-INSTR 4 year-DAT elect-PASS-PRES.3SG
'The Supreme Council is elected for four years by the citizens of the autonomous republic.' (Bartens 1999: 284)

(48) *Kerka-jas stroit-ś-ęnį plotnik-jas-**ęn***
house-PL build-PASS-PRES.3PL carpenter-PL-INSTR
'The houses are built by the carpenters.' (Serebrennikov 1964: 159)

(49) *bura gęsťitęd-ś-ęnį Sťepan gozja-**ęn***
well entertain-PASS-PRES.3PL St. wife-INSTR
'Stepan and his wife are entertaining [them[46]] well' (Bartens 1999: 285)

Selkup is not an unified language but a continuum of several distinct dialects. The northern dialect, Taz, does not allow an agent in its passive structure, as seen in chapter 2.1.6**,** but Ket, a southern dialect, is reported to have an agent in the instrumental case. In Ket the passive marker is *-ku-* (in one-syllable stems ending with a vowel) or *-V-* (elsewhere), and it is used as a component in the formation of many other suffixes (Kuznecova 1987). According to Florian Siegl (p.c.), this kind of instrumental agent is due to the influence of Tungus.

(50) *Mat mēgu-kku-ŋ εsε-p-sε.*
house build-PASS-PRES.3SG father-PX.1SG-INSTR
'The house is going to be built by my father.' (Kuznecova 1987: 201)

2.3 The expression of an agent with analytic structures in the Uralic languages: postpositional constructions

In Finnish and Estonian there exists a limited possibility for adding an agent phrase with the postposition-like expressions *taholta* 'on the part of', and *poolt* 'by' (respectively) in clauses with a nominative (in Estonian, example 46, 48), partitive or accusative object. This is undoubtedly a recent development based on foreign models of the major Indo-European languages. For instance, Nemvalts (1998: 63) identifies *poolt*-phrases as Indo-European calques. Estonian actually has an innovative *stative passive,* which is perifrastic, consisting of a form of the auxiliary *olema* 'be' and an adjectival *-tud* participle which also allows active 3. person plural predicatives, compare the following pair:

(51) *Nad ol-i-d politsei poolt arreteeri-tu-d.*
they be-PRET-3PL police POP'by' arrest-PASS.PRET.PTCL-PL
'They were arrested by the police.' (Blevins 2003: 507, with references)

[46] The surface subject is not visible.

(52) *Ol-d-i* *politsei* *poolt* *arreteeri-tu-d.*
be-PASS-PRET police POP'by' arrest-PASS.PRET.PTCL-PL
'One was arrested by the police.' (Blevins 2003: 507, with references)

Originally Finnish and Estonian passives were agentless, and there seems to be no tendency toward the development of the agentless passive into a passive proper (Holvoet 2001: 368). In Finnish newpapers, it is quite common to find sentenses such as *Hallituksen taholta ilmoitettiin, että ...,* 'On the part of the government it was announced that…'. In Finnish, another possibility for expressing the agent is the postposition *toimesta* 'ordered by', which takes the predicate either in the unipersonal passive form or in the *u*-derivational form *käynnistyi*, (e.g. in the example (54), which can also be in the passive *käynnistettiin*:

Estonian
(53) *Vaenlase-d* *aje-t-i* *mei-e* *väge-de* ***poolt***
enemy-PL drive-PASS-PRET we-GEN troop-PL.GEN POP'by'
maa-lt *välja.*
country-ABL out
'The enemies were driven out of the country by our troops.' (Erelt 2003: 102–103)

Finnish
(54) *...Soros-in* ***toimesta*** *käynnisty-i /* *käynniste-tt-iin*
Soros-GEN POP'ordered by' start(itr.)-PRET.3SG start(tr.)-PASS-PRET
keinottelu *Ranska-n* *frangi-a* *vastaan.*
speculation France-GEN franc-PART POP'against'
'…At the behest of Soros, speculation against the French franc began.'
(adapting Vilkuna 2004: 1279)

In Erzya, I have found one case where the agent is expressed with the dialectal postposition *tortov,*[47] usually meaning 'for' (see examples 19–20 in the first article of this study).

In Hungarian, the agent can be indicated, but such a construction having the postposition *által* 'by' is very affected and not accepted in official Hungarian.

(55) *A* *ház* *fel* *le-tt* *épít-ve*
DEF.ART house PREF be-PRET.3SG build-ADS
a *kő+műves-ek* ***által***
DEF.ART brick+layer-PL POP'by'
'The house has been built by the bricklayers.' (Dezső 1988: 294)

In old Hungarian texts the agent is sometimes expressed by the postpositional structure *miat,* which today only means 'for', as in the Müncheni kódex: *mezt a tozuen moyſes* ***miat*** *adatot* 'because the law was given by Moses'. Exactly the same passage from the Bible is translated with another postposition, *által,* in the Jordánszky kódex: *Mert aʒ terwen Moyſes* ***atal*** *adatot* 'id.' (Kiss–Pusztai 2003: 456–457).

[47] In Erzya literary language: *turtov*.

2.4 The agent in surrounding non-Uralic languages

In the Slavic languages such as standard Russian, Belarusian, Ukrainian and Czech, the agent of the passives typically takes the instrumental case. In a few Indo-European languages, however, the passive agent takes the genitive – Classical Greek, North Russian, and Lithuanian – or the ablative – Armenian, and Latin (Siewierska 1984: 41–42, Wiemer 2004: 277). Prepositions are also partly used; for example, the *by* in English and the *u* (+GEN) of the dialects in Northwestern Russian can be interpreted as a locative, and the German *von*, Swedish *av,* French *de*, Polish *ot*, and Czech *od*[48] (+GEN) as an ablative or possibly a genitive, for they also have possessive uses. In Polish, the translative preposition *przez* 'through' is also used, which might be influence of the German *durch* 'through'. Their agentive function has been quite stable in these languages, instead of other functions which have proven to be more unstable (Wiemer 2004: 324, fn. 51). The history of many languages has seen a couple of prepositions that have shown a more or less ephemeral tendency to be used as the agents in a passive, even though this has arisen from language contact. For example, the Lithuanian ablative *nuo(g*), translative *per/par* 'through' and locative *pas* 'at (the side of) and the Latvian *nô* 'from', were basically "implanted" by contact with the Slavic languages and German. In the standardized languages, however, these uses have vanished due to a purist language policy (Wiemer 2004: 305).

On the Turkic side of the Middle East, it is also sometimes necessary to express the agent in passive sentences, which can be achieved with the help of a postposition, in Old Turkic *üzä*, Turkish *tarafından,* see example (56), and Uzbek *tämånidän* (Johanson 2001: 1734)

(56) *Resim* *Ali* *taraf-ın-dan* *çek-il-di.*
picture Ali POP'side'-PX.3SG-ABL make-PASS-PRET.3SG
'The picture was made by Ali.' (Johanson 2001: 1736)

Lative(or dative)-marked agents are not uncommon in Siberia, e.g. in Southern Siberian Turkic, as well as in several Tungusic and Mongolic languages, e.g. Tuva, Khakas, Udeghe, Even, Evenki, Buryat, Mongol. However, at least historically, this isogloss is the result of changes in the case system: in these languages the dative expresses both movement and location (Siegl 2013: 404, 423). In general Ket, and probably Yeniseian, take comitative agents, while the neighbouring Turkic languages Dolgan and Yakut take instrumentals. Interestingly, both Yakut and Dolgan seem to have an *adversative passive* with dative agents (Siegl 2013: 422). New information based on fieldwork reveals that in Evenki case functions are changing, which can be directly linked to Russian influence. Today, there is an increasing tendency to mark the agent in the instrumental case (Grenoble 2000: 109), and an identical change is also taking place in Khakas (Pakendorf 2010: 720).[49]

[48] *otъ* + GEN most probably was an Old Church Slavonic "import" into Old East Slavic. *od* + GEN in early West Slavic may well have been influenced by Latin and/or Greek (Wiemer 2004: 324 fn. 51)

[49] She claims that the impact of Russian on the languages of Siberia is leading to a gradual typological shift. The most salient structural changes are in the domain of syntax, e.g. case-marked participles or converbs have been replaced by finite subordinate clause constructions copied from Russian (Pakendorf 2010: 720–721).

2.5 The impersonal passive

2.5.1 Finnish and other Finnic languages

In Finnish a special passive connected to an unidentified human as its subject argument and expressed with the *t* marker has long puzzled lingvists. Consequently, it has been variously described as the *impersonal passive, t-passive, so-called 4th person* or *unipersonal passive*. It is generally assumed that impersonal passives differ from personal passives in two major respects. Whereas personal passives are typically regarded as being restricted to transitive verbs whose agent is human, animate, abstract or a natural force, impersonal passives are primarily associated with intransitives, and their agents are claimed to be restricted to humans (Siewierska 1984: 96). In reality, the situation is more complicated, but as far as the impersonal passive is concerned, this definition is an adequate fit for the Finnic and Eastern Saami languages. It is typical of Finnish passive clauses that the place of the subject is taken by some other member. In the literature the unipersonal passive has been interpreted as a structure in its own right, the '4th' person, which is different from the singular and plural personal forms (Tuomikoski 1971: 149, Hakulinen–Karlsson 1979: 255, Vilkuna 2004: 1256). Recently, the term 'indefinite person / epämääräinen persoona' has been accepted in the description of Skolt Saami; also the term *fourth person* has been used by the same source (KSKK 83). At least in glossing morphology 4P is short and informative. In describing Estonian the term *suppressive* has been introduced by Pihlak (1993, particularly pp. 16–19). The unipersonal passive clause is used to describe situations where the verb has a subject argument whose identity is left open, but which can be concluded from the context. The passive clause is a less detailed description of the situation than the active clause, as the next two examples demonstrate:

(57) *Piha-lla* *on* *riehu-ttu* *ja* *keinu* *on*
yard-ADES be.PRES.3SG rage-PASS.PRET.PTCL and swing be.PRES.3SG
kaade-ttu.
overturn-PASS.PRET.PTCL
'They have gone crazy in the yard and the swing has been overturned.'
(Vilkuna 2004: 1256):

(58) *Talo-n* *nuoriso* *on* *riehu-nut* *piha-lla*
house-GEN youth be.PRES.3SG rage-ACT.PRET.PTCL yard-ADES
ja *kaata-nut* *keinu-n.*
and overturn-ACT.PRET.PTCL swing-ACC
'The youths of the house have gone crazy in the yard and overturned the swing.'
(Vilkuna 2004: 1256)

Compare also the next two clauses, of which the first member is an active clause with a *u*-derivative as its predicate and the second a passive clause:

(59) *Hallinto* *uudistu-u* *nopeasti.*
administration be.renewed-PRES.3SG fast
'The administration is being rapidly renewed.' (Vilkuna 2004: 1257)

(60) *Hallinto-a* *uudiste-taan* *nopeasti.*
administration-PART renewe-PRES.4P fast
'The administration is being rapidly renewed.' (Vilkuna 2004: 1257)

In the terminology of Viitso (1998: 112), there was once an impersonal voice in proto-Finnic expressed with the suffix **-tA-* or **-ttA-*. According to Lehtinen (1984) this was originally a causative verbal suffix. It is

> "followed by the tense marker (**k* for present tense, except in Finnish and Karelian, where analogical *k*-less constructions are used; **i* for past tense) and the suffix **sen* ~ **hen* (historically related to the 3rd person pronoun *hän*). Examples of this are Finnish *syö-t-i-hen* < **söö-t-i-hen* (eat-"PASS"-PRET-"3SG") and Estonian *süü-a-kse* < ** söö-δä-ksen* (eat-"PASS"-PRES-"3SG"). The perfect and pluperfect forms consist of the auxiliary 'to be' in 3SG (or in the "passive") and the passive perfect participle, e.g. Finnish *on syö-ty* (~ coll. *ollaan syöty*), Estonian *on söö-dud* '(it) has been eaten, somebody has/they have eaten' (be-3SG.PRES eat-PASS.PAST.PTCL)." (Laakso 2001: 194)

It is more common to term this suffix a passive marker or the grammatical passive, in distiction to the derivational passive. It means that the AGENTIVE or EXPERIENCER is absent from the surface structure but present, however, in the background**,** which is a well known feature of impersonals (Siewierska 1984: 96, Blevins 2003: 475). Today, impersonalization is possible in all tenses and moods in all Finnic languages except Livonian. Finnish and Estonian impersonal passives are not dependent on the transitivity of the verb, and they are subjectless, describing an action performed by an indefinite human agent. Even *olla* (Finnish) and *olema* (Estonian) 'to be' can be impersonalized. In contrast, this is never the case with *sarastaa* or *koitma* 'to dawn', *päättyä* or *aeguma* 'to expire', and *haukkua* or *haukuma* 'to bark' (Blevins 2003: 476). Moreover, passive verbs are not inflected for person. Finnish (example 61) and Estonian (example 62) impersonal passives can have an object, which is relatively rare in the Uralic family of languages.

(61) *Koira-a* *kutsu-taan.*
dog-PART call-PRES.4P
'The dog is called.' (Kulonen 2007: 176)

(62) *Loe-takse* *raamatu-t.*
read-PRES.4P book-PART
'The book is being read; someone is reading the book.' (Erelt 2003: 102)

According to Shore (1988: 159), the example (63) means that a human being is responsible for the process; the indefinite would not be used if the house had been destroyed in a bushfire or in cyclone, while the impersonal form of *olla* in (64) indicates that this hidden person is plural.

(63) *Talo* *tuho-ttiin.*
house destroy-PAST.4P
'The house was destroyed (by somebody or some people).' (Shore 1988: 159)

(64) *Suome-ssa* *ol-laan* *niin* *totis-i-a.*
Finland-INE be-PRES.4P so serious-PL-PART
'In Finland, we/they/people are so serious.' (Shore 1988: 159)

In Finnish, the type *minä viedään* is widely known in the western dialects and partly in the eastern dialects, in place of the usual *minut viedään*. The obvious reason for this is that this structure with the pronoun in the nominative occurs only in dialects where the accusative forms of personal pronouns (in the singular) are genitive-like. Since the genitive-like *n*-accusative is not used for nouns in passive sentences, it is not used for pronouns either, while the *t*-accusative has been kept separate and the type *hänet viedään* has been preserved almost everywhere where the *t*-accusative has occured, but the type *hänen viedään* has widely been replaced by the type *hän viedään* (Lehtinen 1985: 275).

2.5.2 Saami languages

In Skolt Saami there is a special ending, in the present tense *-t*, in the past tense *-š,* meaning that the performer of an action is unidentified but, however, is known to be +human. The 4th or indefinite person can occur in the indicative, conditional or potential mood. In many Saami languages the locative case has also adopted the functions which the elative and the ablative perform in other languages. On the Russian side it is termed the inessive-elative case. This phenomen is known to have been influenced by the Finnic languages, particularly by the Karelian present tense ending *-tAh* (via apocope) and the past tense *-ttih* (where the final *-h* has been substituted for *-š*)[50] (Itkonen 1957: 4, = Itkonen 1966: 53).

(65) *Leä-t* *leämmaž* *škoolâ-st* *kääu'c* *čiâssâ-d.*
be-PRES.4P be.PAST.PTCL school-LOC 8 hour-PART
'School has been[51] attended for eight hours.' (KSKK 93)

(66) *Suõ'nn'jelsiidâ-st* *le'jješ* *siõrrâ-m* *nue´rrsiõr.*
Suoni+village-LOC be.PRET.4P play-PAST.PTC rope+game.ACC
'There was a rope game played in Suoni village.' (KSKK 98)

The same special verbal forms also occur further to the east, in Kildin and Ter Saami.

(67) *kɐd-s't* *al'ga-t* *kil'a* *sil'l'e-d'*
spring-INE-ELA begin-PRES.4P fish.ACC fish-INF
'From the spring on, the fishing begins.' (Terëškin 2002: 134[52])

[50] The passive forms are in the 3rd person plural in Olonets-Karelian, Tver-Karelian, in some Ludian dialects, Vepsian, Votian, Ingrian, in the northernmost Finnish dialects (and even elsewhere), and with other plural persons. This form is considered to display the influence of Russian *-sja*-verbs (e.g. Nirvi 1947, with references).
[51] Actually meaning: we have been…

2.5.3 Other surrounding languages

It has been noted that Latvian impersonal passives are frequently used, and they can be derived from virtually any intransitive verb. Thus, there is no need for the verb to express any kind of activity, which is obligatory in German (where an action performed by an indefinite agent can be expressed with intransitive verbs, as seen in (68). Even an impersonal passive derived from *būt* 'be' is possible, as seen in (69). It therefore seems likely that Latvian has adapted its system of impersonal and passive construction to the Finnic model (Holvoet 2001; 370, 387).

(68) *Hier* *wird* *getanzt*
here AUX.PRES.3SG dance.PASS.PTCL
'People are dancing/Dances are going on.' (Holvoet 2001: 364)

(69) *Te* *ilgi* *nav* *būt-s*
here long be.PRES.NEG be-PASS.PRET.PTCL.MASC
'One hasn't been here for a long time.' (Holvoet 2001: 370)

This type is also common in some Turkic languages, where the accusative topicalizes the direct object, as in Uyghur:

(70) *Aš-ni* *ye-yil-gän.*
food-ACC eat-PASS-PTCL
'The food was eaten.' (Johanson 2001: 1734)

2.6 Mixture of two passives

Two Finnic varietes, South Estonian Võru and Old Finnish have been reported to have a polypersonal passive: a transitive clause with the predicate verb in a personal form of the present or imperfect indicative can be made passive by transforming the object into a subject and replacing the active predicate verb with the corresponding passive verb. In Agricola's language, for example, the following forms have been attested: 1st person plural: *me waijwatamma* 'we are troubled', *me domitamma* 'we are condemned'; 2nd person plural: *te castetat* 'you are baptized', 3rd person plural: *elot nijtetehet* 'crops are mown', *acanat södhit* 'the glumes were eaten', *he tapettijt* 'they were killed' (Posti 1975: 331). According de Smit (2011: 65), the polypersonal passive in Old Finnish is clustered around certain contexts – the 1st person plural and the conditional in some text types – and he assumes that the polypersonal passive once existed in the prehistory of Finnish. Nevertheless, opinions on the origin of the polypersonal passive in Old Finnish are divided. Posti (1975), Hakulinen (1979: 241) and Lehtinen (1985: 285) consider it to be innovative, while Ikola (1959: 41–43) and de Smit (2011) argue that it is archaic. However, it seems reasonable to agree with de Smit's (2011: 69) idea of develop-

[52] This example from the same Jokanga dialect was also collected earlier by Kert (1971: 199) with many minor differences in the orthography, which indicate that Terëškin has made some mistakes. The suffix *-a* is peculiar, could it be DAT-LAT, a reflexion of an older form or just a misprint?

ment model of Finnish from a polypersonal passive with subject case-marking via an impersonal passive with varying argument case-marking to an impersonal passive with object case-marking.

The South Estonian passive has obviously developed under the influence of the German literary language and is documented by Johann Gutslaff in his Võru grammar of 1648 and later by Wiedemann in his grammar of 1864. This peculiarity was observed as late as 1939 and 1940, but since then the forms have disappeared (Keem 1997: 53). Gutslaff even gives full paradigms of the present and past tense with the passive marker *-t-* and personal endings, e.g. *ma pessetä* 'I am washed', *sa pessetä**t*** 'you are washed', *tiä pessetä**ss*** '(s)he is washed', *mip pessetä* 'we are washed', *tip pessetä**t*** 'you are washed', *niäp pessetä**se***ʔ 'they are washed'. In Lehtinen's (1985) material collected from the archives[53] in Tallinn, this agreement has been documented only in the present tense. Today only the third person forms survive, although an attempt to revive the full passive paradigms is now being made in the Võru literary language. Lehtinen presents reliable data that the South Estonian personal passive is innovative, since person markers do not appear when negation would affect the case ending on the argument. According to Viitso (2003: 219), the Võru example in (71) below more closely resemble the Russian reflexivization of transitive verbs than the proper reflexive conjugation of Russian (72) or Veps verbs.

(71) *ˊKuis ˊtaa ˊkutsu-t-a-**ss**?*
how this call-PASS-PRES-3SG
'How is this one over here called?' (Viitso 2003: 219)

(72) *on nazyva-jet-**sja***
he call-PRES.3SG-REFL
'he is called.' (Viitso 2003: 219)

The Võru 3rd person singular forms of the present indicative, *-se* and *-ss,* are identical to the corresponding reflexive conjugation suffix *-ksen* in East Finnish and *-ze* in Veps and go back to **-ksen,* where **-k* is the present tense marker and *-sen* a pronoun stem (Hakulinen 1979: 557, Lehtinen 1984: 33, 36–37, Viitso 2003: 218).

2.7 The use of the 3rd person singular in impersonal passive structures

In Finnic, zero subjects (in Finnish *0-persoona*) with third person singular verb forms are quite common. In Finnish they often occur in generic sentences, as in (75), which actually means 'anyone who wants to lose weight gives up eating'.

(75) *Jos aiko-o laihtu-a, lopetta-a syömisen.*
If intend-PRES.3SG lose.weight-INF stop-PRES.3SG eating.ACC
'If you want to lose weight, you give up eating' (Holvoet 2001: 384)

[53] Eesti NSV Teaduste Akadeemia Keele ja Kirjanduse Instituut.

This type of construction is relatively rare in Indo-European languages, but it can be found in Latvian and some of the Slavic languages (West Slavic and Slovenian). They occur, above all, in conditional clauses and favour modal verbs (Holvoet 2001: 382–384).

In Northern Saami there are intransitive verbs which have the suffix *-(oj)uv'vot* or *-uv'vot* and take no subject. Morphologically, they are similar to passives. However, the action can be performed by a human being, e.g.:

(76) *Dánse-juvvu-i.*
dance-PASS-PRET.3SG
'It was danced.' (Nickel & Sammallahti 2011: 575)

In Udmurt, impersonal passives are formed from the third person singular (or plural) (Pozdeeva 1975: 140), and the verbs can be intransitive (77) or transitive (78). These can be identified as *prototypical impersonals* according to Gulyás's (2013) classification. Moreover, these structures can have an object, as seen in (78). According to Gulyás and Speshilova (2014: 69), the reflexive constructions can also be formed from non-agentive meteoverbs which is a strong argument in favour of the impersonal interpretation of this structure. In their view, the force constraint is a very important feature in these constructions.

(77) *Gužem* *ʒ'eč* *uža-śk-i-z.*
in.summer well work-PASS/REFL-PRET-3SG
'In the summer work was performed well.' (Pozdeeva 1975: 140)

(78) *Turi̯n-ez* *li̯svu* *di̯rja* *kapči* *turna-śk-e.*
hay-ACC dew POP'during' easy mow-PASS/REFL-PRES.3SG
'It is easy to mow the hay when there is dew.' (Pozdeeva 1975: 140)

(79) *Tati̯n* *ki̯nt-iśk-i-z.*
here freeze-PASS/REFL-PRET-3SG
'There was frost here.' (Gulyás–Speshilova 2014: 68)

In Komi, the corresponding suffix also creates impersonal passives (80). (Similar constructions that allow an agent, just as their corresponding Russian utterances do, are not discussed here). Cypanov (2002) calls his examples the impersonal passive, but Gulyás uses this term for constructions usiing the past participle *-ẹma*, which can be formed from both transitive and intransitive verbs (Bartens 2000: 238). However, these participles are not discussed in this study.

(80) *Talun* *koknia* *pilit-ś-ẹ.*
today easy saw-PASS/REFL-PRES.3SG
'Today, it is easy to be sawn.' (Cypanov 2002: 83)

(81) *Gožẹm-i̯n* *śi̯v-ś-ẹ* *ov-ś-ẹ.*
summer-INE sing-PASS/REFL-PRES.3SG live-PASS/REFL-PRES.3SG
'[People] sing and live [well] in summer.' (Gulyás 2013: 42)

According to Kulonen (1989: 259), the majority of Mansi impersonal sentences conform to the type where the passive verb appears alone or with an adverbial, e.g. in Northern Mansi:

(82) *ās* *xosit* *mina-we*
Ob POP'along' go-PASS.PRES.3SG
'they go along the river Ob' (Kulonen1989: 259)

In Eastern Mansi impersonal passives do not accept objects:

(83) *towø-x°* *nog-wø-s*
row-INF begin-PASS-PRET.3SG
'People began to row.' (Kulonen 2007: 176)

(84) *tokäly* *tø* *kønsiilø-wø*
there(LAT) this.way search-PASS.PRES.3SG
'Hunting is done like this.' (Kulonen 2007: 176)

In Khanty the impersonal passive is more common than in Mansi.

Northern Khanty, Kazym
(85) *śi* *wŭš+ewəλt* *oλŋət-λ-a* *jak-ti*
this POP'from' start-PRES-PASS.3SG dance-INF
'now (or: from this moment) the dancing begins' (Kulonen 1989: 263)

Further in the North, in Obdorsk Khanty, similar impersonal passives also occur:

(86) *xoti* *wer-l-a?*
how make-PRES-PASS.3SG
'what to do/what should we do?' (Nikolaeva 1995: 202)

On the Turkic side, in Turkish, we can find the same structure with passives derived from intransitives:

(87) *Burada* *güzel* *yaş-an-ıyor.*
here well live-PASS-PRES.3SG
'One lives well here.' (Johanson 2001: 1734)

2.8 The impersonal passive with an agent

Kulonen has found in Southern Khanty, in the Konda dialect, a small, special group of impersonal subjectless passive sentences containing an agent in the locative but no subject. She assumes that this sentence type is probably the final step in the chain of development of the passive: (reflexive-automative >) personal passive > (with an agent >) impersonal passive > impersonal passive with an agent (Kulonen 1989: 269).

(88) *imə-**nə*** *xăt* *xar-a* *pŏw-ta* *t'ŏxlat-aj*
woman-LOC house floor-LAT blow-INF start-PASS.PRES.3SG
'the woman started to blow onto the floor' (Kulonen 1989: 269)

Udmurt has a special impersonal type that optionally allows an agent and whose single verbal argument can be in the nominative or the accusative, which makes it very difficult to consider it a subject:

(89) *Perepeć / -ez* *śi-iśk-i-z* *(anaj-**en**).*
perepech(.NOM)/-ACC eat-REFL/PASS-PAST-3SG mother-INSTR
'Perepech was eaten (by the mother). (Gulyás–Speshilova 2014: 68)

The following Permyak example shares similar features, the agent does not need to be AGENTIVE; *the wind* as FORCE agent can also be possible. There is no overt subject either.

(90) *tęl-**ęn*** *nębęt-is* *krįša*
wind-INSTR carry-PAST.3SG roof.ACC
'The roof was carried away by the wind.' (Gulyás 2013: 41)

In Veps there has been observed a special kind of impersonal structure formed according to the Russian model. In this Northern Russian sentence type, the past tense predicate has neutral gender and an object in in the accusative and an agent in the instrumental case.

(91) *malan'g'a-u* *riko-i* *lehma-n*
lightning-ADES break-PRET.3SG cow-ACC
(molniej ubylo korovu)
'A/the cow was killed by lightning.' (Mullonen 1965: 81)

(92) *ragihe-l* *muren'-z'* *rugihe-n*
hailstone-ADES damage-PRET.3SG rye-ACC
(gradom pobilo rož')
'The rye was damaged by hailstones.' (Mullonen 1965: 81)

In some languages impersonal structures with formal subjects, such as *es* in German, even allow agents in impersonal structures, but this is rare:

(93) *Es* *wurde* *dem* *Schüler*
It become.PRET.3SG DEF.ART.MASC.DAT pupil
(vom *Lehrer)* *geholfen*.
PREP.MASC.DAT teacher help.PRET.PTCL
'The pupil was helped by the teacher.' (Comrie 1977: 51–54)

2.9 The use of the 3rd person plural in (impersonal?) passive structures

One of the functional near-equivalents of an agentless passive construction is to use the third person plural forms of a verb without a lexical subject. According to Siewierska (2008) third person plural forms in impersonal constructions have three subtypes, since they have: general, episodic (existential), or specific readings and since they are also known to be used to express habitual or frequently repeated actions.

This type is quite common in Finnish dialects: *sanovat, että* … 'they say that …'; however, the so called passive form *sanotaan* usually expresses this meaning instead (Gulyás 2011, with references). In Estonian there is a corresponding form, *räägivad* 'they say'. However, in both languages this usage is largely restricted to *verba dicendi.* In Veps this has caused a reinterpretation of the original impersonal (passive) forms as alternatives to the third person plural forms (Holvoet 2001: 381). Mullonen describes the use of the third person plural as situational, when reporting rumors etc. Furthermore, this use has even spread to include an indefinite subject 'raised' from an embedded participial clause, as seen in (94):

(94) *Siellä kuulu-vat tienaa-va-n hyvin.*
there be.rumoured-PRES.3PL earn-ACT.PRES.PTCL-ACC well
'It is said that one earns well there.' (Mullonen 1963: 34)

Correspondingly, in present day Mari newspapers there occur sentences beginning with the verb *ojlat*, … 'they say that / it is told that…'. Due to the fact that the third person plural is very common in Russian, e.g. on signs such as *zdes' ne kurjat* 'it's not allowed to smoke here', or *u nas govorjat po-russki* 'we speak Russian', this structure is also commonly used by Finno-Ugric peoples in the Russian Federation when they speak their native languages. It can be used as personal form for an unknown, unidentified actor, which can be compared to the Finnish fourth person, as in:

Hill Mari
(95) *Tištə mar-la šajəšt-ət.*
here Mari-COMP speak-PRES.3PL
'Hill Mari is spoken here.' (Kuprina's lecture material)

Erzya
(96) *Kodamo kel'-se t'ese kort-it'?*
which language-INE here speak-PRES.3PL
'Which language is spoken here?'

Moksha
(97) *T'asa koʀta-Jt' mokšə-ks.*
here speak-PRES.3PL Moksha-TRANSL
'Moksha is spoken here.'

In Mordvin, an objective conjugation is also possible, but rather rare. Moreover, it can be hard to distinguish when it is simply a question of an ellipsis. The following example is taken without context from an Erzya dictionary:

(98) *Kort-i-ź* *kado-vo-mo* *udo-mo* *ťeske.*
speak-PRET-OBJ.CONJ.PRET.(3SG)3PL[54] leave-REFL-INF2 sleep-INF2 here
'(S)he was persuaded to stay overnight here.' (ĖRV 295)

This type is common to all Permic languages. According to Gulyás (2013: 37) verbal markers show that a plural interpretation is more natural, and this type is located closer to the core of impersonal constructions, as seen in the two following Udmurt examples:

(99) *Tatįn* *udmurt* *śamen* *veraśk-o*
here Udmurt POP'manner' speak-PRES.3PL
'Udmurt is spoken here.' (UKH 29)

(100) *Perepeć-ez* *śi-i-zį*
perepech-ACC eat-PAST-3PL
'Someone/they ate the perepech.' (Gulyás–Speshilova 2014: 67)

Many examples have an existential reference, such as in the following example in Permyak:

(101) *Kam* *dor-iś* *mu* *su-ę-nį* *Kom-mu-ęn.*
Kama POP'near'-ELAT land call-PRES-3PL Komi-land-INSTR
'The land nearby Kama is called Komi land.'
(Gulyás 2013: 37, from Ponomareva's forthcoming grammar)

An interesting negation, which reverses the utterance, can be seen in the Komi example:

(102) *mįj* *jįlįś* *ęni* *o-z* *śorńit-nį.*
what about now NEG-PRES.3PL/SG speak-CONNEG.3PL
'People speak about everything nowadays.' (Gulyás 2013: 37)

This structure is commonly used various kinds of directions or instructions, e.g. in a Mari recipe in example (103) and its Russian translation in (104):

(103) *Oš+poŋgo* *dene* *šürə-m* *šolta-t.*
white+mushroom POP'with, at, of' soup-ACC boil-PRES.3PL

(104) *Iz* *borovik-ov* *var-jat* *sup.*
PREP'of' cepe-PL.GEN boil-PRES.3PL soup
'You boil the soup of cepes (lit. white mushrooms).' (PK 78)

[54] The objective conjugation is not complete, and some forms can be analysed in several different ways; in this example the object can also be plural. An alternative interpretation would be: 'They were persuaded to stay overnight here.'

This Russian model is pervasive among the Turkic languages of the Volga region, as seen in the following examples of Chuvash (105) and its Russian parallel (106):

(105) *Tăšman-a* *šutla-sa* *tă-ma-**ччĕ***
enemy-DAT/ACC count-CRD.GER1 do-NEG-PRES.3PL
ăn-a *pĕter-**ечче**.*
it-DAT/ACC destroy-PRES.3PL

(106) *Vrag-ov* *ne* *sčita-**jut**,* *ih* *uničtoža-**jut**.*
enemy-PL.ACC NEG count-PRES.3PL they.ACC destroy-PRES.3PL
'You don't count enemies, you destroy them.' (Rezjukov 1959: 240)

In Hungarian the subjectless verb can have objective conjugation forms, as in (107). These constructions imply that the agent(s) is/are human being(s), as in (108). Thus, according to Komlósy (1994: 112), example (109) can be uttered if the speaker saw someone bite Peter, but not if (s)he saw one or more dogs do so:

(107) *Tegnap* *fel-ava-tt-**ák*** *az* *új* *hid-at.*
yesterday PREF-open-PRET-OBJ.CONJ.3PL DEF.ART new bridge-ACC
'The new bridge was opened/unveiled yesterday.' (Komlósy 1994: 111)

(108) *Itt* *dolgoz-**nak**.*
here work-PRES.3PL
'Somebody is working here.' (Komlósy 1994: 111)

(109) *Péter-t* *meg-harap-t-**ák**.*
P.-ACC PREF-bite-PRET-OBJ.CONJ.3PL
'Peter has been bitten.' (Komlósy 1994: 112)

The same structure also occurs in Mansi, as seen in (110), when Evdokija Rombandeeva met Matti Liimola in Helsinki:

(110) *tit* *mańśi* *lātŋ-əl* *potərtē-**ɣt***
here Mansi language-INSTR speak-PRES.3PL
'Mansi is spoken here.' (Janhunen 1975: 60–62)

2.10 Modality expressed with the same suffix as the passive: some observations

Because the starting point of my dissertation was polysemantic Mordvin *v*-verbs, I must introduce some essential features which have not yet been exhaustively examined in articles 1) and 2) concerning Mordvin derivation. In my investigation the term *dynamic modality* means that it is possible for someone to do something. In other words: dynamic modality deals with actions resulting from internal factors, while *deontic modality* deals with actions initiated by external factors (Palmer 2001: 9–10, Vellupilai 2012: 223). For both of these situations the

term *agent-oriented modality* has been used, and it includes obligation, necessity, ability, desire and willingness. It means that the focus is on how an event is to be carried out by an agent, not on the event proper (Bybee et al. 1994: 176–). In Bybee's data, obligation is the most frequently expressed agent-oriented modality. Approximately 75 per cent of obligation expressions are auxiliaries or particles, and 25 per cent are affixes. The second most frequent agent-oriented modality occurring in their sample is ability. Again, there is no clear boundary between its lexical and grammatical expressions. Often root possibility concerns general enabling conditions and is not restricted to the internal condition of ability. It is also used to report on general external conditions (social or physical). Shibatani (1985) calls this simply *potential*. Haspelmath (1990) assumes that general (non-passive) root possibility will seldom have the same expression as the passive. In syntactic works, this use is sometimes called *middle*. In the following pages I hope to be able to disprove Haspelmath's assumption concerning the potential passive based on one important meaning of Mordvin *v* verbs.

In Finnish, as in so many other languages, the main indicator of dynamic possibility is a modal auxiliary verb, *voida*, with other possibilities being the verbs *pystyä* and *kyetä.*[55] All three are very suitable for translating the Mordvin examples into Finnish. In Mordvin, dynamic modality is one of the most common meanings expressed by the *v* suffix. In contrast, for deontic modality lexicalized *v* verbs can be used. To date, much of the theoretical analysis on modality has focused on English modal (auxiliary) verbs, which are the best known examples of their kind (see e.g. Palmer 1990).

2.10.1 Dynamic modality (or potentiality) in Mordvin

Both extensive Mordvin dictionaries (ĖRV & MRV) have also taken the position that the *v*-verbs are strongly modal. Usually the dictionaries present two meanings: *vozvr.* (= *vozvratnyj*) 'reflexive' and *vozm.* (= *vozmožnyj*) 'possible', of which the first also includes *passive* and *automative* meanings (interestingly the term *strad.* = *stradatel'nyj* 'passive' is not even present in the list of their abbreviations. This means that the native speakers keep these two cases apart, as the two basic meanings of the *v*-verbs, while intuitively combining reflexive and passive meanings.). While the second I have mainly interpreted as *dynamic modality,* in line with Paasonen's dictionary, since other sources rarely offer any context for these derivations. This group has even been regarded as its own mood, the *potential* in von der Gabelentz's grammar (1839: 273).

The *v* suffix signifying dynamic modality can be added to both transitive and intransitive stems. However, one restriction seems to exist: objective conjugation forms are not allowed and objects of any kind are extremely rare, only existing in the ablative[56] case with the

[55] According to Flint (1980: 40–45, 87–88), the distinction between *pystyä* and *kyetä* is neutralized in many contexts; *pystyä* refers more commonly to mental abilities and *kyetä* to physical prowess and endowed abilities which one does not have a great deal of control over. In the Oulu corpus *kyetä* refers very seldom to mental or learnt abilities, whereas *pystyä* is rather commonly employed in this way. However, both verbs quite frequently refer to external circumstances rather than the actor's abilities or characteristics. *Pystyä* can take all kinds of subjects, but *kyetä* is more restricted to human subjects (Kangasniemi 1992: 34–35).

[56] Some mental verbs meaning speak, think, fear (E *kortams*, M *koʀtams*; *arśems*, M *arśəms*; E *peľems*, M *peľəms*) can only take ablative objects; eat and drink (E *jar[t]sams*, M *jaʀcams*; E *śimems*, M *śiməms*) take other objects, too. Usually objects are in the nominative, genitive or definite genitive.

jar(t)sams ‘eat’ verb (see example 67 in the first article). With intransitive root verbs, valence remains unaffected, while with transitive root verbs the situation is more complicated as the object is almost entirely removed, resulting in a situation where the suffix *v* in its modal meaning can be both a TRANSFORMER and MODIFIER. Moreover, my attempts to make my informants produce a *v* derivative and objective conjugation forms, with or without an object, were unsuccessful. Constructions such as ***(mon) lovnovasa ťe kńigańť*** ‘I can read the book’ are not possible in Erzya or Moksha. This minor nuance, it seems, is so obvious that no grammar has ever paid attention to it. If it is necessary to add an object, an auxiliary verb is needed, which I have tested on numerous occasions with Mordvin informants:

(111) *(Mon) mašta-n* *lovno-mo* *ťe* *kńiga-ńť.*
I can-PRES.1SG read-INF2 this book-DEF.GEN
‘I can read this book.’

My interpretation is that the *v* emphasises the subject’s capability or inability to such an extent that the object becomes unnecessary. This resembles, to a certain degree, one of the meanings of Udmurt reflexive verbs, such as *vuri-śkį-nį* ‘sew, be engaged in the activity of sewing’ < *vur-įnį* ‘sew (sth.)’, *leka-śkį-nį* ‘be in the habit of stinging’ < *leka-nį* ‘sting (sth.)’. This group is called *deobjective* by Haspelmath (1990: 34) or *absolute reflexive* by Geniušienė (1987: 83–86). Modality is very strongly present in Mordvin negative sentences. It is always more important to express what can not be done than what can be done. Occasionally, an object in the ablative case can be present, as in the Erzya example (112) below:

(112) *eźi-ń* *orgoď e-**f**[57]-t* *nogaj-ďe*[58]
NEG.PRET-1SG escape-MOD-CONNEG Nogay-ABL
‘Ich konnte nicht den Nogajern entfliehen’ (MW III: 1458)
‘I couldn’t escape from the Nogays.’

When analysing modality through translations, care is needed to ensure that the metalanguage does not disturb the results. For example, English perceptual verbs do not have progressive forms; thus ***I am seeing* is impossible. The verbs *see*, *hear*, *feel* etc., as well as such verbs as *remember* and *understand,* compensate for this shortcoming by using the auxiliary *can*. This use is particularly common in spoken language: *When you can see it sharply. He can’t hear you. But I can’t remember his name now*. Furthermore, all *can* examples are connected to the present tense. In fact it could be interpreted as a marker of stative aspect: *I can see you* = {*I am able* [*I am seeing you*]} (Coates 1983: 90–91, 99).

To a large extent, my Mordvin material consists of folklore translations into German, and I have noticed that the verb *können* ‘can’ is often present in the translations, especially in negative passive utterances. *v*-verbs do not have the same negative constructions as simple non-*v*-verbs, there is always modality involved with the negation, and many examples can have two interpretations: *a lovnovi* / *af luvəvi* ‘(s)he can’t read’ or ‘it can’t be read’. Some-

[57] *v* > *f* before voiceless consonant.
[58] As a curiosity I have to mention that this could have several alternative translations into Finnish: *En voinut paeta nogai-ta* (direct object: SG/PL-PART, because the common nominal declension doesn’t have separate plural forms) or *nogai-lta* (adverbial: SG/PL-ABL).

times even underived verbs are translated with an auxiliary and a main verb, particularly in negative sentences, as demonstrated in the three following Erzya samples:

(113) ***a*** *koj-ez-est* *bojar-ava* *tonad-i*
NEG habit-ILL-PX.3PL boyar+woman learn-PRES.3SG
'die Bojarin kann ihre Sitten nicht lernen.' (MV V: 194)
'The boyar woman can not/doesn't learn their habits.'

(114) *van-i* *ava* *paro* *maro* ***a*** *meń-i*
look-PRES.3SG woman good POP'with' NEG get.loose-PRES.3SG
'Die Frau sieht, sie kann nicht mit Gutem loskommen[59].' (MV V: 450)
'The woman looks as if she cannot/will not get loose by fair means.'

(115) *avol'* *viďe* *kij-ava* *ikeľe-j* ***a*** *ńej-at*
is.not right road-PROL in.front-LAT NEG see-PRES.2SG
'Auf einem krummen Wege kann man nicht (weit) vor (sich) sehen.' (MV VI: 220)
'On a winding road one can't see ahead.'

In some rare cases, there appears the verb *wollen* 'want' in the translations:

(116) *Nuvara* *seŕ-em* *mon* *viť-an*
bent body-PX1SG I straighten-PRES.1SG
'Ich will meine niedergebeugte Gestalt aufrichten,' (PM I: 172)
'I will/want to straighten my bent body,'

(117) *a* *mon* *pećka* *laŋk-s* *maď-an.*
but I oven POP'on'-ILL lie.down-PRES.1SG
'ich aber will mich auf den Ofen niederlegen.' (PM II: 82)
'But I will/want to lie down on the oven.'

Based on these examples, the modal translations of *v*-verbs also have to be considered suspect. Moreover, I have shown some sentences to my informants, and they partly reject the modal meanings, saying that it depends on the context. However, here are two positive cases where both a passive and modal meaning are present:

(118) *źar-do* *kirvaśťi-v-i-ť* *maćťa-v-i-ť* *vedun-neń*
when-ABL light-PASS-PRES-3PL put.out -PASS-PRES-3PL magician-DAT
vä'ke *ćaz-oń* *poc-to,* *vä'ke (väj'ke)* *minut-oń* *poc-to*
one hour-GEN POP'in'-ABL one minute-GEN POP'in'-ABL
'Wenn ein böser Zauberer sie innerhalb einer Stunde, innerhalb einer Minute anzünden und löschen kann' (MV III: 83)
'When a mean magician can light them and put them out in one hour, in one minute'

[59] Noted by Paasonen: *Ei pääse irti* 'can't get loose'.

(119) *kona ve śeľme kola-si*
who one eye harm-PRES(SG3).3SG
śe čiŕ kurgo-ńe viť e-v-i
that wry mouth-DAT free-PASS-PRES.3SG
'Wem ein Einäugiger Schaden zufügt, den kann ein Schiefmündiger (davon) befreien' (MV V: 230)
'Who is harmed by the one-eyed, can be freed by the wry-mouthed'

Most modal *v* derivatives originate from intransitive root verbs. In such utterances a locative element is often present, as here in the postpositional structure:

(120) *tiŋk baslovka-so-ŋk*
you(PL).GEN blessing-INE-PX.2PL
*ťoša-ń moŕa-ń šačk juta-**v**-a-n*
Tjosha-GEN see-GEN POP'over' go-MOD-PRES-1SG
'Mit eurem Segen
kann ich das Meer von Tjoscha[60] überqueren' (MV II: 315, MW IV: 2411)
'With your blessing can I cross the sea of Tjosha.'

(121) *veť-ťe setmeste veľksta-**v**-i-ń*
water-ABL silently go.over-MOD-PRET-1SG
'Leiser als Wasser vermochte ich zu gehen' (MV II: 358, MW IV: 2607)
'I could walk more silently than the water.'

This suffixal modal meaning has sometimes developed even further. According to older Mordvin grammars (Evsev'ev 1928: 190 & 1931: 125), in the Erzya region of Nizhegorodsk and Zakadomsk the suffix *v* gives a more specialized meaning of desire, in Russian *hoču, hočetsja*. The examples offered are *moľivan* 'ja hoču itti, mne hočetsja itti / I want to go, I feel like going' (< *moľems* 'go') and *kortavan* 'ja hoču govorit', mne hočetsja govorit' / I want to speak, I feel like speaking'. In Paasonen's material such meanings can be found in the dialects of three villages: Veliki Vrag, Vezovka and Shoksha. Indeed, Vellupilai (2012: 223) divides dynamic modality into two subcategories: *volitives,* denoting willingness on the part of the subject to carry out an action, and *ability,* denoting capacity on the part of the subject to carry out an action. Depending on the language in question, these meanings are either expressed differently or use the same form.

It has been assumed that dynamic modality is some kind of starting point for the development of modality, which then evolves to express *deontic* meaning and, finally, *epistemic* meaning (Lyons 1977: 845, 849). Moreover, this kind of development might be a universal phenomenon. Dynamic and deontic modality are connected with +animate subjects, whereas epistemic modality can be linked to any clauses (Bybee 1985: 168).[61] However, if we accept this development, it seems odd that in her material consisting of 50 languages and represent-

[60] A tributary of the Oka, Paasonen's note.
[61] The English modal auxiliary verb *may* (< *magan*) shows this chain of meanings: 'have the physical power' > 'be allowed' > 'be possible'. A good Finnish example is the verb *voida* 'can', which belongs to the same word family as *voima* 'force, power', *voittaa* 'win' and possibly *voipua* 'become tired'.

ing different language families, Bybee is unable to find even one language where the ability of the subject is expressed in verbal inflection morphology. The author proposes that in agent centered modality, its marker, usually an auxiliary, has weakened phonologically and merged into the main verb, while its meaning has extended to affect the whole sentence, as an epistemic element. This leads to the opinion that non-epistemic modality can be expressed with inflectional morphology only if it is a question of 'new' morphology (Bybee 1985: 168–169). Furthermore, epistemic modality is more strictly *event-* or *speaker-oriented*. Nevertheless, my Mordvin findings seriously challenge Bybee's idea of dynamic modality as new morphology.

In the Turkic languages the modal meaning of possibility is usually expressed by auxiliary verbs, which might have also developed into suffixes, as in the Turkish *ver-ebil* 'can give' < *ver-* 'give' + *bil-* 'know' (Johanson 2001: 1729). In Tatar and Bashkir the solution is different: the *-A* converb and the auxiliary *al-* 'take; get; buy' form a construction that occurs in all persons, e.g. Tatar *yaza alam* 'I can write' or *bir-di* '(s)he gave' > *bir-äl-di* '(s)he was able to give', *bir-äl-mä-di* '(she) was not able to give'. Another converb, *-(Ĕ)p,* and the auxiliary *bul-* 'be' form an impersonal construction restricted to the 3rd person singular, e.g. Tatar *yazïp bula* 'it is possible to write' (Berta 1998: 291). In Old Turkic, the verb *u-* expresses the ability to act. Furthermore, its positive form is rare, and it is mostly used in a negative connection with negation *-mA* (Ramstedt 1952: 190–191, Erdal 1998: 145). In Chuvash the ability to perform an action is indicated by adding *-Ay* to the stem (dropping the final suffix vowel), and it can be followed by a negative marker, *-mA* (Clark 1998: 443); *kil-* 'come' > *kil-ey* 'be able to come', *kil-ey-me-* 'be unable to come'. There have also been attempts to connect this suffix to the *u*-verb (Fedotov 1963: 88–89).

In searching for more cases where modality is expressed by a verbal derivative I looked through many grammars with very modest results. Most studies were simply too short to discuss this matter in any great detail. At this point in time, I realized that the grammar must be really comprehensive and as recent as possible, leading me to find one for a language spoken in Eastern Siberia. Udihe (or Udeghe, Udegey etc.), a Southern Tungusic language spoken in the 'Russian Far East', marks the passive derivation with the suffix *-u-* (formally identical to the unproductive causative marker), which changes into *-w-* in the intervocalic position (Nikolaeva–Tolskaya 2001: 306–308, 577–580). The present tense is employed to express a timeless universal situation. This also applies to the case of the imperfective impersonal passive in the present tense. Moreover, the study reveals also that possibility, necessity and even perfectivity (in the past tense) might be involved, as in:

(122) *Ei* *b'oto-wo* *diga-**u**-ji.*
this mushroom-ACC eat-PASS-PRES/AOR.3SG
'This mushroom is edible.' (Nikolaeva–Tolskaya 2001: 578)

(123) *Čaja-wa* *olokto-**u**-ji*
tea-ACC boil-PASS-PRES/AOR.3SG
'One boils tea (tea should be boiled).' (Nikolaeva–Tolskaya 2001: 578)

2.10.2 Lexicalized *v*-verbs in Mordvin

Mordvin has two homonymic verbs, in Erzya *eŕavoms,* and in Moksha *eŕavəms*. One is derived from the stem verb *eŕams* 'live, exist, experience, be a habit' and has the passive meaning 'be lived', the other is a pure necessive modal verb with the meaning 'must, need, be necessary, be needed'. It might be that the modal verb is also derived from the same root verb (which for phonological reasons cannot be related to the Finnish verb *elää* 'live'[62]), for it is difficult to think any other origin for it. However, from the perspective of the current language, this derivational relationship has ceased to exist; it is a question of a lexicalized derived word, totally separated from the root verb.

Even if the *eŕavoms* or *eŕavəms* is very often unipersonal, it can sometimes occur as a full verb conjugating in different persons. In such instances, the sentence requires either a BENEFACTIVE in the dative or a LOCATIVE in the 'wohin / to where' -case.

Erzya

(124) *eŕva* *tarka-s* *eŕav-a-t*
every place-ILL be.needed-PRES-2SG
'an jedem Ort braucht man dich' (MV III: 20)
'you are needed everywhere.'

(125) *ki-ńe* *pola* *eŕav-i*
who-DAT spouse need-PRES.3SG
'Wer braucht eine Frau?' (MV V: 424)
'Who needs a wife?'

Moksha

(126) *täj ˣtịrne-ś*[63] *meŕ-ä:* *ńeť* *mońäń* *naŕat-ks*
girl(dim.)-DEF.NOM say-PRES.3SG they I.DAT jewel-TRANSL
äŕäv-ị-ť
be.necessary-PRES-3PL
'Das Mädchen (aber) sagte: "Ich kann sie als Schmuck gebrauchen"' (MV III: 249)
'The girl said: "I need them for jewels."'

The most common form is the unipersonal EM *eŕavi* with an infinitive subject. With the transitive infinitive, there usually occurs its GOAL or PATIENT; in these structures the agent is not present, even if it would be easy to add to the sentence.

Erzya

(127) *meź-d* *bojar* *meŕ-ć,* *eŕav-i* *ťeje-ms.*
what-PL boyar say-PRET.3SG must-PRES.3SG do-INF
(128) *alaša-ťńe* *eŕav-i* *ando-ms*
horse-DEF.PL must-PRES.3SG feed-INF

[62] Not listed in the SSA (1: 103–104), but accepted in the UEW (I: 73) as a Uralic word with a sporadic sound shift *l* > *r (> ŕ).*
[63] It has sometimes been necessary to simplify the transcription of original Mordvin examples.

‘was der Bojar gesagt habe, das müsse man tun.
Man müsse die Pferde füttern.’ (MV III: 319)
‘What the boyar said must be done. The horses must be fed.’

Another, rare necessive verb with a unipersonal use is EM *savi* ‘must, be convenient’; which might be derived from the motion verb *sams* ‘come, get, hit; (in Moksha also transit.) reach, hit’. Moreover, the stem verb can express modal nuances: *śimemam saś* ‘I wanted to drink’ lit. ‘my drinking came’. There is a parallel homonymic verb, *savoms,* with regular meanings which can be expressed with the *v* suffix: ability, occasionality and (in Moksha) the passive. For the necessive use of *savi* I have two examples. Both have an infinitive as the subject, and the agent of the infinitive is expressed in the dative.

(129) *koda* *eŕd'ź-a-t* *oj-śe-ź* *stoľ+ekš-sa* *jarc-i-ť* *di*
when Erzya-PL sit-FREQ-GER table+on-INE eat-PRES.3PL and
kona-ńiń-gak *sav-e* *korčta-ms* *pejeľ-eń* *troks,*
somebody-DAT-CLT want-PRES.3SG slurp-INF knife-GEN POP‘over’
‘Wenn die Ersänen am Tisch sitzend essen und jemand sich (Speise) über ein Messer herschöpfen will,’ (MV VIII: 164)
‘When the Erzyas are sitting on the table and somebody wants to slurp over a knife,’

(130) *mońeń* *kurok* *sav-i* *bazar-ov* *moľe-ms*
I.DAT soon must-PRES.3SG market.place-LAT mennä-INF
‘Ich muß bald auf den Basar gehen.’ (MW IV: 1947)
‘I must soon go to the market place.’

It is clear that modal necessive verbs can easily develop from verbs of motion. Parallel cases are in the Finnish *tulee* ‘must, it’s necessary’ and the Russian *prijtis’* ‘must, have to’ < *prijti* ‘come; fall/get into; get, come to’). With these verbs, the person is expressed with the dative or genitive case. (In the Finno-Ugric languages, the agent with the infinitive is also typically in the dative case.) Among the *t* derivatives at least one modal verb can also be found: *satoms* ‘be enough’. This is really a derivative, not a root verb (unless it is a deponent verb), which is proven by its inflection, as a reduplicative *t* is present in the preterite 3rd singular and plural forms.

2.11 Passive suffixes and perfective meaning in Mordvin

In Uralic languages perfectivity is seldom expressed with verbal construction, in contrast to Russian. Instead, the case marking of object and different adverbials fulfil this function. As already (in 2.1.3) mentioned, the Komi suffix *ś* also has this meaning. Similar cases in Mordvin are the Erzya *udovoms* ‘sleep enough’ cf. Russian *prospat’sja*, *vyspat’sja*; *jarcavoms* ‘eat enough’ cf. *najest’sja*; *raŋgovoms* ‘cry enough’ cf. *vykričat’sja*. Erkki Itkonen has noticed that the Komi suffix *ś* forms not only the passive, but also the terminative aspect. Moreover, if the verb lacks a subject, it has an additional perfective nuance: *šydys puśas* ‘liemi keittyy valmiiksi/the soup will be ready cooked’ (Itkonen 1966: 278). After having collected passive

sentences with a clearly perfective meaning in the translations, I showed them to my informant, who failed to see any perfectivity in them. According to this linguistically educated person, perfectivity is above all expressed with an object conjugation, as in the following Erzya example:

(131) *Maťiďev-ś-* *ťejťeŕńe-ś,* *di* *Viŕ-ava-ś*
fall.asleep-PRET.3SG girl(dim.)-DEF.NOM and forest+mother-DEF.NOM
sev-i-źe
eat-PRET-OBJ.CONJ(3SG).3SG
'Das Mägdlein schlief ein, und die Waldmutter fraß es auf.' (PM II: 82)
'The little girl fell asleep and the Forest mother ate her up.'

However, here are some examples which in Mordvin folklore have a perfective meaning. The object is never present, and the object conjugation is impossible, which means that with transitive verbs *v* reduces the valence from two to one; however, with intransitives the changes are fewer. Sometimes both positive and negative meanings, and even root verbs, are present in the same context, as in the following, where a magpie gives instructions on how to wash in the sauna:

(132) *Kuź-at,* *kuź-at,* *mekev* *valk!*
climb-PRES.2SG climb-PRES.2SG back descend.IMP.2SG
(133) *Kuźi-v-at* *polok* *laŋk-s,* *karm-at* *paŕa-mo.*
climb-PERF-PRES.2SG sauna.seat POP'on'-ILL start-PRES.3SG wash-INF2
(134) *Paŕa-k,* *paŕa-k,* *iľa* *paŕa-v!*
wash-IMP.2SG wash-IMP.2SG NEG.IMP.2SG wash-PERF.CONNEG
(135) *Paŕa-v-at,* *karm-at* *oršta-mo.*
wash-PERF-PRES2SG start-PRES.2SG dress(itr.)-INF2
'Du steigst hinauf, du steigst hinauf, stiege wieder zurück! Du bist auf die Schwitzbank hinaugestiegen, fängst an dich zu baden. Bade dich, bade dich, bade dich nicht zu ende! Du bist mit dem baden fertig, fängst an dich anzuziehen.' (PM II: 122)
'Climb, climb, come down! Climb onto the sauna bench, start washing yourself. Wash, wash, don't wash yourself until the end! Wash [yourself] until the end, start dressing [yourself].'

Sometimes only an infinitive has been recorded, such as *meľavtovoms* 'genug sorgen od. trauern, bis zu Ende sorgen od. trauern, austrauern / mourn to the end or enough' from the Erzya village Maresevo (MW 1234).

The verb *jarcavoms* < *jarcams* 'eat' has many meanings depending on the context: passive, modal, perfective and in some dialects even 'want to eat'; here it is presented with a perfective meaning:

(136) *nu* *jarca-v-śt* *pop* *ďi* *ďijakon*
INTJ eat-PERF-PRET.3PL pope and deacon
'Der Pope und der Diakon aßen sich voll' (MV III: 312)
'The pope and the deacon ate their fill.'

2.12 Passive suffixes and zero meaning

In all the languages of the Volga region I have studied, I have found cases where a passive or reflexive suffix fails to change the original meaning of the underived basic verb. I term these *zero meaning* suffixes (more information in the articles 1, 2, 3 & 4 of this publication). Kangasmaa-Minn (1977) has used a term *piiloderivaatio* 'hidden derivation', which brings some light to this phenomenon from the Finnish point of view.

I have sought such cases in other Uralic languages, but unfortunately the result has thus far been very modest. However, it can certainly be assumed that if a language has a rich derivational morphology, there will presumably always be some dummy suffixes, or at least some stems where the derivation does not change the original meaning. In Mordvin most such zero meaning cases are to be found among derived causative and frequentative verbs, which is unsurprising since both Mordvin languages tend to decorate their verbs with multiple suffixes; for instance, there can be many frequentative suffixes, and even the same suffix can be added repeatedly.

This phenomenon might be rare or just difficult to recognize for non-native speakers. Nevetheless,examples can be found in the Obdorsk dialect of Khanty, where the passive and subjective conjugation of the same verb are identical in meaning, e.g. ***ľŭw jel əm-l-a*** / *luw jeləm-l* '(s)he feels ashamed'. Other such verbs of the same type have meanings such as 'freeze (itr.)', 'get drunk', 'get old[er]', 'get tired', 'sweat', 'want' (Nikolaeva 1995: 153–154).

2.13 Some remarks on expressions of reflexivity in Uralic languages and elsewhere and on their origin

It is well-known that passives sometimes arise from reflexives (cf. Lehmann 1982: 42–49), and this process has been observed from the Indo-European languages of Europe, in particular Romance, Slavic, Baltic and Skandinavian Germanic languages. In all these languages a reflexive pronoun that can be traced to PIE **s(w)e-* is involved (Haspelmath 1990: 42). In Lithuanian and Slavic languages, the reflexive marker is mostly a postfix, but it can stand between the prefix and the verb stem (in Lithunian) or be a free element in the sentence (on the Slavic side). East and West Slavic languages differ with respect to the status of the reflexive marker passive: in West Slavic it is an enclitic and in East Slavic an unmovable postfix *-sja/-ś*, i.e. an affix to the stem and its inflectional and/or derivational suffixes (therefore called "extra-inflectional affix" by Haspelmath 1990: 29). Both enclitic and postfix reflexive marker derive from the same etymological element **sę/sebe,* the accusative/genitive form of the reflexive pronoun (Wiemer 2004: 276–277).

Most commonly, reflexivity is expressed by reflexive nouns that originally meant the 'head', 'soul' or 'body'. Such reflexive nouns can also be grammaticized into verbal reflexives, which has happened in Mordvin, where besides the suffix *-v-,* a structure containing the reflexive pronoun *(eś) pŕa* 'one's own head' + transitive verb is developing into an area of reflexivity. In some cases, Mordvin analytical and syntactical structures can be synonymous, and it would be highly interesting to compare these Mordvin analytical reflexives to the Russian *sja*-verbs sometime in the near future. It is quite rare for there to exist simultaneously in a

language two reflexive variants such as the *sja*-verbs and *sebja* reflexive pronoun in Russian (Isačenko 1962: 463–464). However, in Mordvin *v*-derivatives and *(eś) pŕa* -constructions are sometimes interchangeable.

In Mansi, reflexive and reciprocal verbs form a special group of verbs derived from transitive stems with the help of the suffix *-xat-* (added to short stems) or *-axt-* (added to longer stems), as in *xańiśtangkwe* 'teach' > *xańiśt**axt**ungkwe* 'learn' or *lowtungkwe* 'wash' > *low**xat**ungkwe* 'wash oneself', *alungkwe* 'kill' > *al**xat**ungkwe* 'fight (each other)'. The nuance that somebody/thing usually does something can also be present, as in *mis wangkərt**axt**i* 'the cow butts' or *ľomvoit saka purxategət* 'the mosquitoes bite well' (Balandin–Vahruševa 1957: 114–115, Rombadeeva 1973: 148–152)). The origin of *-xat-* or *-axt-* seems to be the proto-Finno-Ugric causative suffix **-kt-* (Keresztes 1998: 408). Nevertheless, the comprehensive Mansi-German dictionary (WW) repeatedly gives passive translations for *-xat-*, *-axt-* derivatives, which means that further studies are needed.

In Northern Samoyed languages, a special reflexive conjugation has developed. It is based on the reflexive derivational suffix **-j-*, which is also known in Selkup (Lehtisalo 1936: 72–78, Mikola 1988: 255). According to Mikola, there are many common features in the development of reflexive conjugations in Finnic and Samoyed languages. Collinder (1960: 275) assumes that the suffix **-j-* has evolved a passive or reflexive function in Khanty, Northern Samoyed languages, and possibly in Selkup, and it is part of a complex passive suffix in Saami: *-uj-*, *-ujuvvu-*.

In Selkup reflexive verbs are derived from transitive (sometimes also from intransitive) verb stems with the suffixes *-Ï-*, *-Č'ï-* or (with additional intensive or perfective meaning) in a compound derivative with a *-Il-* suffix as its first part, e.g. *panal-ï-* 'breaks (itr.)'< *panal-* breaks (tr.)', *tott-ıl'č'ï-* 'bring oneself to vertical position' < *tottï* - 'stands' (Helimski 1998b: 573). Even without any context, this kind of meaning suggests that the suffix has at least an automative-reflexive meaning.

Kamas verbal inflection is still insufficiently known; however, the literature offers some examples of relevant deverbal derivation. In Kamas, reflexivity is expressed by the suffix *-ō-,* as in *amn-ō-l'a-m* 'I seat myself, I sit down' < *amn-na* 'sits' or *k'ajōľäm* 'cover oneself' < *k'ajľäm* 'cover', *o'ptōľäm* 'get together' < *o'ptəľäm* 'collect', and the same suffix is also used with a passive participle (KW 179, Simoncsics 1998: 591). According to Collinder (1960: 246), these Kamas forms are connected to a proto-Uralic passive voice which is echoed in modern Finnic, Saamic, Mordvin and Mansi.

3 The main results of the original publications

3.1 Article 1

Mordvin passive sentences contain a special polyfunctional derivative suffix, *-v-*. Since only some groups of verbs with this suffix are passive, final judgement on the meaning can be rendered only in context. The relationship between the derivative and the root verb is illustrated using valence roles of case grammar. There are two groups of passive clauses: 1) where the primary actant is reflected as the agent in the dative case in the surface structure and 2) where the primary actant is not visible in the surface structure. The *v*-suffix also has six other meanings in Erzya, of which some are quite common, while some occur very seldom.

Instinctively, and on the grounds of earlier studies, it can be supposed that in Moksha the *v*-suffix is less common and has fewer meanings. In Erzya *automatives* constitute the largest group of *v*-derivatives. A small group of reflexives with the special meaning of moving in some direction have been named *intentionals*. A second group of reflexives, *unintentionals*, consists of verbs meaning 'happen to do something, do something unwillingly, unintentionally'. The suffix *-v-* can also express *dynamic modality*, i.e. 'be able to do something, can; want to do something' and in these examples negation clearly dominates. Some *v*-derivatives have the *perfective* or resultative meaning 'do something to the end, finish'. The smallest group are *v*-derivatives with *zero meaning*, and their root verbs are derived from adjectives.

Mostly the root verbs for all these meanings are transitive; however, dynamic and zero meanings also allow intransitive roots. Passives and automatives undergo similar changes in their valence roles, as do intentionals and unintentionals. With dynamic modality, the picture is more complicated: with intransitive root verbs valence remains unaffected, while with transitive verbs an object in the ablative case is allowed, while an objective conjugation is not. A perfective meaning causes a valence decrease with transitive verbs, whereas with intransitive verbs the changes are not significant. With a zero meaning there is no change in valence. To these *v*-verbs can be added two modal verbs expressing necessity: *eŕavoms* and *savoms*.

3.2 Article 2

This study presents new data for the Finnish unipersonal or impersonal passive in other Uralic languages by analysing material in the Mordvin languages of Erzya and Moksha for the rare, almost extinct *t*-derivatives. The data were examined to locate the roots of the *t*-verbs, in order to illustrate the changes occurring in the syntactic behaviour of the verbs. The relationship between the derivative suffix and the root verb has been demonstrated with valence roles.

Examples from a large number of folklore texts and dictionaries have been divided into the following groups: 1) *Automatives*: physiological verbs, meteorological verbs, and other automatives; 2) *Intentionals:* a special type of reflexives; 3) *Passives*; 4) *Modals;* and 5) *Lexicalizations*. In passive sentences, the animate AGENTIVE is indicated, even though it is never present as an agent at the surface level. Contemporary speakers mainly use *t*-verbs to express unpleasant feelings and negative physiological states. Although weather conditions can also be described using *t*-derivatives when they are the only constituent part of a sentence, but this use is quite marginal. Nevertheless, some meteorological *t*-verbs occur frequently in texts. These two types of usage bring the *t*-derivatives close to the way the impersonals are used in Indo-European languages. Two modal verbs appear to be included amongst *t*-verbs: *satoms* 'to be enough' and *l'et'ems* 'to be obliged to, to have to'.

3.3 Article 3

The *passive* in Mari is expressed with the deverbal suffix *-əlt-* or *-Alt-,* which also has other meanings beyond the passive. These verbs are conjugated according to the *am*-conjugation. Even if Mari passive sentences do not have an agent, this animate nature of this hidden AGENTIVE is always inferred. In *automative* events, the AGENTIVE is absent from both the deep and surface level. The only actants of automative verbs, i.e. their subjects, come in two types: NEUTRAL, which is inanimate or abstract, and EXPERIENCER, whose awareness is affected by the event described in the sentence.

Depending on the context, the derivative can sometimes be passive, automative, or *reflexive*. In reflexive sentences, the only obligatory actant is the ACTOR, which fulfils both the role of AGENTIVE and PATIENT. From intransitive root verbs there can be derived *-əlt-* or *-Alt-* verbs where the meaning does not change at all. Occasionally, however, the suffix has been added directly to the nominal stem. Some grammars provide other meanings for this suffix such as a diminutive, momentaneous, perfective, or disparaging meaning (often the *em*-conjugation), but they are a case apart. In addition, this suffix can have a frequentative meaning, in which case it conjugates according to the *am*-conjugation.

3.4 Article 4

The fourth article follows the same line of research applied in the three previous articles and compares the findings in Chuvash with the results in Mari and Mordvin and makes some observations on three other Turkic languages: Tatar, Bashkir, and Turkish. The question about reflexives and passives in Chuvash is complicated. Usually, the grammatical elements of the Turkic languages are quite similar in many ways; reflexive and passive verbs are kept separate, each having its own suffixes. The Common Turkic passive suffix *-l-* and the reflexive suffix *-n-* have representatives in almost all of the Turkic languages; and they are both productive in Chuvash.

This study proves that both of these old Turkic categories do exist in Chuvash, although the line between them is not always so clear. The findings are based on sentences, which has seldom been done in the reference literature used. In *passive* surface structures, an agent is never present, although it can always be inferred to be animate. In Chuvash texts, passive examples are rare.

In Mari, the situation is similar, but in Mordvin, the agent is possible, albeit not very common. In *automative* sentences, the AGENTIVE is never present, and the majority of Chuvash verbs with an *-n-* or *-l-* suffix belong to this specific type of agentless passive. Although most Chuvash *reflexives* use the suffix *-n-*, the suffix *-l-* can also have this reading. Among the reflexives, a small group of *intentionals* can be separated, and the suffix *-n-,* at least, can have *zero meaning*. With the passives, automatives and reflexives, the derivative suffix can be a TRANSFORMER, with zero meaning and rare *modal meaning* a MODIFIER. In Chuvash, these suffixes are used more widely as CHANGERS, turning many adjectives into verbs.

3.5 Article 5

Finno-Ugric and Samoyed meteorological verbs form an interesting and insufficiently studied group that exhibits considerable internal diversity. Some verbs have zero valence, some display a more or less semantically faded subject, and some feature an object. In addition, there are expressions that have simply fossilized. With causative transitive verbs, the prevailing restriction seems to be that either a subject or object is possible, but not both. The construction verb + object is already attested in the Finnic languages, the Saami languages, Mari, Komi and Mansi. With languages where verbs can conjugate according to the objective conjugation and take objects, the structure can be (S)OV or (S)VO as in Erzya, Moksha, Khanty, and Nenets. A remarkable feature of Samoyed meteorological expressions is the abundance of objective conjugation forms, even when the object is absent. In Nenets and Selkup, this type of SV order with the objective conjugation is quite common. Hungarian meteorological expressions with objective conjugation forms are very unusual, although SVO is possible.

In the Uralic languages, the subject can be unmarked (the Finnic languages, the Saami languages, Mari, Udmurt, Khanty, Mansi, Nganasan, and Kamas), marked with a definite article (Erzya, Moksha, and Hungarian), or marked with a possessive suffix (Udmurt, Komi, Khanty, Mansi, Nenets, Selkup, and Nganasan). Although cognate constructions or figura etymologica have been attested from the Finnic languages to Nenets, they are mentioned as being common only in Mari, Khanty and Mansi. Purely nominal utterances and those consisting of a noun and the verb ‘to be’ have generally been disregarded.

The study draws on data from 14 Uralic languages, and as such constitutes the most comprehensive account to date of how meteorological phenomena are expressed in the Uralic languages. Most of the examples cited have been discussed with and substantiated by native speakers or researchers with a profound knowledge of that particular Uralic language. The findings reveal that avalent verbs exist in 13 Uralic languages, and that a construction with a dummy subject like the the Indo-European languages have started to spread from the west and now occurs in the Saami and Finnic languages.

4 Conclusions

In this study, reflexive passive verbs from three Finno-Ugric languages (Erzya, Moksha, and Mari) and one Turkic language (Chuvash) have been analysed and then used to make some observations on three other Turkic languages (Tatar, Bashkir, and Turkish). The verbs in question are clearly deverbal in the Uralic languages, but can be denominal in the Turkic languages. The derivational suffixes can been divided into TRANSFORMERS and MODIFIERS according to the changes they cause in the verbs they are attached to. The same derivational suffix can belong to different groups based on whether it is added to transitive or intransitive verb.

Earlier, it was assumed that the basic minimal sentence type V is Uralic, but according to my findings it is absent in some of the Samoyed languages and that the SV or VS type is more widely known in the Uralic languages. The comprehensive introduction provides background information on the many alternative ways of expressing the passive and other related structures in the Uralic languages, as well as in the neighbouring languages of other language families. An agent in a passive sentence is relatively rare, and thus special attention is given to its morphological expression. It seems obvious that the agent has been completely absent in passive sentences in the Uralic and Turkic languages. Many of these languages, however, have now developed an agent under the influence of the Indo-European languages. Furthermore, the foreign construction with a dummy subject has started to spread from the west and now occurs in the Saami and Finnic languages.

Interestingly, Erzya and Moksha have two polysemantic groups of *reflexive-passive-automative* verbs that share many of the same meanings: *v*-derivatives and *t*-derivatives. With both suffixes, the automatives form the largest group. With the passive meaning, some differences exist, as expected: *t*-passives can never accept agents; with *v*-passives agents are relatively rare, although these are always inferred to be animate. Even their lexicalizations show similar development paths; for example, there are both *v*-derivative and *t*-derivative modal verbs expressing necessity, such as synonymous *eŕavoms* and *savoms*, as well as *satoms* ‘to be enough’ and *l'et'ems* ‘to be obliged to’. The physiological verbs form the largest group of *t*-derivatives; as *v*-derivatives, they also occur frequently. The semantic reflexivity is not often expressed with either of these suffixes. Instead, reflexivity is expressed in two other ways: either by 1) an underived verb root that already has a direct transitive or intransitive meaning, or by 2) a reflexive pronoun such as *(eś) pŕa* ‘(one’s own) head’ with a possessive suffix. However, for both suffixes, there is a small group of reflexives having the special meaning of moving in some direction, which are called *intentionals*. In contrast, there is a small group of *unintentionals*, again with a *v* or *t*-suffix, which indicate that someone is doing something unwillingly or unintentionally. Verbs depicting sense perception, especially *hearing* seem to gather lexicalized verbs. The meaning of verbs with the *v*-passive is closer to the meaning of the stem verb than the *t*-derivation. Furthermore, it seems likely that Russian *sja*-verbs have, to a certain degree, affected Mordvin *v*-verbs and Udmurt *śk*-verbs. At least the *perfective* or *resultative* meaning seem to be a good candidate for such development. For *v*-verbs derived from deadjectival root verbs, *zero meaning* is also possible.

Verbs in Mari and Chuvash behave similarly, at least in terms of reflexive-passive suffixes. They both have a passive classified as a reflexive passive, and the passive meaning is quite rare among the *əlt*- or *Alt*-verbs in Mari (*am*-conjugation), and the *l*- or *n*-derivatives in Chuvash. In their *passive* surface structures, an agent is never present, although it can always be inferred to be animate. The majority of Mari and Chuvash verbs with these suffixes belong

to *automatives*, where the AGENTIVE is never present. The only actant or argument in this type of verb, i.e., the subject, does not control the event or state. Furthermore, *reflexives* are quite common. A *zero meaning* occurs occasionally. My material proves that both Chuvash suffixes can have identical meaning and that there is, at least morphologically, no need to separate a passive or reflexive voice category, since they are both clearly derivational categories in Turkic languages. For example, the affix *t* that is used to form the passive or impersonal in Finnish is obviously not a derivational suffix. Unfortunately, the terminology used in Soviet or Russian Turkology is inaccurate. It seems to me that the term *reflexive* is often used loosely and might even be close to the term *intransitive*. For Mari, further investigations are still needed. The grammars have not paid enough attention to the fact that these suffixes also have other meanings with *em*-conjugation verbs.

A profound analysis of other large derivational groups can further enrich the linguistic picture of these languages of the Volga region that are in many ways exceptional. But entire sentences must be collected in order to do this, as plain verbs without ontext cannot reveal intricacies of their use.

Verbal suffixes usually have a very strict order in which they are added. Using a sample of 50 languages, Bybee (1985: 191–205) arrived at the following conclusion on this order:

VERB ROOT + VOICE + ASPECT + TENSE + MOOD + PERSON/NUMBER

According to her material, the distributions were quite strong in most cases. Although, Uralic verbs tend to fit this pattern, Khanty somehow violates these ordering principles by placing the tense marker before the passive marker right after the verb root, as seen in the fifth article of this study and in the introduction section.

Finer distinctions have seldom been made and the information found in descriptive grammars is rarely detailed enough. In some cases, however, elegant analyses are possible (cf. Siewierska (1984), Geniušienė (1987) for an especially detailed taxonomy of uses in the passive or reflexive area). However, it is possible to find some relatively old areal Uralic passives or other related categories that defocus the primary actant:

I The derivative suffix **w* occurring in the Finnic and Saami languages, Mordvin, Mansi, and Hungarian. The agent is encoded in the 'to where / wohin' case (illative, dative, or lative) in the Saami languages, Mordvin, and Mansi. To these can probably be added the Kamas reflexive suffix *-ō-*, which is also used with a passive participle.

II In proto-Finnic, there was an impersonal voice expressed with the suffix **-tA* or **-ttA*, possibly originally a causative suffix. Its descendants occur not only in the Finnic languages, but also in Skolt Saami, as a result of influence from the Finnic languages, particularly Karelian.

III The proto-Uralic reflexive morpheme **j*, which has counterparts in the Saami polysemantic suffix *-j-*, and in the Samoyed languages.

IV The derivative suffix *-śk-* or *-ś-* in the Permic languages with its multitude of meanings including the reflexive and passive; originally an agent was not allowed. It is derived from the Finno-Ugric frequentative suffix **-śk-*. It is related through metathesis to the Finnic and Saami frequentative suffix, and the Estonian, Livonian, and Saami markers of the conditional.

V The marker or derivative suffix *-r-* occurring in Forest Enets, Tundra Enets, Nganasan, and with some traces even found in Tundra Nenets. With the three first languages listed, the agents of the passives are encoded using the lative case.

The agents of passives in Uralic languages are encoded with many different case endings, depending on the variety of cases available in that particular language. In this respect, the use of the dative is one feature that connect Mordvin to the Saami languages, Mansi, and the Northern Samoyed languages. It is again one feature that separates Mordvin from its geographically closest language-relatives.

Cases used in expressing the agent in the Uralic languages:

‘from where / woher’:
South Saami, old lit. Finnish, old Hungarian
‘to where / wohin’:
North Saami, Inari Saami, (Finnish dialects,) Mordvin,
Mansi, Eastern Khanty (?), Enets, Nganasan
‘where / wo’:
Veps, Northern and Skolt Saami, Khanty, Tundra Nenets
instrumental:
Udmurt, Komi, Forest Enets, Selkup

This distribution makes one wonder whether there really was an agent in the Finno-Ugric or Uralic proto-language, as has been assumed, for the agents have now begun to occur more often than earlier due to the influence of the Indo-European languages. Currently the ‘where / wo’ and ‘to where / wohin’ case is widely represented among the passive agents in the Uralic languages. However, the agents in the ‘from where / woher’ case can be seen as a result from Germanic influence and the agents in the instrumental case as a result from Russian influence.

Glosses and abbreviations

+	break in compound words
ABL	ablative
ACC	accusative
ACT	active
ADES	adessive
ADS	deverbal adverbial suffix
ADVL	adverbial (a case in Udmurt)
AFF	affix
AOR	aorist
ATTR	attributive
AUX	auxiliary
CLT	clitic
COMP	comparative
	(a case in Hill Mari)
CONNEG	connegative
CONV	converb
CX	case suffix
DAT	dative
DEF	definite
DEF.ART	definite article
dim.	diminutive
DU	dual
ELA	elative
EVID	evidential mood
FIN	finite
fn.	footnote
FREQ	frequentative
FUT	future
GEN	genitive
GER	gerund
GER1	I gerund (in Chuvash)
IFIN	instructivus-finalis
ILL	illative
IMP	imperative
INE	inessive
INF	infinitive
INF2	*mo*-infinitive (in Erzya)
INSTR	instrumental
itr.	intransitive
LAT	lative
lit.	literary
LOC	locative
MASC	masculine
MOD	modal
mom.	momentaneous
NARR	narrative
NEG	negation, negative verb
NOM	nominative
OBJ.CONJ	objective conjugation
P	person
PART	partitive
PASS	passive
PAST	past
PERF	perfective
PL	plural
PLU.PERF	pluperfect
POP	postposition
PREF	prefix
PREP	preposition
PRES	present
PRET	preterite
PROL	prolative
PTCL	participle
PX	possessive suffix
REFL	reflexive
REFL.CONJ.	reflexive conjugation
SFX	(derivational) suffix
SG	singular
SUP.ATTR	attributive form of the superlative (in Saami)
tr.	transitive
TRANSL	translative

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Corrigenda

Article 1)

p. 182 in the middle: Here, the suffix -*v*- **decreases the valence of the root verb.**
p. 183 top: **hočetsja**, not hočet'sja.

Article 3)

p. 329 r. 22 ChGr **1837**, not 1937.
p. 330 in the middle: **dene,** not deńe.
p. 333 examples (7) and (9) **dene,** not deńe.
p. 336 examples (19) and (22) **dene,** not deńe.

Article 5)

p. 412 t is missing in example (32) Wo**t** wār-i.
p. 430 in table 1. after Mari the footnote's number should be **44**, not 43.
p. 432 under table 3. after * should be **pre**-Ugric, not per-Ugric.
p. 437 Molnár, J. 2001: the pages **59–66** are missing.

Addenda

Article 3)

According Saarinen (1991: 114) and Galkin (1966: 103–104, 129–133), there are two polysemantic deverbal suffixes in Mari which are at least partly Turkic loans. The Mari non-productive deverbal reflexive-passive derivational suffix *-n-* has its origin in the Turkic languages, although the Finno-Ugric languages have a momentaneous suffix, *-n*, or *-l*. This means that the reflexive-passive meaning can be considered a Turkic influence while the momentaneous or frequentative meaning can be seen as originally Finno-Ugric. Moreover, they all take an *em*-conjugation, e.g. MMa *savərnaš,* HMa *särnäš* 'turn back (itr.)' < *savəraš*, *säräš* 'turn back (tr.)', MMa *čaknaš* 'move back' < *čakaš* 'back', *pernaš* 'hit oneself' < *peraš* 'hit', *ušnaš* 'be joined' < *ušaš* 'join', *šujnaš* 'lenghten (itr.)' < *šujaš* 'lenghten (tr.)'. Some verbs take *a* before the suffix *-n*, e.g. *moktanaš* 'boast' < *moktaš* 'praise', *ilanaš* 'become rooted, start to live' < *ilaš* 'live'. There is also a group of verbs having no stem verbs but parallel transitive verbs with the suffix *-t*, e.g. *emganaš* 'make a mistake' ~ *emgataš* 'mislead', *taranaš* 'get excited' ~ *tarataš* 'excite'. Lehtisalo (1936: 132–133) links this suffix to the Proto-Uralic inchoative-momentaneous suffix **-n,* of which there is actually just one example in Mari, while some others considered it of Turkic origin. Nevertheless, most of these verbs are borrowed from Chuvash or Tatar. Expressed in Kangasmaa-Minn's terms (1982), the reflexive-passive suffix *-n* is a TRANSFORMER and other *-n* suffixes are MODIFIERS.

The other proposed suffix, *-l,* is highly productive in Mari, and has, as a denominal, usually an *em*-conjugation and as a deverbal an *am*-conjugation. Deverbal meanings are, according to Galkin (1966: 130–133), frequentative, momentaneous, and reflexive; *utlaš* 'save oneself' < *utaš* 'protect', *ojərlaš* 'scatter' < *ojəraš* 'disperse', *šarlaš* 'broaden, widen (itr.)' < *šaraš* 'broaden, widen (tr.)'. These Mari reflexive verbs have parallels in Turkic languages, as Galkin testifies on the basis of his own candidate's dissertation (1966). A little earlier, Fedotov (1965: 42) came to same conclusion with lesser evidence. All Turkic loanwords in Mari have an *em*-conjugation, which entitles us to suppose that the denominal suffix is also of Chuvash origin, except for one verb: *jüštəlaš* 'have a bath (in a river or lake)' < *jüštə* 'cold'. Here again, the reflexive suffix *-l* is a TRANSFORMER and the momentaneous or frequentative suffixes are MODIFIERS.

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Article 5)

3.1.10 *Hungarian*

Some of these verbs, which according to Komlósy (1994: 159–160) originally took a subject may have had a subjectless entry as well: *fagy* 'become frozen; it freezes, there is a frost' or *esik* 'fall; it is raining'. Hungarian weather verbs form an interesting group which often having a derivational suffix, *-od, -ed, -öd,* which is used to make intransitive verbs from adjectives in order to provide the meaning 'turn/become/get': *fehér* 'white' > *fehér-ed* 'get white' (this does not function with nouns). In Hungarian a morphologically unmarked Adjective > Noun derivation is present. The suffix *-od, -ed, -öd* only attaches to nouns when the result will be a weather verb. It can be assumed that the relation between a noun and this suffix is taken to be that of a subject and a predicate. Since the subject slot of the affix is already filled in, the resulting verb ought to be subjectless:

(i) *Hajnal-od-ik.*
dawn-SFX-PRES.3SG
'Dawn is coming.' 'ARISE (DAWN)' (Komlósy 1994: 160)

(ii) *Sötét-ed-ik.*
dark-SFX-PRES.3SG
'It is getting dark.' 'ARISE (DARKNESS)' (Komlósy 1994: 160)

Komlósy, A. 1994: Complements and Adjunts. In: *The Syntactic Structure of Hungarian* [Syntax and Semantics 27], F. Kiefer & K. È. Kiss (eds), 91–178. San Diego & al.: Academic Press.

PART II